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As filed with the Securities and Exchange Commission on September 13, 2017.

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ACM RESEARCH, INC.

(Exact name of registrant as specified in its charter)

Delaware	3559	94-3290283
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

42307 Osgood Road, Suite I
Fremont, California 94539
(510) 445-3700
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☒

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(2)
Class A common stock, $0.0001 par value per share	$34,500,000	$3,998.55

(1) Estimated pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes the offering price attributable to additional shares that the underwriters have the option to purchase to cover over-allotments, if any.
(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to such Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the Securities and Exchange Commission declares our registration statement effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS, SUBJECT TO COMPLETION, DATED SEPTEMBER 13, 2017

PROSPECTUS

Shares

Class A Common Stock

This is the initial public offering of common stock of ACM Research, Inc. We are selling shares of Class A common stock. We anticipate that the initial public offering price of shares of Class A common stock will be between $ and $ per share. After the pricing of the offering, we expect that shares of Class A common stock will trade on The Nasdaq Global Market under the symbol "ACMR."

We have two classes of common stock, Class A and Class B. Each share of Class A common stock is entitled to one vote. Each share of Class B common stock is entitled to twenty votes and is convertible at any time into one share of Class A common stock. The rights attributable to each class of common stock are otherwise identical. Immediately following this offering, holders of Class B will have % of the voting power of our outstanding capital stock and holders of Class A common stock will have the remaining %.

Investing in Class A common stock involves a high degree of risk. See "Risk Factors" beginning on page 11.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012 and will be subject to reduced public company reporting requirements. See "Prospectus Summary—Our Company—Implications of Being an Emerging Growth Company" on page 5.

	Per Share	Total
Initial public offering price	**$**	**$**
Underwriting discounts and commissions(1)	**$**	**$**
Proceeds to us, before expenses	**$**	**$**

(1) Does not include warrants that are issuable by us to the underwriters for the purchase of shares of Class A common stock at a price of $ per share or certain out-of-pocket expenses of the underwriters that are reimbursable by us. See "Underwriting" beginning on page 136 for additional disclosure regarding underwriter discounts, commissions and estimated offering expenses.

We have granted a 30-day option to the underwriters to purchase up to additional shares of Class A common stock to cover over-allotments, if any.

The underwriters expect to deliver the shares of Class A common stock to purchasers in the offering on or about , 2017.

Roth Capital Partners

Craig-Hallum Capital Group

The Benchmark Company

Prospectus dated , 2017

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You should rely only on the information contained in this prospectus and any free writing prospectus we may authorize to be delivered to you. We have not, and the underwriters have not, authorized anyone to provide you with information different from, or in addition to, that contained in this prospectus and any related free writing prospectus. We and the underwriters take no responsibility for, and can provide no assurances as to the reliability of, any information that others may give you. This prospectus is not an offer to sell, nor is it seeking an offer to buy, these securities in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus is only accurate as of the date of this prospectus, regardless of the time of delivery of this prospectus and any sale of shares of Class A common stock.

For investors outside of the United States: Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of Class A common stock and the distribution of this prospectus outside of the United States.

Unless the context requires otherwise, references in this prospectus to "our company," "our," "us," "we" and similar terms refer to ACM Research, Inc. (including its predecessor prior to its redomestication from California to Delaware in November 2016) and its subsidiaries. References to "ACM Research" refer to ACM Research, Inc., and references to "ACM Shanghai" are to ACM Research (Shanghai), Inc., a subsidiary of ACM Research.

SAPS, TEBO, ULTRA C and our logo design are our trademarks. This prospectus also contains other companies' trademarks, registered marks and trade names, which are the property of those companies.

PROSPECTUS SUMMARY

The following summary highlights selected information contained elsewhere in this prospectus. Because the following is only a summary, it does not contain all of the information you should consider before investing in Class A common stock. You should carefully read this entire prospectus, including the risks set forth under the heading "Risk Factors" and our consolidated financial statements and related notes included at the end of this prospectus, before making an investment decision.

Our Company

We develop, manufacture and sell single-wafer wet cleaning equipment, which semiconductor manufacturers can use in numerous manufacturing steps to remove particles, contaminants and other random defects, and thereby improve product yield, in fabricating advanced integrated circuits, or chips. Our Ultra C equipment is designed to remove random defects from a wafer surface effectively, without damaging a wafer or its features, even at an increasingly advanced process node (the minimum line width on a chip) of 22 nanometers, or nm, or less. Our equipment is based on our innovative, proprietary *Space Alternated Phase Shift*, or SAPS, and *Timely Energized Bubble Oscillation*, or TEBO, technologies. We developed our proprietary technologies to enable manufacturers to produce chips that reach their ultimate physical limitations while maintaining product yield, which is the percentage of chips on a wafer that meet manufacturing specifications.

Differentiated technologies for advanced chips. Our SAPS and TEBO single-wafer wet cleaning technologies control the power, intensity and distribution of megasonic cleaning in order to remove random defects from a wafer surface effectively, without damaging the wafer or its features, even at process nodes of 22nm or less. As process nodes continue to shrink to 22nm and less, finer feature sizes and denser, more complex architectures make the cleaning process even more complicated and challenging. Our SAPS and TEBO technologies specifically address the inadequacies of conventional equipment available for the critical cleaning steps in chip manufacturing processes. One of our customers has implemented SAPS-based equipment for the 22nm process node, and we have demonstrated TEBO technology to be effective for the 16nm node. Furthermore, we believe both SAPS and TEBO technologies can be applied for even smaller process nodes. According to Transparency Market Research Pvt. Ltd, the global market for cleaning equipment for single-wafer processing systems totaled $2.6 billion in 2015 and will increase to an estimated $3.7 billion in 2020, a compound annual growth rate of 6.8%.

China-based operations positioned for growth in new chip fabrication plants. In 2006 we established our operational center in Shanghai, and we currently conduct substantially all of our development and manufacturing activities in the People's Republic of China, or the PRC. The PRC's share of worldwide semiconductor manufacturing capacity expanded from 7.3% in 2006 to 12.7% in 2015, and its semiconductor manufacturing revenue increased at a compound annual growth rate of 17.6% over the ten-year period ending in 2015 (PricewaterhouseCoopers, January 2017). Our Shanghai operations position us near potential customers in not only the PRC but also Taiwan, Korea and throughout Asia, giving us increased access to those customers and reducing shipping and manufacturing costs for equipment they purchase. The PRC government is implementing focused policies, including state-led investment initiatives, that aim to create and support an independent domestic semiconductor supply chain spanning from design to final system production.

Referenceable customer base. In commercializing our equipment, we place evaluation equipment with a selected group of leading chip manufacturers, whose use of our products can influence decisions by other manufacturers. We believe this process is helping us penetrate the mature chip manufacturing markets and build credibility with industry leaders. Since beginning to place evaluation SAPS equipment with a small number of selected customers in 2009, we have worked on equipment improvements and qualification with those customers, who include a leading Korean memory chip company and four leading PRC memory and logic chip foundries. In 2016, using a similar "demo-to-sales" process, we placed TEBO evaluation equipment with a leading PRC foundry and a leading Taiwanese foundry and recognized revenue from our initial sale of TEBO equipment. Our revenue

from the selected customers' purchases of single-wafer wet cleaning equipment totaled $10.6 million, or 73.6% of our revenue, in the first six months of 2017, $21.5 million, or 78.4% of our revenue, in 2016 and $26.8 million, or 86.0% of our revenue, in 2015.

Extensive intellectual property protection. Since our formation in 1998, we have focused on building a strategic portfolio of intellectual property to support and protect our key innovations, including most recently our SAPS and TEBO technologies. As of September 11, 2017, we had been issued more than 140 patents in the United States, the PRC, Japan, Korea, Singapore and Taiwan.

Industry Background and Trends

Semiconductors are the foundation of the exponential growth of digital technologies and applications. After 30 years of growth fueled by demand for personal computers, tablet computers, mobile phones and other digital products, semiconductor shipments are expected to reach 1.0 trillion units in 2018 based on demand driven by the migration of computing, networking and storage to the cloud and the proliferation of the "Internet of Things" (IC Insights, Inc., March 2016).

New and enhanced digital applications and products have relied on the development and deployment of progressively faster and more powerful—but ever smaller and less costly—semiconductors known as integrated circuits, or chips. For a half century the number of transistors that can fit in a given area has roughly doubled every two years, a rate of improvement referred to as "Moore's Law." Chip feature sizes have been repeatedly scaled down to pack more transistors in smaller chips, as nodes shrank from 30,000nm in 1963 to 14nm in 2014. In recent years the rate of chip improvement delivered solely by shrinking feature sizes has slowed as conventional two-dimensional, or 2D, chips have begun to approach their critical performance limitations. In order to extend Moore's Law, chip designers and manufacturers are developing and implementing technologies and architectures to transition to advanced chips with three-dimensional, or 3D, structures.

Manufacturing advanced chips at smaller nodes requires a more complex process flow that incorporates enhanced, more expensive capital equipment, or tools, to perform increasingly complex process steps, as well as an increased number of tools to perform a greater number of process steps per wafer. A fabrication plant capable of producing advanced 3D chips may have more than 500 highly specialized tools representing more than 70 categories of equipment and may cost between $5 and $10 billion. Because of significant capital expenditures and manufacturing expenses, chip makers must focus on avoiding product yield loss by implementing additional fabrication process steps and innovative, reliable tool solutions.

Chip yield loss can result directly from random defects, which can originate from nearly every aspect of the manufacturing process. As a result, cleaning steps to eliminate random defects, without damaging features, are critical to chip fabrication. Wet cleaning, which uses liquid chemistry to spray, scrub, etch and dissolve random defects, has become the standard method for wafer cleaning. Wet cleaning's chemistry has not changed appreciably over the past 25 years, but its implementation has shifted from simple immersion to increasingly sophisticated techniques such as tools using jet spraying and megasonic energy, which transmits acoustic waves through a fluid bath to produce bubble oscillation that dislodges random defects.

As chip complexity has increased, cleaning has become the most frequently repeated step in chip fabrication and may be performed in as many as 200 steps for each wafer. As process nodes continue to shrink to 22nm and less, finer feature sizes and denser, more complex architectures make the cleaning process even more complicated and challenging. Effective, damage-free cleaning poses a significant challenge for manufacturers seeking to fabricate chips in the advanced process nodes available today or introduced in the future. In order to extend Moore's law, chip manufacturers must be able to remove ever smaller random defects from not only flat wafer surfaces but also progressively more intricate, finer-featured 3D chip structures, in each case without incurring damage or material loss that curtails yield and profits.

Our Product Offerings

We have developed single-wafer wet cleaning equipment that chip manufacturers can use in numerous steps of the fabrication process in order to avoid yield loss at existing and future process nodes. Using our proprietary technologies, we have designed our tools to remove random defects from chip wafers with fine feature sizes, complex patterning, dense circuit structures and high aspect ratios (the ratio of the structure's depth to its width) more effectively than traditional jet spray and transient megasonic technologies.

Flat and patterned wafer surfaces. Our SAPS technology, which we introduced in 2009, employs alternating phases of megasonic waves to deliver megasonic energy to flat and patterned wafer surfaces in a highly uniform manner on a microscopic level. We have shown SAPS technology to be more effective than conventional megasonic and jet spray technologies in removing random defects across an entire wafer as node sizes shrink from 300nm to 45nm, including node sizes for which jet spray technology has proven to be ineffective. Based on their initial mass production experience with SAPS equipment, customers have increased their use of SAPS equipment by adding cleaning steps to the manufacturing processes for advanced chips in order to achieve higher yields and reduce chemical usage.

High-aspect ratio conventional 2D and advanced 3D patterned wafer surfaces. Our TEBO technology, which we introduced in March 2016, has been developed to provide effective, damage-free cleaning for both conventional 2D and 3D patterned wafers at advanced process nodes. TEBO technology provides multi-parameter control of bubble cavitation during megasonic cleaning by using a sequence of rapid pressure changes to force bubbles to oscillate at controlled sizes, shapes and temperatures. Because the bubbles oscillate instead of imploding or collapsing, TEBO technology avoids the pattern damage caused by traditional megasonic cleaning processes. We have demonstrated the damage-free cleaning capabilities of TEBO technology on patterned wafers for feature nodes as small as 1xnm (16nm to 19nm), and we have shown that TEBO technology can be applied in manufacturing processes for patterned chips with 3D structures having aspect ratios as high as 60-to-1. We believe TEBO technology can be applied for even smaller process nodes. TEBO tools are currently being evaluated by a selected group of leading memory and logic chip manufacturers.

Custom-made wafer assembly and packaging solutions. In addition to our product offerings for single-wafer cleaning, we leverage our technologies and expertise to provide a wide range of advanced packaging equipment, such as coaters, developers, photoresist strippers, scrubbers, wet etchers and copper-plating tools, to wafer assembly and packaging factories, particularly in the PRC. For these offerings, we focus on providing customized equipment with competitive performance, service and pricing.

Our Strategy

Our objective is to be the leading global provider of a full range of wet cleaning equipment for the manufacture of advanced integrated circuits. To achieve this goal, we are pursuing the following strategies:

Extend technology leadership. We intend to build upon our technology leadership in wet processing by continuing to develop and refine our differentiated SAPS and TEBO technologies and equipment to address cleaning challenges presented by the manufacture of increasingly advanced chip nodes.

Establish referenceable customer base. In commercializing our SAPS equipment, we placed evaluation equipment with selected customers, who subsequently purchased additional SAPS equipment to enable them to add more cleaning steps during their manufacturing processes. Using a similar "demo-to-sales" process, we have placed TEBO evaluation equipment with a leading PRC foundry and a leading Taiwanese foundry and we recognized revenue from our initial sale of TEBO equipment in 2016. Based on our market experience, we believe that implementation of our SAPS and TEBO equipment by selected leading memory and logic chip manufacturers will encourage evaluation of our equipment by other manufacturers, who will view the leading companies' implementation as a validation of our equipment that facilitates a shorter evaluation process.

Leverage local presence to address growing Chinese market. The market for semiconductor manufacturing equipment in the PRC is expected to grow markedly in the upcoming years. Our experience has shown that chip manufacturers in the PRC demand equipment meeting their specific technical requirements and prefer building relationships with local suppliers. We established our operations in Shanghai a decade ago, and we will continue to work closely with chip manufacturers in China and throughout Asia to understand their specific requirements, encourage them to adopt our SAPS and TEBO technologies, and enable us to design innovative products and solutions to address their needs.

Continue to improve performance through operational excellence. We actively manage our business through principles of operational excellence designed to ensure continuous improvement of our key operational and financial metrics. As we increase the breadth of our product offerings and the size of our operations and customer base, we must continue to develop and implement these principles in order to improve the efficiency and quality of our operations, satisfy our customers' needs, and meet our financial goals.

Pursue strategic acquisitions and relationships. To complement and accelerate our internal growth, we may pursue acquisitions of businesses, technologies, products or business relationships that will expand the functionality of our products, provide access to new markets or customers, or otherwise complement our existing operations.

Acquisition of Outstanding Minority Interests in Our Operating Company

In 2006 we established our operational center in Shanghai in the PRC, where we operate through our subsidiary ACM Shanghai. Until recently ACM Research owned 62.87% of the outstanding equity interests in ACM Shanghai and three PRC-based third-party investors held the remaining 37.13%.

- Effective as of August 31, 2017, ACM Research acquired, for a purchase price of $5.8 million, an additional 18.77% of ACM Shanghai's equity interests from one of the minority investors and issued, for a purchase price of $5.8 million, capital stock that, upon the closing of this offering, will convert into 1,666,170 shares of Class A common stock.
- Pursuant to agreements entered into as of August 31, 2017, ACM Research issued to the other two minority investors a total of 1,906,674 shares of Class A common stock on September 8, 2017 for a purchase price of $14.3 million and expects to acquire, prior to the closing of this offering, the remaining 18.36% of ACM Shanghai's minority equity interests for a purchase price of approximately $14.3 million.

As a result of these arrangements, ACM Research owned 81.64% of ACM Shanghai's equity interests as of August 31, 2017 and expects to own 100% of those equity interests as of the closing of this offering.

Risks Related to Our Business

Our business is subject to a number of risks, including risks that may prevent us from achieving our business objectives or may adversely affect our business, financial condition, results of operations, cash flows or prospects. These risks are discussed more fully in "Risk Factors" beginning on page 11. Before making a decision to invest in Class A common stock, you should carefully consider all of those risks, including the following:

- We have incurred significant losses since our inception and have generated limited revenue to date, and we may not be able to maintain profitability.
- Demand for our tools is subject to substantial variation due to the cyclic nature of the chip industry.
- The commercial success of our tools requires that we demonstrate the differentiated, innovative nature of our technology to gain acceptance by leading chip manufacturers and then leverage our reputation to

gain market acceptance by additional manufacturers, which may have existing relationships with our competitors.

- The chip equipment industry is highly competitive, and many of our competitors are larger and better-established than we are, have significantly greater operating and financial resources than we have, and may have existing relationships with our potential customers.
- We depend on a small number of customers for a significant percentage of our revenue and the number of potential customers for our tools is limited, so the loss of a major customer could harm our financial condition.
- Our success depends on our ability to protect the intellectual property of our SAPS and TEBO technologies and to combat infringement from competitors who may try to replicate our technologies.

Our Corporate Information

We incorporated in California in January 1998 and redomesticated in Delaware in November 2016. Our headquarters are located at 42307 Osgood Road, Suite I, Fremont, California 94539, where our telephone number is (510) 445-3700. Our website address is *www.acmrcsh.com*. The information contained in, or accessible through, our website is not part of, and is not incorporated into, this prospectus, and investors should not rely on any such information in deciding whether to invest in Class A common stock.

Implications of Being an Emerging Growth Company

As a company with less than $1.0 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act. An emerging growth company may take advantage of provisions that reduce its reporting and other obligations from those otherwise generally applicable to public companies. An emerging growth company may, among other things, elect to:

- present only two years of audited financial statements and related disclosure under "Management's Discussion and Analysis of Financial Condition and Results of Operations";
- not obtain from its auditors an attestation and report on the assessment of internal control over financial reporting pursuant to the Sarbanes-Oxley Act;
- provide less extensive disclosure about its executive compensation arrangements; and
- not present to its stockholders non-binding advisory votes on executive compensation and golden parachute arrangements.

We may take advantage of these provisions until the earliest of December 31, 2022 or such time that we have annual revenue greater than $1.0 billion, the market value of our capital stock held by non-affiliates exceeds $700 million or we have issued more than $1.0 billion of non-convertible debt in a three-year period. We have chosen to take advantage of some of these provisions, and as a result we may not provide stockholders with all of the information that is provided by other public companies. For example, Section 107 of the JOBS Act provides that an emerging growth company can use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933 for complying with new or revised accounting standards. We have, however, irrevocably elected not to avail ourselves of the extended transition period for complying with new or revised accounting standards, and we therefore will be subject to the same new or revised accounting standards as public companies that are not emerging growth companies.

Offering	
Class A common stock offered by us	shares
Class A common stock to be outstanding after this offering	shares
Class B common stock outstanding	2,409,738 shares
Total Class A and Class B common stock to be outstanding after this offering	shares
Over-allotment option of Class A common stock	shares
Use of proceeds	We estimate we will receive net proceeds from this offering of $ million, assuming an initial public offering price of $ per share, the midpoint of the initial offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and offering expenses. If the underwriters' option to purchase additional shares is exercised in full, we estimate our net proceeds will be $ million. We intend to use our net proceeds from this offering for working capital and other general corporate purposes, which may include financing our growth, developing new products, and acquiring complementary businesses, technologies and products. See "Use of Proceeds."
Proposed NASDAQ symbol	ACMR
Voting Rights	Holders of Class A common stock and Class B common stock will generally vote together as a single class, unless otherwise required by law. Class A common stock is entitled to one vote per share, and Class B common stock is entitled to twenty votes per share. After this offering, our executive officers and directors, some of whom hold Class B common stock, will control % of the voting power of our outstanding capital stock and therefore may be able to control the outcome of matters submitted to stockholders, including the election of directors. See "Principal Stockholders" and "Description of Capital Stock."

The numbers of shares of Class A and Class B common stock to be outstanding following this offering are based on 9,302,983 shares of Class A common stock and 2,409,738 shares of Class B common stock outstanding as of September 11, 2017, and exclude the following as of September 11, 2017:

- 397,502 shares of Class A common stock issuable upon the exercise of an outstanding warrant, with an exercise price of $7.50 per share, as described under "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Issuance of Warrants";
- 3,442,743 shares of Class A common stock issuable upon the exercise of outstanding options, with a weighted-average exercise price of $2.31 per share; and
- 705,383 shares of Class A common stock reserved for future issuance under our equity incentive plan.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- effective immediately prior to the completion of this offering, the automatic conversion of all of our outstanding preferred stock into an aggregate of 4,628,015 shares of Class A common stock and the restatement of our charter and bylaws;
- a 1-for-3 reverse split of Class A and Class B common stock effective as of September 13, 2017;
- no exercises of outstanding stock options; and
- no exercise of the underwriters' over-allotment option.

The information in this prospectus does not reflect our issuance to the underwriters of warrants exercisable for shares of Class A common stock at a price of $ per share, as described in "Underwriting—Discounts, Commissions and Expenses" beginning on page 136.

Summary Consolidated Financial Information

The following tables summarize our consolidated financial data. You should read the following data in conjunction with "Selected Consolidated Financial Information," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and our consolidated financial statements and related notes included at the end of this prospectus.

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands, except share and per share data)			
Consolidated Statement of Operations Data:				
Revenue	$ 14,423	$ 8,122	$ 27,371	$ 31,206
Cost of revenue	8,570	5,292	14,042	17,085
Gross profit	5,853	2,830	13,329	14,121
Operating expenses:				
Sales and marketing	2,583	1,818	3,907	4,213
Research and development	1,867	1,486	3,259	2,942
General and administrative	3,158	1,089	2,673	2,103
Total operating expenses, net	7,608	4,393	9,839	9,258
Income (loss) from operations	(1,755)	(1,563)	3,490	4,863
Interest expense, net	(159)	(45)	(165)	(105)
Other income (expense), net	(292)	506	(343)	632
Income (loss) before income taxes	(2,206)	(1,102)	2,982	5,390
Income tax benefit (expense)	(749)	73	(595)	2,525
Net income (loss)	(2,955)	(1,029)	2,387	7,915
Less: Net income (loss) attributable to non-controlling interests(1)	(208)	(476)	1,356	2,535
Net income (loss) attributable to ACM Research, Inc.	$ (2,747)	$ (553)	$ 1,031	$ 5,380
Net income (loss) per common share(2):				
Basic	$ (0.56)	$ (0.27)	$ 0.30	$ 1.50
Diluted	$ (0.56)	$ (0.27)	$ 0.18	$ 0.97
Weighted-average common shares outstanding used in computing per share amounts(2):				
Basic	4,927,973	2,061,339	2,176,315	2,047,383
Diluted	4,927,973	2,061,339	3,792,137	3,144,120
Pro forma net income (loss) per common share(2):				
Basic	$ (0.35)		$ 0.20	
Diluted	$ (0.35)		$ 0.15	
Pro forma weighted-average common shares outstanding used in computing per share amounts(2):				
Basic	7,889,818		5,137,211	
Diluted	7,889,818		6,753,033	

(1) As of each date ACM Research held 62.87% of the outstanding equity interests of its operating subsidiary ACM Shanghai and the remaining 37.13% was held by third-party investors. As described above under "—Our Company—Acquisition of Outstanding Minority Interests in Our Operating Company," we have entered into agreements pursuant to which ACM Research acquired an additional 18.77% of the outstanding ACM Shanghai equity interests as of August 31, 2017 and expects to acquire, prior to the closing of this offering, all of the remaining outstanding equity interests held by minority investors.

(2) See note 2 to our consolidated financial statements included at the end of this prospectus for an explanation of the method used to determine the number of shares used in computing historical and pro forma net income (loss) per share.

In the following table:

- "As Adjusted" data gives effect to the following:
  - (a) the closing of strategic investment transactions on September 11, 2017, with Ninebell Co., Ltd. or Ninebell, one of our key subassembly providers, in which we issued 133,334 shares of Class A common stock to Ninebell for a purchase price of $1.0 million and Ninebell issued ordinary shares, representing 20% of its post-closing equity, to us for a purchase price of $1.2 million; and
  - (b) the completion of the transactions described under "—Our Company—Acquisition of Outstanding Minority Interests in Our Operating Company" on page 4, pursuant to which, in the third quarter of 2017, (i) we issued 3,572,844 shares of Class A common stock (on an as-converted basis) to the minority investors in ACM Shanghai for an aggregate purchase price of $20.1 million and (ii) ACM Research acquired 18.77% of the outstanding ACM Shanghai equity interests, for a purchase price of $5.8 million and expects to acquire, prior to the closing of this offering, all of the remaining outstanding minority ACM Shanghai equity interests for an aggregate purchase price of $14.3 million;
- "Pro Forma" data gives further effect to the automatic conversion of all of our outstanding convertible preferred stock into Class A common stock, which will occur automatically upon completion of this offering; and
- "Pro Forma As Adjusted" data further adjusts "Pro Forma" data to reflect our sale of shares of Class A common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the initial public offering price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and offering expenses, and our issuance to the underwriters upon completion of this offering of a warrant to purchase shares of Class A common stock (see "Underwriting—Discounts, Commissions and Expenses").

	As of June 30, 2017			
	Actual	As Adjusted	Pro Forma	Pro Forma As Adjusted
	(in thousands)			
Consolidated Balance Sheet Data:				
Cash and cash equivalents	$13,206	$ 13,006	$ 13,006	$
Working capital(1)	23,433	23,433	23,433	
Total assets	47,437	48,437	48,437	
Total indebtedness	4,595	4,595	4,595	4,595
Total liabilities	27,883	27,883	27,883	27,883
Total redeemable convertible preferred stock	18,034	23,834	—	—
Total ACM Research, Inc. stockholders' (deficit) equity	(3,289)	(3,281)	20,553	
Non-controlling interests	4,809	—	—	—
Total stockholders' equity	1,520	(3,281)	20,553	

(1) Calculated as current assets less current liabilities.

To supplement our consolidated financial statements presented in accordance with U.S. generally accepted accounting principles, or GAAP, we monitor and consider adjusted EBITDA, free cash flow and adjusted operating income (loss), which are non-GAAP financial measures. We are presenting adjusted EBITDA, free cash flow and adjusted operating income (loss) because they are key metrics used by our management in tracking business performance. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Components of Results of Operations."

- We define adjusted EBITDA as our net income excluding interest expense (net), income tax expense (benefit), depreciation and amortization, and stock-based compensation. The following table reconciles net income (loss), the most directly comparable GAAP financial measure, to adjusted EBITDA:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands)			
Adjusted EBITDA Data:				
Net income (loss)	$ (2,955)	$ (1,029)	$ 2,387	$ 7,915
Interest expense, net	159	45	165	105
Income tax expense (benefit)	749	(73)	595	(2,525)
Depreciation and amortization	118	88	187	160
Stock-based compensation	1,348	193	383	423
Adjusted EBITDA	$ (581)	$ (776)	$ 3,717	$ 6,078

- We define free cash flow as net cash provided by operating activities less purchases of property and equipment (net of proceeds from disposals) and of intangible assets. The following table reconciles net cash provided by operating activities, the most directly comparable GAAP financial measure, to free cash flow:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands)			
Free Cash Flow Data:				
Net cash provided by operating activities	$ 2,983	$ 4,739	$ (3,702)	$ 2,702
Purchase of property and equipment, net of proceeds from disposals	(26)	(95)	(788)	(1,371)
Purchase of intangible assets	(36)	(9)	(22)	—
Free cash flow	$ 2,921	$ 4,635	$ (4,512)	$ 1,331

- We define adjusted operating income (loss) as our income (loss) from operations excluding stock-based compensation. The following table reconciles income (loss) from operations, the most directly comparable GAAP financial measure, to adjusted operating income (loss):

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands)			
Adjusted Operating Income (Loss) Data:				
Income (loss) from operations	$(1,755)	$(1,563)	$3,490	$4,863
Stock-based compensation	1,348	193	383	423
Adjusted operating income (loss)	$ (407)	$(1,370)	$3,873	$5,286

RISK FACTORS

Investing in Class A common stock involves a high degree of risk. You should consider and read carefully all of the risks and uncertainties described below, as well as other information contained in this prospectus, including our audited consolidated financial statements and related notes appearing at the end of this prospectus, before making an investment decision. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition, results of operations or cash flows. In any such case, the trading price of Class A common stock could decline, and you may lose all or part of your investment. This prospectus also contains forward-looking statements and estimates that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of specific factors, including the risks and uncertainties described below.

Risks Related to Our Business and Our Industry

We have incurred significant losses since our inception and we are uncertain about our future profitability.

We have incurred significant losses since our inception in 1998, and as of June 30, 2017 we had an accumulated deficit of $12.4 million. We may not be able to generate sufficient revenue to achieve and sustain profitability. We expect our costs to increase in future periods, which could negatively affect our future operating results if our revenue does not increase. In particular, we expect to continue to expend substantial financial and other resources on:

- research and development, including continued investments in our research and development team;
- sales and marketing, including a significant expansion of our sales organization, both domestically and internationally, building our brand, and providing our single-wafer wet cleaning equipment and other capital equipment, or tools, for evaluation by customers;
- the cost of goods being manufactured and sold for our installed base;
- expansion of field service; and
- general and administrative expenses, including legal and accounting expenses related to being a public company.

These investments may not result in increased revenue or growth in our business. If we are unable to increase our revenue at a rate sufficient to offset the expected increase in our costs, then our business, financial position and results of operations will be harmed and we may not be able to achieve or maintain profitability over the long term. Additionally, we may encounter unforeseen operating expenses, difficulties, complications, delays and other factors that may result in losses in future periods. If our revenue growth does not meet our expectations in future periods, our financial performance may be harmed and we may not achieve or maintain profitability in the future.

We currently have limited revenue and may not be able to regain or maintain profitability.

To date we have only generated limited revenue from sales of our products. Our revenue totaled $31.2 million in 2015, $27.4 million in 2016 and $14.4 million in the first half of 2017. Our revenue was not sufficient to cover our operating expenses prior to 2015, and our net income decreased to $2.4 million in 2016 from $7.9 million in 2015. In the first half of 2017, we incurred an operating loss of $1.8 million, which was an increase from our operating loss of $1.6 million in the first half of 2016, and a net loss of $3.0 million, which was an increase from a net loss of $1.0 million in the first half of 2016. Our ability to generate significant revenue and operate profitably depends upon our ability to commercialize our Ultra C single-wafer wet cleaning equipment based on our Space Alternated Phase Shift, or SAPS, and Timely Energized Bubble Oscillation, or TEBO, technologies. Our ability to generate significant product revenue from our current tools or future tool candidates also depends on a number of additional factors, including our ability to:

- achieve market acceptance of Ultra C equipment based on SAPS technology as well as Ultra C equipment based on TEBO technology;

- increase our customer base, including the establishment of relationships with companies in the United States;
- continue to expand our supplier relationships with third parties; and
- establish and maintain our reputation for providing efficient on-time delivery of high quality products.

If we fail to regain and sustain profitability on a continuing basis, we may be unable to continue our operations at planned levels and be forced to reduce our operations or even shut down.

We may require additional capital in the future and we cannot give any assurance that such capital will be available at all or available on terms acceptable to us and, if it is available, additional capital raised by us may dilute holders of Class A common stock.

We may need to raise funds in the future, depending on many factors, including:

- our sales growth;
- the costs of applying our existing technologies to new or enhanced products;
- the costs of developing new technologies and introducing new products;
- the costs associated with protecting our intellectual property;
- the costs associated with our expansion, including capital expenditures, increasing our sales and marketing and service and support efforts, and expanding our geographic operations;
- our ability to continue to obtain governmental subsidies for developmental projects in the future;
- future debt repayment obligations; and
- the number and timing of any future acquisitions.

To the extent that our existing sources of cash, together with any cash generated from operations and the net proceeds from this offering, are insufficient to fund our activities, we may need to raise additional funds through public or private financings, strategic relationships, or other arrangements. Additional funding may not be available to us on acceptable terms or at all. If adequate funding is not available, we may be required to reduce expenditures, including curtailing our growth strategies and reducing our product development efforts, or to forego acquisition opportunities.

If we succeed in raising additional funds through the issuance of equity or convertible securities, then the issuance could result in substantial dilution to existing stockholders. Furthermore, the holders of these new securities or debt may have rights, preferences and privileges senior to those of the holders of Class A common stock. In addition, any preferred equity issuance or debt financing that we may obtain in the future could have restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions.

Our quarterly operating results can be difficult to predict and can fluctuate substantially, which could result in volatility in the price of Class A common stock.

Our quarterly revenue and other operating results have varied in the past and are likely to continue to vary significantly from quarter to quarter. Accordingly, you should not rely upon our past quarterly financial results as indicators of future performance. Any variations in our quarter-to-quarter performance may cause our stock price to fluctuate. Our financial results in any given quarter can be influenced by a variety of factors, including:

- the cyclicality of the semiconductor industry and the related impact on the purchase of equipment used in the manufacture of integrated circuits, or chips;
- the timing of purchases of our tools by chip fabricators, which order types of tools based on multi-year capital plans under which the number and dollar amount of tool purchases can vary significantly from year to year;

- the relatively high average selling price of our tools and our dependence on a limited number of customers for a substantial portion of our revenue in any period, whereby the timing and volume of purchase orders or cancellations from our customers could significantly reduce our revenue for that period;
- the significant expenditures required to customize our products often exceed the deposits received from our customers;
- the lead time required to manufacture our tools;
- the timing of recognizing revenue due to the timing of shipment and acceptance of our tools;
- our ability to sell additional tools to existing customers;
- the changes in customer specifications or requirements;
- the length of our product sales cycle;
- changes in our product mix, including the mix of systems, upgrades, spare parts and service;
- the timing of our product releases or upgrades or announcements of product releases or upgrades by us or our competitors, including changes in customer orders in anticipation of new products or product enhancements;
- our ability to enhance our tools with new and better functionality that meet customer requirements and changing industry trends;
- constraints on our suppliers' capacity;
- the timing of investments in research and development related to releasing new applications of our technologies and new products;
- delays in the development and manufacture of our new products and upgraded versions of our products and the market acceptance of these products when introduced;
- our ability to control costs, including operating expenses and the costs of the components and subassemblies used in our products;
- the costs related to the acquisition and integration of product lines, technologies or businesses; and
- the costs associated with protecting our intellectual property, including defending our intellectual property against third-party claims or litigation.

Seasonality has played an increasingly important role in the market for chip manufacturing tools. The period of November through February has been a particularly weak period historically for manufacturers of chip tools, in part because capital equipment needed to support manufacturing of chips for the December holidays usually needs to be in the supply chain by no later than October and chip makers in Asia often wait until after Chinese New Year, which occurs in January or February, before implementing their capital acquisition plans. The timing of new product releases also has an impact on seasonality, with the acquisition of manufacturing equipment occurring six to nine months before a new release.

Many of these factors are beyond our control, and the occurrence of one or more of them could cause our operating results to vary widely. As a result, it is difficult for us to forecast our quarterly revenue accurately. Our results of operations for any quarter may not be indicative of results for future quarters and quarter-to-quarter comparisons of our operating results are not necessarily meaningful. Variability in our periodic operating results could lead to volatility in our stock price. Because a substantial proportion of our expenses are relatively fixed in the short term, our results of operations will suffer if revenue falls below our expectations in a particular quarter, which could cause the price of Class A common stock to decline. Moreover, as a result of any of the foregoing factors, our operating results might not meet our announced guidance or expectations of public market analysts or investors, in which case the price of Class A common stock could decrease significantly.

Cyclicality in the semiconductor industry is likely to lead to substantial variations in demand for our products, and as a result our operating results could be adversely affected.

The chip industry has historically been cyclic and is characterized by wide fluctuations in product supply and demand. From time to time, this industry has experienced significant downturns, often in connection with, or in anticipation of, maturing product and technology cycles, excess inventories and declines in general economic conditions. This cyclicality could cause our operating results to decline dramatically from one period to the next.

Our business depends upon the capital spending of chip manufacturers, which, in turn, depends upon the current and anticipated market demand for chips. During industry downturns, chip manufacturers often have excess manufacturing capacity and may experience reductions in profitability due to lower sales and increased pricing pressure for their products. As a result, chip manufacturers generally sharply curtail their spending during industry downturns and historically have lowered their spending more than the decline in their revenues. If we are unable to control our expenses adequately in response to lower revenue from our customers, our operating results will suffer and we could experience operating losses.

Conversely, during industry upturns we must successfully increase production output to meet expected customer demand. This may require us or our suppliers, including third-party contractors, to order additional inventory, hire additional employees and expand manufacturing capacity. If we are unable to respond to a rapid increase in demand for our tools on a timely basis, or if we misjudge the timing, duration or magnitude of such an increase in demand, we may lose business to our competitors or incur increased costs disproportionate to any gains in revenue, which could have a material adverse effect on our business, results of operations, financial condition or cash flows.

The government of the People’s Republic of China, or the PRC, is implementing focused policies, including state-led investment initiatives, that aim to create and support an independent domestic semiconductor supply chain spanning from design to final system production. If these policies, which include loans and subsidies, result in lower demand for equipment than is expected by equipment manufacturers, the resulting overcapacity in the chip manufacturing equipment market could lead to excess inventory and price discounting that could have a material adverse effect on our business and operating results.

Our success will depend on industry chip manufacturers adopting our SAPS and TEBO technologies.

To date our strategy for commercializing our tools has been to place them with selected industry leaders in the manufacturing of memory and logic chips, the two largest chip categories, to enable those leading manufacturers to evaluate our technologies, and then leverage our reputation to gain broader market acceptance. In order for these industry leaders to adopt our tools, we need to establish our credibility by demonstrating the differentiated, innovative nature of our SAPS and TEBO technologies. Our SAPS technology has been tested and purchased by industry leaders, but has not achieved, and may never achieve, widespread market acceptance. We have initiated a similar commercialization process for our TEBO technology with a selected group of industry leaders. If these leading manufacturers do not agree that our technologies add significant value over conventional technologies or do not otherwise accept and use our tools, we may need to spend a significant amount of time and resources to enhance our technologies or develop new technologies. Even if these leading manufacturers adopt our technologies, other manufacturers may not choose to accept and adopt our tools and our products may not achieve widespread adoption. Any of the above factors would have a material adverse effect on our business, results of operations and financial condition.

If our SAPS and TEBO technologies do not achieve widespread market acceptance, we will not be able to compete effectively.

The commercial success of our tools will depend, in part, on gaining substantial market acceptance by chip manufacturers. Our ability to gain acceptance for our products will depend upon a number of factors, including:

- our ability to demonstrate the differentiated, innovative nature of our SAPS and TEBO technologies and the advantages of our tools over those of our competitors;

- compatibility of our tools with existing or potential customers' manufacturing processes and products;
- the level of customer service available to support our products; and
- the experiences our customers have with our products.

In addition, obtaining orders from new customers may be difficult because many chip manufacturers have pre-existing relationships with our competitors. Chip manufacturers must make a substantial investment to qualify and integrate wet processing equipment into a chip production line. Due, in part, to the cost of manufacturing equipment and the investment necessary to integrate a particular manufacturing process, a chip manufacturer that has selected a particular supplier's equipment and qualified that equipment for production typically continues to use that equipment for the specific production application and process node, which is the minimum line width on a chip, as long as that equipment continues to meet performance specifications. Some of our potential and existing customers may prefer larger, more established vendors from which they can purchase equipment for a wider variety of process steps than our tools address. Further, because the cleaning process with our TEBO equipment can be up to five times longer than cleaning processes based on other technologies, we must convince chip manufacturers of the innovative, differentiated nature of our technologies and the benefits associated with using our tools. If we are unable to obtain new customers and continue to achieve widespread market acceptance of our tools, then our business, operations, financial results and growth prospects will be materially and adversely affected.

If we do not continue to enhance our existing single-wafer wet cleaning tools and achieve market acceptance, we will not be able to compete effectively.

We operate in an industry that is subject to evolving standards, rapid technological changes and changes in customer demands. Additionally, if process nodes continue to shrink to ever-smaller dimensions and conventional two-dimensional chips reach their critical performance limitations, the technology associated with manufacturing chips may advance to a point where our Ultra C equipment based on SAPS and TEBO technologies becomes obsolete. Accordingly, the future of our business will depend in large part upon the continuing relevance of our technological capabilities, our ability to interpret customer and market requirements in advance of tool deliveries, and our ability to introduce in a timely manner new tools that address chip makers' requirements for cost-effective cleaning solutions. We expect to spend a significant amount of time and resources developing new tools and enhancing existing tools. Our ability to introduce and market successfully any new or enhanced cleaning equipment is subject to a wide variety of challenges during the tool's development, including the following:

- accurate anticipation of market requirements, changes in technology and evolving standards;
- the availability of qualified product designers and technologies needed to solve difficult design challenges in a cost-effective, reliable manner;
- our ability to design products that meet chip manufacturers' cost, size, acceptance and specification criteria, and performance requirements;
- the ability and availability of suppliers and third-party manufacturers to manufacture and deliver the critical components and subassemblies of our tools in a timely manner;
- market acceptance of our customers' products, and the lifecycle of those products; and
- our ability to deliver products in a timely manner within our customers' product planning and deployment cycle.

Certain enhancements to our Ultra C equipment in future periods may reduce demand for our pre-existing tools. As we introduce new or enhanced cleaning tools, we must manage the transition from older tools in order to minimize disruptions in customers' ordering patterns, avoid excessive levels of older tool inventories and ensure timely delivery of sufficient supplies of new tools to meet customer demand. Furthermore, product introductions could delay purchases by customers awaiting arrival of our new products, which could cause us to fail to meet our expected level of production orders for pre-existing tools.

Our success will depend on our ability to identify and enter new product markets.

We expect to spend a significant amount of time and resources identifying new product markets in addition to the market for cleaning solutions and in developing new products for entry into these markets. Our TEBO technology took eight years to develop, and development of any new technology could require a similar, or even longer, period of time. Product development requires significant investments in engineering hours, third-party development costs, prototypes and sample materials, as well as sales and marketing expenses, which will not be recouped if the product launch is unsuccessful. We may fail to predict the needs of other markets accurately or develop new, innovative technologies to address those needs. Further, we may not be able to design and introduce new products in a timely or cost-efficient manner, and our new products may be more costly to develop, may fail to meet the requirements of the market, or may be adopted slower than we expect. If we are not able to introduce new products successfully, our inability to gain market share in new product markets could adversely affect our ability to sustain our revenue growth or maintain our current revenue levels.

If we fail to establish and maintain a reputation for credibility and product quality, our ability to expand our customer base will be impaired and our operating results may suffer.

We must develop and maintain a market reputation for innovative, differentiated technologies and high quality, reliable products in order to attract new customers and achieve widespread market acceptance of our products. Our market reputation is critical because we compete against several larger, more established competitors, many of which supply equipment for a larger number of process steps than we do to a broader customer base in an industry with a limited number of customers. In these circumstances, traditional marketing and branding efforts are of limited value, and our success depends on our ability to provide customers with reliable and technically sophisticated products. If the limited customer base does not perceive our products and services to be of high quality and effectiveness, our reputation could be harmed, which could adversely impact our ability to achieve our targeted growth.

We operate in a highly competitive industry and many of our competitors are larger, better-established, and have significantly greater operating and financial resources than we have.

The chip equipment industry is highly competitive, and we face substantial competition throughout the world in each of the markets we serve. Many of our current and potential competitors have, among other things:

- greater financial, technical, sales and marketing, manufacturing, distribution and other resources;
- established credibility and market reputations;
- longer operating histories;
- broader product offerings;
- more extensive service offerings, including the ability to have large inventories of spare parts available near, or even at, customer locations;
- local sales forces; and
- more extensive geographic coverage.

These competitors may also have the ability to offer their products at lower prices by subsidizing their losses in wet cleaning with profits from other lines of business in order to retain current or obtain new customers. Among other things, some competitors have the ability to offer bundled discounts for customers purchasing multiple products. Many of our competitors have more extensive customer and partner relationships than we do and may therefore be in a better position to identify and respond to market developments and changes in customer demands. Potential customers may prefer to purchase from their existing suppliers rather than a new supplier, regardless of product performance or features. If we are not able to compete successfully against existing or new competitors, our business, operating results and financial condition will be negatively affected.

We depend on a small number of customers for a substantial portion of our revenue, and the loss of, or a significant reduction in orders from, one of our major customers could have a material adverse effect on our revenue and operating results. There are also a limited number of potential customers for our products.

The chip manufacturing industry is highly concentrated, and we derive a significant portion of our revenue from the sale of our products to a small number of customers. In the first half of 2017, 62.8% of our revenue was derived from three customers: SK Hynix Inc., 22.8%; Shanghai Huali Microelectronics Corporation, 20.6%; and Yangtze Memory Technologies Co., Ltd. and a subsidiary, 19.4%. In 2016 99.3% of our revenue was derived from four customers: Shanghai Huali Microelectronics Corporation, 33.7%; Semiconductor Manufacturing International Corporation, 25.0%; SK Hynix Inc., 24.0%; and JiangYin ChangDian Advanced Packaging Co. Ltd., 16.6%. In 2015 all of our revenue was derived from three customers, including SK Hynix Inc., which accounted for 86.0% of our revenue, and JiangYin ChangDian Advanced Packaging Co., Ltd., which accounted for 10.1% of our revenue. As a consequence of the concentrated nature of our customer base, our revenue and results of operations may fluctuate from quarter to quarter and are difficult to estimate, and any cancellation of orders or any acceleration or delay in anticipated product purchases or the acceptance of shipped products by our larger customers could materially affect our revenue and results of operations in any quarterly period.

We may be unable to sustain or increase our revenue from our larger customers or offset the discontinuation of concentrated purchases by our larger customers with purchases by new or existing customers. We expect a small number of customers will continue to account for a high percentage of our revenue for the foreseeable future and that our results of operations may fluctuate materially as a result of such larger customers' buying patterns. Thus, our business success depends on our ability to maintain strong relationships with our customers. The loss of any of our key customers for any reason, or a change in our relationship with any of our key customers, including a significant delay or reduction in their purchases, may cause a significant decrease in our revenue, which we may not be able to recapture due to the limited number of potential customers.

We have seen, and may see in the future, consolidation of our customer base. Industry consolidation generally has negative implications for equipment suppliers, including a reduction in the number of potential customers, a decrease in aggregate capital spending and greater pricing leverage on the part of consumers over equipment suppliers. Continued consolidation of the chip industry could make it more difficult for us to grow our customer base, increase sales of our products and maintain adequate gross margins.

Our customers do not enter into long-term purchase commitments, and they may decrease, cancel or delay their projected purchases at any time.

In accordance with industry practice, our sales are on a purchase order basis, which we seek to obtain three to four months in advance of the expected product delivery date. Until a purchase order is received, we do not have a binding purchase commitment. Our SAPS and TEBO customers to date have provided us with non-binding one- to two-year forecasts of their anticipated demands, but those forecasts can be changed at any time, without any required notice to us. Because the lead-time needed to produce a tool customized to a customer's specifications can extend up to six months, we may need to begin production of tools based on non-binding forecasts, rather than waiting to receive a binding purchase order. No assurance can be made that a customer's forecast will result in a firm purchase order within the time period we expect, or at all.

If we do not accurately predict the amount and timing of a customer's future purchases, we risk expending time and resources on producing a customized tool that is not purchased by a particular customer, which may result in excess or unwanted inventory, or we may be unable to fulfill an order on the schedule required by a purchase order, which would result in foregone sales. Customers may place purchase orders that exceed forecasted amounts, which could result in delays in our delivery time and harm our reputation. In the future a customer may decide not to purchase our tools at all, may purchase fewer tools than it did in the past or may otherwise alter its purchasing patterns, and the impact of any such actions may be intensified given our dependence on a small number of large customers. Our customers make major purchases periodically as they add capacity or otherwise implement technology upgrades. If any significant customers cancel, delay or reduce orders, our operating results could suffer.

We may incur significant expenses long before we can recognize revenue from new products, if at all, due to the costs and length of research, development, manufacturing and customer evaluation process cycles.

We often incur significant research and development costs for products that are purchased by our customers only after much, or all, of the cost has been incurred or that may never be purchased. We allow new customers, or existing customers considering new products, to evaluate products without any payment becoming due unless the product is ultimately accepted, which means we may invest $1.0 to $2.0 million in manufacturing a tool that may never be accepted and purchased or may be purchased months or even years after production. In the past we have borrowed money in order to fund first-time purchase order equipment and next-generation evaluation equipment. When we complete a first-time sale, we may not receive payment for up to 24 months. Even returning customers may take as long as six months to make any payments. If our sales efforts are unsuccessful after expending significant resources, or if we experience delays in completing sales, our future cash flow, revenue and profitability may fluctuate or be materially adversely affected.

Our sales cycle is long and unpredictable, which results in variability of our financial performance and may require us to incur high sales and marketing expenses with no assurance that a sale will result, all of which could adversely affect our profitability.

Our results of operations may fluctuate, in part, because of the resource-intensive nature of our sales efforts and the length and variability of our sales cycle. A sales cycle is the period between initial contact with a prospective customer and any sale of our tools. Our sales process involves educating customers about our tools, participating in extended tool evaluations and configuring our tools to customer-specific needs, after which customers may evaluate the tools. The length of our sales cycle, from initial contact with a customer to the execution of a purchase order, is generally 6 to 24 months. During the sales cycle, we expend significant time and money on sales and marketing activities and make investments in evaluation equipment, all of which lower our operating margins, particularly if no sale occurs or if the sale is delayed as a result of extended qualification processes or delays from our customers' customers.

The duration or ultimate success of our sales cycle depends on factors such as:

- efforts by our sales force;
- the complexity of our customers' manufacturing processes and the compatibility of our tools with those processes;
- our customers' internal technical capabilities and sophistication; and
- our customers' capital spending plans and processes, including budgetary constraints, internal approvals, extended negotiations or administrative delays.

It is difficult to predict exactly when, or even if, we will make a sale to a potential customer or if we can increase sales to our existing customers. As a result, we may not recognize revenue from our sales efforts for extended periods of time, or at all. The loss or delay of one or more large transactions in a quarter could impact our results of operations for that quarter and any future quarters for which revenue from that transaction is lost or delayed. In addition, we believe that the length of the sales cycle and intensity of the evaluation process may increase for those current and potential customers that centralize their purchasing decisions.

Difficulties in forecasting demand for our tools may lead to periodic inventory shortages or excess spending on inventory items that may not be used.

We need to manage our inventory of components and production of tools effectively to meet changing customer requirements. Accurately forecasting customers' needs is difficult. Our tool demand forecasts are based on multiple assumptions, including non-binding forecasts received from our customers years in advance, each of which may introduce error into our estimates. Inventory levels for components necessary to build our tools in

excess of customer demand may result in inventory write-downs and could have an adverse effect on our operating results and financial condition. Conversely, if we underestimate demand for our tools or if our manufacturing partners fail to supply components we require at the time we need them, we may experience inventory shortages. Such shortages might delay production or shipments to customers and may cause us to lose sales. These shortages may also harm our credibility, diminish the loyalty of our channel partners or customers. A failure to prevent inventory shortages or accurately predict customers' needs could result in decreased revenue and gross margins and harm our business.

Some of our products and supplies may become obsolete or be deemed excess while in inventory due to rapidly changing customer specifications, changes in product structure, components or bills of material as a result of engineering changes, or a decrease in customer demand. We also have exposure to contractual liabilities to our contract manufacturers for inventories purchased by them on our behalf, based on our forecasted requirements, which may become excess or obsolete. Our inventory balances also represent an investment of cash. To the extent our inventory turns are slower than we anticipate based on historical practice, our cash conversion cycle extends and more of our cash remains invested in working capital. If we are not able to manage our inventory effectively, we may need to write down the value of some of our existing inventory or write off non-saleable or obsolete inventory. Any such charges we incur in future periods could materially and adversely affect our results of operations.

The difficulty in forecasting demand also makes it difficult to estimate our future results of operations and financial condition from period to period. A failure to accurately predict the level of demand for our products could adversely affect our net revenue and net income, and we are unlikely to forecast such effects with any certainty in advance.

If our tools contain defects or do not meet customer specifications, we could lose customers and revenue.

Highly complex tools such as our may develop defects during the manufacturing and assembly process. We may also experience difficulties in customizing our tools to meet customer specifications or detecting defects during the development and manufacturing of our tools. Some of these failures may not be discovered until we have expended significant resources in customizing our tools, or until our tools have been installed in our customers' production facilities. These quality problems could harm our reputation as well as our customer relationships in the following ways:

- our customers may delay or reject acceptance of our tools that contain defects or fail to meet their specifications;
- we may suffer customer dissatisfaction, negative publicity and reputational damage, resulting in reduced orders or otherwise damaging our ability to retain existing customers and attract new customers;
- we may incur substantial costs as a result of warranty claims or service obligations or in order to enhance the reliability of our tools;
- the attention of our technical and management resources may be diverted;
- we may be required to replace defective systems or invest significant capital to resolve these problems; and
- we may be required to write off inventory and other assets related to our tools.

In addition, defects in our tools or our inability to meet the needs of our customers could cause damage to our customers' products or manufacturing facilities, which could result in claims for product liability, tort or breach of warranty, including claims from our customers. The cost of defending such a lawsuit, regardless of its merit, could be substantial and could divert management's attention from our ongoing operations. In addition, if our business liability insurance coverage proves inadequate with respect to a claim or future coverage is

unavailable on acceptable terms or at all, we may be liable for payment of substantial damages. Any or all of these potential consequences could have an adverse impact on our operating results and financial condition.

Warranty claims in excess of our estimates could adversely affect our business.

We have provided warranties against manufacturing defects of our tools that range from 12 to 36 months in duration. Our product warranty requires us to provide labor and parts necessary to repair defects. To date we have not accrued a significant liability contingency for potential warranty claims. Warranty claims substantially in excess of our expectations, or significant unexpected costs associated with warranty claims, could harm our reputation and could cause customers to decline to place new or additional orders, which could have a material adverse effect on our business, results of operations and financial condition.

We rely on third parties to manufacture significant portions of our tools and our failure to manage our relationships with these parties could harm our relationships with our customers, increase our costs, decrease our sales and limit our growth.

Our tools are complex and require components and subassemblies having a high degree of reliability, accuracy and performance. We rely on third parties to manufacture most of the subassemblies and supply most of the components used in our tools. Accordingly, we cannot directly control our delivery schedules and quality assurance. This lack of control could result in shortages or quality assurance problems. These issues could delay shipments of our tools, increase our testing costs or lead to costly failure claims.

We do not have long-term supply contracts with some of our suppliers, and those suppliers are not obligated to perform services or supply products to us for any specific period, in any specific quantities or at any specific price, except as may be provided in a particular purchase order. In addition, we attempt to maintain relatively low inventories and acquire subassemblies and components only as needed. There are significant risks associated with our reliance on these third-party suppliers, including:

- potential price increases;
- capacity shortages or other inability to meet any increase in demand for our products;
- reduced control over manufacturing process for components and subassemblies and delivery schedules;
- limited ability of some suppliers to manufacture and sell subassemblies or parts in the volumes we require and at acceptable quality levels and prices, due to the suppliers' relatively small operations and limited manufacturing resources;
- increased exposure to potential misappropriation of our intellectual property; and
- limited warranties on subassemblies and components supplied to us.

Any delays in the shipment of our products due to our reliance on third-party suppliers could harm our relationships with our customers. In addition, any increase in costs due to our suppliers increasing the price they charge us for subassemblies and components or arising from our need to replace our current suppliers that we are unable to pass on to our customers could negatively affect our operating results.

Any shortage of components or subassemblies could result in delayed delivery of products to us or in increased costs to us, which could harm our business.

The ability of our manufacturers to supply our tools is dependent, in part, upon the availability certain components and subassemblies. Our manufacturers may experience shortages in the availability of such components or subassemblies, which could result in delayed delivery of products to us or in increased costs to us. Any shortage of components or subassemblies or any inability to control costs associated with manufacturing could increase the costs for our products or impair our ability to ship orders in a timely cost-efficient manner. As a result, we could experience cancellation of orders, refusal to accept deliveries or a reduction in our prices and margins, any of which could harm our financial performance and results of operations.

We depend on a limited number of suppliers, including single source suppliers, for critical components and subassemblies, and our business could be disrupted if they are unable to meet our needs.

We depend on a limited number of suppliers for components and subassemblies used in our tools. Certain components and subassemblies of our tools have only been purchased from our current suppliers to date, and changing the source of those components and subassemblies may result in disruptions during the transition process and entail significant delay and expense. We rely on Product Systems, Inc., or ProSys, as the sole supplier of megasonic transducers, a key subassembly used in our single-wafer cleaning equipment. We also rely on Ninebell Co., Ltd., or Ninebell, which is the principal supplier of robotic delivery system subassemblies used in our single-wafer cleaning equipment. An adverse change to our relationship with ProSys or Ninebell would disrupt our production of single-wafer cleaning equipment and could cause substantial harm to our business.

With some of these suppliers, we do not have long-term agreements and instead purchase components and subassemblies through a purchase order process. As a result, these suppliers may stop supplying us components and subassemblies, limit the allocation of supply and equipment to us due to increased industry demand or significantly increase their prices at any time with little or no advance notice. Our reliance on a limited number of suppliers could also result in delivery problems, reduced control over product pricing and quality, and our inability to identify and qualify another supplier in a timely manner.

Moreover, some of our suppliers may experience financial difficulties that could prevent them from supplying us with components or subassemblies used in the design and manufacture of our products. In addition, our suppliers, including our sole supplier ProSys, may experience manufacturing delays or shut downs due to circumstances beyond their control, such as labor issues, political unrest or natural disasters. Any supply deficiencies could materially and adversely affect our ability to fulfill customer orders and our results of operations. We have in the past and may in the future, experience delays or reductions in supply shipments, which could reduce our revenue and profitability. If key components or materials are unavailable, our costs would increase and our revenue would decline.

We have depended on PRC governmental subsidies to help fund our technology development since 2008, and our failure to obtain additional subsidies may impede our development of new technologies and may increase our cost of capital, either of which could make it difficult for us to expand our product base.

We received subsidies from local and central governmental authorities in the PRC in 2008, 2009 and 2014. These grants have provided a majority of the funding for our development and commercialization of stress-free polishing and electro copper-plating technologies. If we are unable to obtain similar governmental subsidies for development projects in the future, we may need to raise additional funds through public or private financings, strategic relationships, or other arrangements, which could force us to reduce our efforts to develop technologies beyond SARS and TEBO. To the extent that we receive a lower level of, or no, governmental subsidies in the future, we may need to raise additional funds through public or private financings, strategic relationships, or other arrangements.

The success of our business will depend on our ability to manage any future growth.

We have experienced rapid growth in our business recently due, in part, to an expansion of our product offerings and an increase in the number of customers that we serve. For example, our headcount grew by 18.7% during 2016 and by an additional 27.4% from January 1, 2017 to September 11, 2017. We will seek to continue to expand our operations in the future, including by adding new offices, locations and employees. Managing our growth has placed and could continue to place a significant strain on our management, other personnel and our infrastructure. If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities, develop new products, enhance our technological capabilities, satisfy customer requirements, respond to competitive pressures or otherwise execute our business plan. In addition, any inability to manage our growth effectively could result in operating inefficiencies that could impair our competitive

position and increase our costs disproportionately to the amount of growth we achieve. To manage our growth, we believe we must effectively:

- hire, train, integrate and manage additional qualified engineers for research and development activities, sales and marketing personnel, service and support personnel and financial and information technology personnel;
- manage multiple relationships with our customers, suppliers and other third parties; and
- continue to enhance our information technology infrastructure, systems and controls.

Our organizational structure has become more complex, and we will need to continue to scale and adapt our operational, financial and management controls, as well as our reporting systems and procedures. The continued expansion of our infrastructure will require us to commit substantial financial, operational and management resources before our revenue increases and without any assurances that our revenue will increase.

We are highly dependent on our Chief Executive Officer and President and other senior management and key employees.

Our success largely depends on the skills, experience and continued efforts of our management, technical and sales personnel, including in particular Dr. David H. Wang, our Chief Executive Officer, President and founder. If one or more of our senior management were unable or unwilling to continue their employment with us, we may not be able to replace them in a timely manner. We may incur additional expenses to recruit and retain qualified replacements. We do not currently maintain key person life insurance policies on any of our employees. Our business may be severely disrupted and our financial condition and results of operations may be materially and adversely affected. In addition, our senior management may join a competitor or form a competing company. All of our senior management are at-will employees, which means either we or the employee may terminate his or her employment at any time. The loss of Dr. Wang or other key management personnel could significantly delay or prevent the achievement of our business objectives.

Failure to attract and retain qualified personnel could put us at a competitive disadvantage and prevent us from effectively growing our business.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled personnel. There is substantial competition for experienced management, technical and sales personnel in the chip equipment industry. If qualified personnel become scarce or difficult to attract or retain for compensation-related or other reasons, we could experience higher labor, recruiting or training costs. New hires may require significant training and time before they achieve full productivity and may not become as productive as we expect. If we are unable to retain and motivate our existing employees and attract qualified personnel to fill key positions, we may experience inadequate levels of staffing to develop and market our products and perform services for our customers, which could have a negative effect on our operating results.

Our ability to utilize certain U.S. and state net operating loss carryforwards may be limited under applicable tax laws.

As of June 30, 2017, we had net operating loss carryforward amounts, or NOLs, of $18.9 million for U.S. federal income tax purposes and $322,000 for U.S. state income tax purposes. The federal and state NOLs will expire at various dates beginning in 2036.

Utilization of these NOLs could be subject to a substantial annual limitation if the ownership change limitations under U.S. Internal Revenue Code Sections 382 and 383 and similar U.S. state provisions are triggered by changes in the ownership of our capital stock. Such an annual limitation would result in the expiration of the NOLs before utilization. Our existing NOLs may be subject to limitations arising from

previous ownership changes, including in connection with this offering and any future follow-on public offerings. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change. Regulatory changes, such as suspensions on the use of NOLs, or other unforeseen reasons, may cause our existing NOLs to expire or otherwise become unavailable to offset future income tax liabilities. Additionally, U.S. state NOLs generated in one state cannot be used to offset income generated in another U.S. state. For these reasons, we may be limited in our ability to realize tax benefits from the use of our NOLs, even if our profitability would otherwise allow for it.

Acquisitions that we pursue in the future, whether or not consummated, could result in other operating and financial difficulties.

In the future we may seek to acquire additional product lines, technologies or businesses in an effort to increase our growth, enhance our ability to compete, complement our product offerings, enter new and adjacent markets, obtain access to additional technical resources, enhance our intellectual property rights or pursue other competitive opportunities. We may also make investments in certain key suppliers to align our interests with such suppliers. If we seek acquisitions, we may not be able to identify suitable acquisition candidates at prices we consider appropriate. We cannot readily predict the timing or size of our future acquisitions, or the success of any future acquisitions.

To the extent that we consummate acquisitions or investments, we may face financial risks as a result, including increased costs associated with merged or acquired operations, increased indebtedness, economic dilution to gross and operating profit and earnings per share, or unanticipated costs and liabilities. Acquisitions may involve additional risks, including:

- the acquired product lines, technologies or businesses may not improve our financial and strategic position as planned;
- we may determine we have overpaid for the product lines, technologies or businesses, or that the economic conditions underlying our acquisition have changed;
- we may have difficulty integrating the operations and personnel of the acquired company;
- we may have difficulty retaining the employees with the technical skills needed to enhance and provide services with respect to the acquired product lines or technologies;
- the acquisition may be viewed negatively by customers, employees, suppliers, financial markets or investors;
- we may have difficulty incorporating the acquired product lines or technologies with our existing technologies;
- we may encounter a competitive response, including price competition or intellectual property litigation;
- we may become a party to product liability or intellectual property infringement claims as a result of our sale of the acquired company’s products;
- we may incur one-time write-offs, such as acquired in-process research and development costs, and restructuring charges;
- we may acquire goodwill and other intangible assets that are subject to impairment tests, which could result in future impairment charges;
- our ongoing business and management’s attention may be disrupted or diverted by transition or integration issues and the complexity of managing geographically or culturally diverse enterprises; and
- our due diligence process may fail to identify significant existing issues with the target business.

From time to time, we may enter into negotiations for acquisitions or investments that are not ultimately consummated. These negotiations could result in significant diversion of management time, as well as substantial out-of-pocket costs, any of which could have a material adverse effect on our business, operating results and financial condition.

Future declines in the semiconductor industry, and the overall world economic conditions on which the industry is significantly dependent, could have a material adverse impact on our results of operations and financial condition.

Our business depends on the capital equipment expenditures of chip manufacturers, which in turn depend on the current and anticipated market demand for integrated circuits. With the consolidation of customers within the industry, the chip capital equipment market may experience rapid changes in demand driven both by changes in the market generally and the plans and requirements of particular customers. Global economic and business conditions, which are often unpredictable, have historically impacted customer demand for our products and normal commercial relationships with our customers, suppliers and creditors. Additionally, in times of economic uncertainty our customers' budgets for our tools, or their ability to access credit to purchase them, could be adversely affected. This would limit their ability to purchase our products and services. As a result, economic downturns could cause material adverse changes to our results of operations and financial condition including:

- a decline in demand for our products;
- an increase in reserves on accounts receivable due to our customers' inability to pay us;
- an increase in reserves on inventory balances due to excess or obsolete inventory as a result of our inability to sell such inventory;
- valuation allowances on deferred tax assets;
- restructuring charges;
- asset impairments including the potential impairment of goodwill and other intangible assets;
- a decline in the value of our investments;
- exposure to claims from our suppliers for payment on inventory that is ordered in anticipation of customer purchases that do not come to fruition;
- a decline in the value of certain facilities we lease to less than our residual value guarantee with the lessor; and
- challenges maintaining reliable and uninterrupted sources of supply.

Fluctuating levels of investment by chip manufacturers may materially affect our aggregate shipments, revenue, operating results and earnings. Where appropriate, we will attempt to respond to these fluctuations with cost management programs aimed at aligning our expenditures with anticipated revenue streams, which could result in restructuring charges. Even during periods of reduced revenues, we must continue to invest in research and development and maintain extensive ongoing worldwide customer service and support capabilities to remain competitive, which may temporarily harm our profitability and other financial results.

We conduct substantially all of our operations outside the United States and face risks associated with conducting business in foreign markets.

All of our sales in 2015, 2016 and the first half of 2017 were made to customers outside the United States. Our manufacturing center has been located in Shanghai, PRC since 2006 and substantially all of our operations are located in the PRC. We expect that all of our significant activities will remain outside the United States in the future. We are subject to a number of risks associated with our international business activities, including:

- imposition of, or adverse changes in, foreign laws or regulatory requirements;

- the need to comply with the import laws and regulations of various foreign jurisdictions, including a range of U.S. import laws;
- potentially adverse tax consequences, including withholding tax rules that may limit the repatriation of our earnings, and higher effective income tax rates in foreign countries where we conduct business;
- competition from local suppliers with which potential customers may prefer to do business;
- seasonal reduction in business activity, such as during Chinese, or Lunar, New Year in parts of Asia and in other periods in various individual countries;
- increased exposure to foreign currency exchange rates;
- reduced protection for intellectual property;
- longer sales cycles and reliance on indirect sales in certain regions;
- increased length of time for shipping and acceptance of our products;
- greater difficulty in responding to customer requests for maintenance and spare parts on a timely basis;
- greater difficulty in enforcing contracts and accounts receivable collection and longer collection periods;
- difficulties in staffing and managing foreign operations and the increased travel, infrastructure and legal and compliance costs associated with multiple international locations;
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, our consolidated financial statements; and
- general economic conditions, geopolitical events or natural disasters in countries where we conduct our operations or where our customers are located, including political unrest, war, acts of terrorism or responses to such events.

In particular, the Asian market is extremely competitive, and chip manufacturers may be aggressive in seeking price concessions from suppliers, including chip equipment manufacturers.

We may not be successful in developing and implementing policies and strategies that will be effective in managing these risks in each country in which we do business. Our failure to manage these risks successfully could adversely affect our business, operating results and financial condition.

Fluctuation in foreign currency exchange rates may adversely affect our results of operations and financial position.

Our results of operations and financial position could be adversely affected as a result of fluctuations in foreign currency exchange rates. Although our financial statements are denominated in U.S. dollars, a sizable portion of our revenues and costs are denominated in other currencies, primarily the Chinese Renminbi. Because many of our raw material purchases are denominated in Renminbi while the majority of the purchase orders we receive are denominated in U.S. dollars, exchange rates have a significant effect on our gross margin. We have not engaged in any foreign currency exchange hedging transactions to date, and any strategies that we may use in the future to reduce the adverse impact of fluctuations in foreign currency exchange rates may not be successful. Our foreign currency exposure with respect to assets and liabilities for which we do not have hedging arrangements could have a material impact on our results of operations in periods when the U.S. dollar significantly fluctuates in relation to unhedged non-U.S. currencies in which we transact business.

Changes in political and economic policies of the PRC government may materially and adversely affect our business, financial condition and results of operations and may result in our inability to sustain our growth and expansion strategies.

Substantially all of our operations are conducted in the PRC, and a substantial majority of our revenue is sourced from the PRC. Accordingly, our financial condition and results of operations are affected to a significant extent by economics, political and legal developments in the PRC.

The Chinese economy differs from the economies of most developed countries in many respects, including the extent of government involvement, level of development, growth rate, and control of foreign exchange and allocation of resources. Although the PRC government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets and the establishment of improved corporate governance in business enterprises, a substantial portion of productive assets in the PRC are still owned by the government. In addition, the PRC government continues to play a significant role in regulating industry development by imposing industrial policies. The PRC government also exercises significant control over economic growth in the PRC by allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, regulating financial services and institutions, and providing preferential treatment to particular industries or companies.

While the PRC economy has experienced significant growth in the past three decades, growth has been uneven, both geographically and among various sectors of the economy. The PRC government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures may benefit the overall PRC economy, but may also have a negative effect on us. Our financial condition and results of operation could be materially and adversely affected by government control over capital investments or changes in tax regulations that are applicable to us. In the past the PRC government has implemented measures to control the pace of economic growth, and similar measures in the future may cause decreased economic activity, which in turn could lead to a reduction in demand for our products and consequently have a material adverse effect on our businesses, financial condition and results of operations.

Although the PRC government has been implementing policies to develop an independent domestic semiconductor industry supply chain, there is no guaranteed time frame in which these initiatives will be implemented. We cannot guarantee that the implementation of these policies will result in additional revenue to us or that our presence in the PRC will result in support from the PRC government. To the extent that any capital investment or other assistance from the PRC government is not provided to us, it could be used to promote the products and technologies of our competitors, which could adversely affect our business, operating results and financial condition.

We are subject to government regulation, including import, export, economic sanctions, and anti-corruption laws and regulations, that may limit our sales opportunities, expose us to liability and increase our costs.

Our products are subject to import and export controls in jurisdictions in which we distribute or sell our products. Import and exports control and economic sanctions laws and regulations include restrictions and prohibitions on the sale or supply of certain products and on our transfer of parts, components, and related technical information and know-how to certain countries, regions, governments, persons and entities.

Various countries regulate the importation of certain products through import permitting and licensing requirements and have enacted laws that could limit our ability to distribute our products. The exportation, re-exportation, transfers within foreign countries and importation of our products, including by our partners, must comply with these laws and regulations, and any violations may result in reputational harm, government investigations and penalties, and a denial or curtailment of exporting. Complying with export control and sanctions laws for a particular sale may be time consuming, may increase our costs, and may result in the delay or loss of sales opportunities. If we are found to be in violation of U.S. sanctions or export control laws, or

similar laws in other jurisdictions, we and the individuals working for us could incur substantial fines and penalties. Changes in export, sanctions or import laws or regulations may delay the introduction and sale of our products in international markets, require us to spend resources to seek necessary government authorizations or to develop different versions of our products, or, in some cases, prevent the export or import of our products to certain countries, regions, governments, persons or entities, which could adversely affect our business, financial condition and operating results.

We are subject to various domestic and international anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act, as well as similar anti-bribery and anti-kickback laws and regulations. These laws and regulations generally prohibit companies and their intermediaries from offering or making improper payments to non-U.S. officials for the purpose of obtaining, retaining or directing business. Our exposure for violating these laws and regulations increases as our international presence expands and as we increase sales and operations in foreign jurisdictions.

Breaches of our cybersecurity systems could degrade our ability to conduct our business operations and deliver products to our customers, result in data losses and the theft of our intellectual property, damage our reputation, and require us to incur significant additional costs to maintain the security of our networks and data.

We increasingly depend upon our information technology systems to conduct our business operations, ranging from our internal operations and product development and manufacturing activities to our marketing and sales efforts and communications with our customers and business partners. Computer programmers may attempt to penetrate our network security, or that of our website, and misappropriate our proprietary information or cause interruptions of our service. Because the techniques used by such computer programmers to access or sabotage networks change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques. We have also outsourced a number of our business functions to third-party contractors, including our manufacturers, and our business operations also depend, in part, on the success of our contractors' own cybersecurity measures. Accordingly, if our cybersecurity systems and those of our contractors fail to protect against unauthorized access, sophisticated cyberattacks and the mishandling of data by our employees and contractors, our ability to conduct our business effectively could be damaged in a number of ways, including sensitive data regarding our employees or business, including intellectual property and other proprietary data, could be stolen. Should this occur, we could be subject to significant claims for liability from our customers and regulatory actions from governmental agencies. In addition, our ability to protect our intellectual property rights could be compromised and our reputation and competitive position could be significantly harmed. Consequently, our financial performance and results of operations could be adversely affected.

Our production facilities could be damaged or disrupted by a natural disaster, war, terrorist attacks or other catastrophic events.

Our manufacturing facilities are subject to risks associated with natural disasters, such as earthquakes, fires, floods tsunami, typhoons and volcanic activity, environmental disasters, health epidemics, and other events beyond our control such as power loss, telecommunications failures, and uncertainties arising out of armed conflicts or terrorist attacks. A substantial majority of our facilities as well as our research and development personnel are located in the PRC. Any catastrophic loss or significant damage to any of our facilities would likely disrupt our operations, delay production, and adversely affect our product development schedules, shipments and revenue. In addition, any such catastrophic loss or significant damage could result in significant expense to repair or replace the facility and could significantly curtail our research and development efforts in a particular product area or primary market, which could have a material adverse effect on our operations and operating results.

Our management and auditors identified a material weakness in our internal control over financial reporting that, if not properly remediated, could result in material misstatements in our consolidated financial statements that could cause investors to lose confidence in our reported financial information and have a negative effect on the trading price of our stock.

Neither we nor BDO China Shu Lun Pan Certified Public Accountants LLP, or BDO China, our independent registered public accounting firm, has performed a comprehensive assessment of our internal control over financial reporting, as defined by the American Institute of Certified Public Accountants, for purposes of identifying and reporting material weaknesses and other control deficiencies. We are not currently required to comply with Section 404 of the Sarbanes-Oxley Act and therefore are not required to assess the effectiveness of our internal control over financial reporting. Further, BDO China has not been engaged to express, nor has it expressed, an opinion on the effectiveness of our internal control over financial reporting.

In connection with its audits of our consolidated financial statements as of, and for the years ended, December 31, 2016 and 2015, BDO China informed us that it had identified a material weakness in our internal control over financial reporting relating to our lack of sufficient qualified financial reporting and accounting personnel with an appropriate level of expertise to properly address complex accounting issues under accounting principles generally accepted in the United States, or GAAP, and to prepare and review our consolidated financial statements and related disclosures to fulfill GAAP and Securities and Exchange Commission financial reporting requirements. We are taking remedial measures to improve the effectiveness of our controls, including by hiring additional accounting and finance personnel and by engaging outside consulting firms.

The existence of material weaknesses is an indication that there is a more than remote likelihood that a material misstatement of our financial statements will not be prevented or detected in a future period, and the process of designing and implementing effective internal controls and procedures will be a continual effort that may require us to expend significant resources to establish and maintain a system of controls that is adequate to satisfy our reporting obligations as a public company. We cannot assure you that the measures we take will be sufficient to remediate the material weakness identified by BDO China or that we will implement and maintain adequate controls over our financial processes and reporting in the future in order to avoid additional material weaknesses or controlled deficiencies in our internal control over financing reporting. If our remediation efforts are not successful or other material weaknesses or control deficiencies occur in the future, we may be unable to report our financial results accurately or on a timely basis, which could cause our reported financial results to be materially misstated and result in the loss of investor confidence and cause the trading price of Class A common stock to decline. Moreover, ineffective controls could significantly hinder our ability to prevent fraud.

Our auditor, as a registered public accounting firm operating in the PRC, is not permitted to be inspected by the Public Company Accounting Oversight Board, and consequently investors may be deprived of the benefits of such inspections.

BDO China Shu Lun Pan Certified Public Accountants LLP, or BDO China, is the independent registered public accounting firm that issued the audit report included at the end of this prospectus in connection with our consolidated financial statements as of, and for the years ended, December 31, 2016 and 2015. BDO China, as an auditor of companies that are traded publicly in the United States and a firm registered with the U.S. Public Company Accounting Oversight Board, or PCAOB, is required by the laws of the United States to undergo regular inspections by the PCAOB to assess its compliance with the laws of the United States and applicable professional standards. BDO China is located in the PRC. The PCAOB is currently unable to conduct inspections on auditors in the PRC without the approval of PRC authorities, and therefore BDO China, like other independent registered public accounting firms operating in the PRC, is currently not inspected by the PCAOB.

In May 2013 the PCAOB announced that it has entered into a Memorandum of Understanding on Enforcement Cooperation with the China Securities Regulatory Commission and the Ministry of Finance of China pursuant to which the Ministry of Finance established a cooperative framework between the parties for the

production and exchange of audit documents relevant to investigations in both the PRC and the United States. More specifically, the Memorandum of Understanding provides a mechanism for the parties to request and receive from each other assistance in obtaining documents and information in furtherance of their investigative duties. In addition the PCAOB is engaged in continuing discussions with the China Securities Regulatory Commission and the Ministry of Finance to permit joint inspections in the PRC of audit firms that are registered with the PCAOB and to audit PRC companies whose securities are listed on U.S. stock exchanges.

The PCAOB's inspections of firms outside of the PRC have identified deficiencies in audit procedures and quality control procedures, and such deficiencies may be addressed as part of the inspection process to improve future audit quality. The inability of the PCAOB to conduct inspections of BDO China with respect to its audit of our consolidated financial statements may make it more difficult for investors to evaluate BDO China's audit procedures and quality control procedures by depriving investors of potential benefits from improvements that could have been facilitated by PCAOB inspections.

Risks Relating to Our Intellectual Property

Our success depends on our ability to protect our intellectual property, including our SAPS and TEBO technologies.

Our commercial success depends in part on our ability to obtain and maintain patent and trade secret protection for our intellectual property, including our SAPS and TEBO technologies and the design of our Ultra C equipment, as well as our ability to operate without infringing upon the proprietary rights of others. There can be no assurance that our patent applications will result in additional patents being issued or that issued patents will afford sufficient protection against competitors with similar technology, nor can there be any assurance that the patents issued will not be infringed, designed around, or invalidated by third parties. Even issued patents may later be found unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. The degree of future protection for our intellectual property is uncertain. Only limited protection may be available and may not adequately protect our rights or permit us to gain or keep any competitive advantage. This failure to properly protect the intellectual property rights relating to our products and technologies could have a material adverse effect on our financial condition and results of operations.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our future development partners will be successful in protecting our product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- The U.S. Patent and Trademark Office and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case.
- Patent applications may not result in any patents being issued.
- Patents that may be issued may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage.
- Our competitors may seek or may have already obtained patents that will limit, interfere with, or eliminate our ability to make, use and sell our potential product candidates.
- The PRC and other countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates.

In addition, we rely on the protection of our trade secrets and know-how. Although we have taken steps to protect our trade secrets and unpatented know-how, including entering into confidentiality and non-disclosure agreements with third parties and confidential information and inventions agreements with key employees, customers and suppliers, other parties may still obtain this information or may come upon this information independently. If any of these events occurs or if we otherwise lose protection for our trade secrets or proprietary know-how, the value of this information may be greatly reduced.

We may be involved in lawsuits to protect or enforce our patents, which could be expensive, time consuming and unsuccessful.

Competitors may infringe upon our patents. If our technologies are adopted, we believe that competitors may try to match our technologies and tools in order to compete. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. An adverse result in any litigation or defense proceedings, including our current suits, could put one or more of our patents at risk of being invalidated, found to be unenforceable or interpreted narrowly and could put our patent applications at risk of not issuing. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. In addition, any future patent litigation, interference or other administrative proceedings will result in additional expense and distraction of our personnel. Most of our competitors are larger than we are and have substantially greater resources, and they therefore are likely to be able to sustain the costs of complex patent litigation longer than we could. An adverse outcome in such litigation or proceedings may expose us to loss of our proprietary position.

We may not be able to protect our intellectual property rights throughout the world, which could materially, negatively affect our business.

Filing, prosecuting and defending patents on our products or proprietary technologies in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States, including the PRC, can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may export otherwise infringing products to territories where we have patent protection but enforcement is not as strong as that in the United States. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license and may adversely affect our business.

If we are sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in that litigation could have a material adverse effect on our business.

Our success depends on our ability to develop, manufacture, market and sell our products without infringing upon the proprietary rights of third parties. Numerous U.S. and foreign-issued patents and pending patent

applications owned by third parties exist in the fields in which we are developing products, some of which may contain claims that overlap with the subject matter of our intellectual property. A third party has claimed in the past, and others may claim in the future, that our technology or products infringe their intellectual property. In some instances third parties may initiate litigation against us in an effort to prevent us from using our technology in alleged violation of their intellectual property rights. The risk of such a lawsuit will likely increase as our size and the number and scope of our products increase and as our geographic presence and market share expand. Any potential intellectual property claims or litigation commenced against us could:

- be time consuming and expensive to defend, whether or not meritorious;
- force us to stop selling products or using technology that allegedly infringes the third party's intellectual property rights;
- delay shipments of our products;
- require us to pay damages or settlement fees to the party claiming infringement;
- require us to attempt to obtain a license to the relevant intellectual property, which may not be available on reasonable terms or at all;
- force us to attempt to redesign products that contain the allegedly infringing technology, which could be expensive or which we may be unable to do;
- require us to indemnify our customers, suppliers or other third parties for any loss caused by their use of our technology that allegedly infringes the third party's intellectual property rights; or
- divert the attention of our technical and managerial resources.

Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, that may later result in issued patents upon which our products or technologies may infringe. Similarly, there may be issued patents relevant to our products of which we are not aware.

Risks Related to Our Initial Public Offering and Ownership of Class A Common Stock

The market price of Class A common stock may be volatile or may decline regardless of our operating performance, and you may not be able to resell your shares at or above the initial public offering price.

The initial public offering price for Class A common stock was determined through negotiations between the underwriters and us and may vary from the market price of Class A common stock following this offering. If you purchase shares of Class A common stock in this offering, you may not be able to resell those shares at or above the initial public offering price. We cannot assure you that the market price following this offering will equal or exceed prices in privately negotiated transactions of our stock that have occurred from time to time prior to this offering. The market price of Class A common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- actual or anticipated fluctuations in our revenue and other operating results;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- actions of securities analysts who initiate or maintain coverage of us, changes in financial estimates by any securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- changes in projections for the chips or chip equipment industries or in the operating performance or expectations and stock market valuations of chip companies, chip equipment companies or technology companies in general;
- changes in operating results;

- any changes in the financial projections we may provide to the public, our failure to meet these projections, or changes in recommendations by any securities analysts that elect to follow Class A common stock;
- additional shares of Class A common stock being sold into the market by us or our existing stockholders or the anticipation of such sales;
- price and volume fluctuations in the overall stock market, including as a result of trends in the economy as a whole;
- lawsuits threatened or filed against us;
- litigation and other developments relating to our patents or other proprietary rights or those of our competitors;
- developments in new legislation and pending lawsuits or regulatory actions, including interim or final rulings by judicial or regulatory bodies; and
- general economic trends, including changes in the demand for electronics or information technology or geopolitical events such as war or acts of terrorism, or any responses to such events.

In recent years, the stock market in general, and the NASDAQ Global Market, or NASDAQ, in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations. These fluctuations may be even more pronounced in the trading market for our stock shortly following this offering.

As a newly public company, our stock price may be volatile, and securities class action litigation has often been instituted against companies following periods of volatility of their stock price. Any such litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

In the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

No public market for Class A common stock currently exists, and an active trading market may not develop or be sustained following this offering.

Prior to this offering, there has been no public market for Class A common stock. An active trading market may not develop following completion of this offering or, if developed, may not be sustained. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair market value of your shares. There can be no assurance that we will be able to successfully develop a liquid market for Class A common stock.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We cannot specify with any certainty the particular uses of the net proceeds that we will receive from this offering. Our management will have broad discretion in the application of the net proceeds, including working capital and other general corporate purposes, and we may spend or invest these proceeds in a way with which our stockholders disagree. The failure by our management to apply these funds effectively could harm our business and financial condition. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

If securities or industry analysts publish inaccurate or unfavorable research about our business, our stock price could decline.

The trading market for Class A common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade the Class A common stock or publish inaccurate or unfavorable research about our business, the Class A common stock price would likely decline. In addition, if one or more of these analysts ceases coverage of the Class A common stock or fails to publish reports about the Class A common stock on a regular basis, we could lose visibility in the financial markets, which in turn could cause the Class A common stock price or trading volume to decline.

Requirements associated with being a public reporting company will increase our costs significantly, as well as divert significant company resources and management attention.

We will be subject to the reporting requirements of the Securities Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of NASDAQ, and other rules and regulations of the SEC upon consummation of this offering. We are working with our legal, independent accounting and financial advisors to identify those areas in which changes should be made to our financial and management control systems to manage our growth and our obligations as a public reporting company. These areas include corporate governance, corporate control, disclosure controls and procedures, and financial reporting and accounting systems. We have made, and will continue to make, changes in these and other areas. Compliance with the various reporting and other requirements applicable to public reporting companies will require considerable time, attention of management and financial resources. In addition, the changes we make may not be sufficient to allow us to satisfy our obligations as a public reporting company on a timely basis.

The listing requirements of NASDAQ require that we satisfy certain corporate governance requirements relating to director independence, distributing annual and interim reports, stockholder meetings, approvals and voting, soliciting proxies, conflicts of interest and a code of conduct. Our management and other personnel will need to devote a substantial amount of time to ensure that we comply with all of these requirements. The reporting requirements, rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. These reporting requirements, rules and regulations, coupled with the increase in potential litigation exposure associated with being a public company, could also make it more difficult for us to attract and retain qualified persons to serve as our directors or executive officers, or to obtain certain types of insurance, including director and officer liability insurance, on acceptable terms.

We have never paid and do not intend to pay cash dividends and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of Class A common stock.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain any future earnings to finance the operation and expansion of our business, and we do not expect to declare or pay any dividends in the foreseeable future. Accordingly, you may only receive a return on your investment in Class A common stock if the market price of Class A common stock increases.

Our ability to pay dividends on Class A common stock depends significantly on our receiving distributions of funds from our subsidiaries in the PRC. PRC statutory laws and regulations permit payments of dividends by those subsidiaries only out of their retained earnings, which are determined in accordance with PRC accounting standards and regulations that differ from U.S. generally accepted accounting principles. The PRC regulations and our subsidiaries' articles of association require annual appropriations of 10% of net after-tax profits to be set aside, prior to payment of dividends, as a reserve or surplus fund, which restricts our subsidiaries' ability to transfer a portion of their net assets to us. In addition, our subsidiaries' short-term bank loans restrict their ability to pay dividends to us.

If you purchase shares of Class A common stock in this offering, you will experience substantial and immediate dilution.

If you purchase shares of Class A common stock in this offering, you will experience substantial and immediate dilution in the pro forma as adjusted net tangible book value per share of Class A common stock of $ per share as of June 30, 2017. Investors purchasing Class A common stock in this offering will pay a price per share that substantially exceeds the as adjusted net tangible book value per share. As a result, investors purchasing Class A common stock in this offering will incur immediate dilution of $ per share, based on the initial public offering price of $ per share, the midpoint of the price range on the cover page of this prospectus. This dilution is due in large part to the fact that our earlier investors paid substantially less than the initial public offering price when they purchased their shares of our capital stock. You will experience additional dilution upon exercise of options to purchase common stock under our equity incentive plans or if we issue restricted stock to our employees under our equity incentive plans, and you may experience additional dilution in the future if we otherwise issue additional shares of Class A common stock.

The dual class structure of Class A common stock has the effect of concentrating voting control with our executive officers and directors, including our Chief Executive Officer and President, which will limit or preclude your ability to influence corporate matters.

Class B common stock has twenty votes per share and Class A common stock has one vote per share. Stockholders who hold shares of Class B common stock, who consist principally of our executive officers, employees, directors and their respective affiliates, will collectively hold approximately % of the voting power of our outstanding capital stock following this offering. Because of the twenty-to-one voting ratio between Class B and Class A common stock, holders of Class B common stock collectively will continue to control a majority of the combined voting power of Class A common stock and therefore be able to control all matters submitted to our stockholders for approval so long as the shares of Class B common stock represent at least 4.8% of all outstanding shares of Class A and Class B common stock. This concentrated control will limit or preclude your ability to influence corporate matters for the foreseeable future. This concentrated control could also discourage a potential investor from acquiring Class A common stock due to the limited voting power of such stock relative to the Class B common stock and might harm the market price of Class A common stock.

Future transfers by holders of Class B common stock will result in those shares converting to Class A common stock, subject to limited exceptions. The conversion of Class B common stock to Class A common stock will have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain their shares in the long term.

Substantial future sales of shares by existing stockholders, or the perception that such sales may occur, could cause our stock price to decline.

If our existing stockholders, particularly our directors and executive officers, sell substantial amounts of Class A common stock in the public market, or are perceived by the public market as intending to sell substantial numbers of shares of Class A common stock, the trading price of Class A common stock could decline below the initial public offering price. Based on shares outstanding as of , 2017, upon completion of this offering, we will have outstanding shares of common stock. Of these shares, only the shares of common stock sold in this offering and registered shares issued pursuant to our equity plans will be freely tradable in the public market, subject to any applicable lock-up agreements or Rule 144 transfer restrictions applicable to affiliates. Our officers, directors and holders of substantially all of our equity securities have entered into contractual lock-up agreements with the underwriters pursuant to which they have agreed, subject to certain exceptions, not to sell or otherwise transfer any of their common stock or securities convertible into or exchangeable for shares of common stock for a period of 180 days after the date of the final prospectus for this offering. We and the lead underwriter in this offering may, however, permit these holders to sell shares prior to the expiration of the lock-up agreements with the underwriters.

Based on shares outstanding as of , 2017, after the contractual lock-up agreements pertaining to this offering expire 180 days from the date of this prospectus, up to an additional shares will be eligible for sale in the public market, of which are held by directors, executive officers and other affiliates and will be subject to volume and other limitations under Rule 144 under the Securities Act.

Delaware law and provisions in our restated charter and bylaws could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of Class A common stock.

Our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay, or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. Our restated charter and bylaws contain provisions that may make the acquisition of our company more difficult, including the following:

- our dual class common stock structure provides holders of Class B common stock with the ability to control the outcome of matters requiring stockholder approval, even if they own significantly less than a majority of the total number of outstanding shares of Class A and Class B common stock;
- when the outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock:
    - amendments to our restated charter or bylaws will require the approval of two-thirds of the combined vote of our then-outstanding shares of Class A and Class B common stock;
    - vacancies on the board of directors will be able to be filled only by the board and not by stockholders;
    - the board, which currently is not staggered, will be automatically separated into three classes with staggered three-year terms;
    - directors will only be able to be removed from office for cause; and
    - our stockholders will only be able to take action at a meeting and not by written consent;
- only our chairman, our chief executive officer or a majority of our directors will be authorized to call a special meeting of stockholders;
- advance notice procedures will apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders;
- our restated charter will authorize undesignated preferred stock, the terms of which may be established, and shares of which may be issued, without stockholder approval; and
- cumulative voting in the election of directors is prohibited.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders holding more than 15% of our outstanding voting stock from engaging in certain business combinations with us. Any provision of our charter or bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of Class A common stock, and could also affect the price that some investors are willing to pay for Class A common stock.

Our restated charter designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or stockholders.

Our restated charter provides that the Court of Chancery of the State of Delaware will, to the fullest extent permitted by law, be the sole and exclusive forum for:

- any derivative action or proceeding brought on our behalf;

- any action asserting a claim of breach of a fiduciary duty owed to us, our stockholders, creditors or other constituents by any of our directors, officers, other employees, agents or stockholders;
- any action asserting a claim arising under the Delaware General Corporation Law, our charter or bylaws, or as to which the Delaware General Corporation Law confers jurisdiction on the Court of Chancery of the State of Delaware; or
- any action asserting a claim that is governed by the internal affairs doctrine.

By becoming a stockholder in our company, you will be deemed to have notice of and have consented to the provisions of our restated charter related to choice of forum. The choice of forum provision in our restated charter may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or any of our directors, officers, other employees, agents or stockholders, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision contained in our restated charter to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations and financial condition.

We are currently an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make Class A common stock less attractive to investors.

We are currently an "emerging growth company," as defined in the Jumpstart Our Business Startups Act. For so long as we remain an emerging growth company, we are permitted, and intend, to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and not being required to comply with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements. In this prospectus, we have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find the Class A common stock less attractive if we rely on these exemptions. If some investors find the Class A common stock less attractive as a result, there may be a less active trading market, and more volatile trading price, for Class A common stock.

We will incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, particularly after we are no longer an "emerging growth company," which could adversely affect our business, operating results and financial condition.

As a public company, and particularly after we cease to be an "emerging growth company," we will continue to incur significant legal, accounting and other expenses. We are subject to the reporting requirements of the Securities and Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, and the rules and regulations of NASDAQ. These requirements have increased and will continue to increase our legal, accounting and financial compliance costs and have made and will continue to make some activities more time consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to maintain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified individuals to serve as our executive officers or on the board of directors, particularly to serve on the audit and compensation committees.

The Sarbanes-Oxley Act requires, among other things, that we assess the effectiveness of our internal control over financial reporting annually and the effectiveness of our disclosure controls and procedures quarterly. In particular, beginning with respect to the year ending December 31, 2018, Section 404 of the

Sarbanes-Oxley Act, or Section 404, will require our management to perform system and process evaluation and testing to allow it to report on the effectiveness of our internal control over financial reporting.

We are currently evaluating our internal controls, identifying and remediating deficiencies in those internal controls and documenting the results of our evaluation, testing and remediation. Please see "—Our management and auditors identified a material weakness in our internal control over financial reporting that, if not properly remediated, could result in material misstatements in our consolidated financial statements that could cause investors to lose confidence in our reported financial information and have a negative effect on the trading price of our stock."

Investor perceptions of our company may suffer if deficiencies are found, which could cause a decline in the market price of our stock. Irrespective of compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our stated operating results and harm our reputation. If we are unable to implement these requirements effectively or efficiently, it could harm our operations, financial reporting, or financial results and could result in an adverse opinion on our internal controls from our independent registered public accounting firm.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expense and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

FORWARD-LOOKING STATEMENTS AND STATISTICAL DATA

Special Note Regarding Forward-Looking Statements

This prospectus contains forward-looking statements that involve risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management are forward-looking statements. The forward-looking statements are contained principally in "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "anticipate," "project," "target," "design," "estimate," "predict," "potential," "plan" or the negative of these terms, and similar expressions intended to identify forward-looking statements.

These statements reflect our current views with respect to future events and are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Some of the key factors that could cause actual results to differ from our expectations include:

- our expectations regarding our expenses and revenue, our ability to maintain and expand gross profit;
- the rate and degree of market acceptance of any of our products, particularly in the PRC;
- the size and growth of the potential markets for our products and our ability to serve those markets;
- the progress and costs of developing and commercializing new products;
- our expectations regarding competition;
- the anticipated trends and challenges in our business and the market in which we operate;
- our anticipated growth strategies;
- our ability to attract or retain key personnel;
- our expectations regarding, and the stability of our, supply chain and manufacturing;
- our expectations regarding federal, state and foreign regulatory requirements, including export controls, tax law changes and interpretations, economic sanctions and anti-corruption regulations;
- regulatory developments in the United States and foreign countries;
- our ability to obtain and maintain intellectual property protection for our products; and
- our use of proceeds from this offering.

Any forward-looking statement made by us in this prospectus speaks only as of the date on which it is made. Except as required by law, we assume no obligation to update these statements publicly, or to update the reasons actual results could differ materially from those anticipated in these statements, even if new information becomes available in the future.

You should read this prospectus, and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

Industry and Market Data

This prospectus contains statistical data and estimates, including forecasts, that are based on independent industry and government organization publications or other publicly available information, as well as other information based on our internal sources. While we are not aware of any misstatements regarding any third-party data presented in this prospectus, estimates, and in particular forecasts, involve numerous assumptions and are subject to risks and uncertainties as well as change based on various factors, including those discussed under "Risk Factors" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates included in this prospectus.

The following list identifies the sources of certain of the third-party forecasts and other estimates included in this prospectus, together with the section or subsection of this prospectus in which that estimate appears. As of September 11, 2017, each of the following sources was publicly available without charge:

- PricewaterhouseCoopers, *China's impact on the semiconductor industry: 2016 update*, January 2017 ("Prospectus Summary—Our Company" and "Business—Industry Background—Growing Influence of the PRC Across the Semiconductor Industry");
- IC Insights, Inc., *Semiconductor Unit Shipments To Exceed One Trillion Devices in 2018*, March 7, 2016 ("Prospectus Summary—Industry Background and Trends" and "Business—Industry Background");
- Semiconductor Industry Association and Nathan Associates, *Beyond Borders: The Global Semiconductor Value Chain: How an Interconnected Industry Promotes Innovation and Growth*, May 2016 ("Business—Industry Background—Ongoing Need for Improved Chip Manufacturing Equipment");
- Semiconductor Equipment and Materials International, *Fab Equipment Spending Trending Upward in 2016 and 2017*, September 6, 2016 ("Business—Industry Background—Escalating Need for Advanced Chip Manufacturing Equipment");
- International Trade Administration of the United States Department of Commerce, *2016 Top Markets Report Semiconductors and Semiconductor Manufacturing Equipment Country Case Study*, July 1, 2016 ("Business—Industry Background—Growing Influence of the PRC Across the Semiconductor Industry"); and
- Semiconductor Equipment and Materials International, *World Fab Forecast Report*, November 2016 ("Business—Our Solutions—China-based operations").

USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of $ million, assuming an initial public offering price of $ per share, the midpoint of the initial public offering price range reflected on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and offering expenses. If the underwriters' option to purchase additional shares in this offering is exercised in full, we estimate that our net proceeds will be $ million.

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the initial public offering price range reflected on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and offering expenses. Similarly, each increase (decrease) of 1,000,000 in the number of shares offered by us would increase (decrease) our net proceeds by $ million, assuming the assumed initial public offering price of $ per share remains the same, and after deducting estimated underwriting discounts and commissions and offering expenses.

We intend to use the net proceeds from this offering for working capital and other general corporate purposes, which may include financing our growth and developing new products. The other principal purposes for this offering are to:

- create a public market for Class A common stock, which will, among other things, provide future liquidity for our existing security holders;
- facilitate our future access to the public capital markets; and
- improve the effectiveness of our equity compensation plans in attracting and retaining directors and key employees.

We may use a portion of our net proceeds to acquire businesses, technologies and products that will help us expand the breadth and features of our product offerings, provide access to new markets or customers, or otherwise complement our existing operations. We assess acquisition opportunities on an ongoing basis. We do not currently have any agreement with respect to an acquisition, and we cannot assure you that we will make any acquisitions in the future.

Our expected use of the net proceeds of this offering represents our current intentions based upon our present plans and business conditions. The amounts and timing of our actual expenditures may vary significantly from our expectations depending upon numerous factors, including our operating costs and capital expenditures and the factors described under "Risk Factors." Because we cannot currently specify with any certainty the particular uses of our net proceeds, our management will have broad discretion in the application of the net proceeds.

Pending use of our net proceeds, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing instruments, certificates of deposit, or direct or guaranteed obligation of the U.S. government.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends on Class A and Class B common stock is subject to the discretion of the board of directors and will depend upon various factors, including our results of operations, financial condition, liquidity requirements, capital requirements, level of indebtedness, contractual restrictions with respect to payment of dividends, restrictions imposed by applicable law, general business conditions and other factors that the board may deem relevant.

Our ability to pay dividends on Class A and Class B common stock depends significantly on our receiving distributions of funds from our subsidiaries in the PRC. PRC statutory laws and regulations permit payments of dividends by those subsidiaries only out of their retained earnings, which are determined in accordance with PRC accounting standards and regulations that differ from U.S. generally accepted accounting principles. The PRC regulations and our subsidiaries' articles of association require annual appropriations of 10% of net after-tax profits to be set aside, prior to payment of dividends, as a reserve or surplus fund, which restricts our subsidiaries' ability to transfer a portion of their net assets to us. As of June 30, 2017, no cash was restricted under those PRC regulations or our subsidiaries' articles because our subsidiaries had never generated net after-tax profits. In addition, our subsidiaries' short-term bank loans restrict their ability to pay dividends to us.

CAPITALIZATION

The table below sets forth our capitalization as of June 30, 2017:

- on an actual basis;
- as adjusted to reflect the following:
  - (a) the closing of strategic investment transactions on September 11, 2017, with Ninebell Co., Ltd. or Ninebell, one of our key subassembly providers, in which we issued 133,334 shares of Class A common stock to Ninebell for a purchase price of $1.0 million and Ninebell issued ordinary shares, representing 20% of its post-closing equity, to us for a purchase price of $1.2 million; and
  - (b) the completion of transactions with minority investors in ACM Shanghai in the third-quarter of 2017, pursuant to which (i) we issued, capital stock consisting of (or convertible, upon the closing of this offering, into) a total of 3,572,844 shares of Class A common stock to the minority investors for an aggregate purchase price of $20.1 million and (ii) ACM Research acquired 18.77% of the outstanding ACM Shanghai equity interests for a purchase price of $5.8 million and expects to acquire, prior to the closing of this offering, all of the remaining outstanding minority ACM Shanghai equity interests for an aggregate purchase price of $14.3 million, as described under “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Acquisition of Outstanding Minority Interests in Our Operating Company”;
- on a pro forma basis to further reflect the automatic conversion of all outstanding shares of our convertible preferred stock into Class A common stock and the restatement of our charter, all of which will occur upon completion of this offering; and
- on a pro forma basis as further adjusted to reflect our issuance and sale of shares of Class A common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and offering expenses, and our issuance to the underwriters upon completion of this offering of warrants to purchase shares of Class A common stock (see “Underwriting—Discounts, Commissions and Expenses”).

You should read the information in this table together with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes appearing at the end of this prospectus.

	As of June 30, 2017			
	Actual	As Adjusted	Pro Forma	Pro Forma As Adjusted
	(in thousands, except share and per share data)			
Short-term debt	$ 4,595	$ 4,595	$ 4,595	$ 4,595
Redeemable convertible preferred stock, without par value, actual, $0.0001 par value per share, as adjusted, pro forma and pro forma as adjusted:				
Series A: 385,000 shares authorized, issued and outstanding, actual and as adjusted; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	$ 288	$ 288	$ —	$ —
Series B: 1,572,000 shares authorized, issued and outstanding, actual and as adjusted; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	1,572	1,572	—	—
Series C: 1,360,962 shares authorized, issued and outstanding, actual and as adjusted; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	2,041	2,041	—	—
Series D: 2,659,975 shares authorized and 1,326,642 shares issued and outstanding, actual and as adjusted; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	4,975	4,975	—	—
Series E: 10,718,530 shares authorized and no shares issued and outstanding, actual; 10,718,530 shares authorized and 4,998,530 shares issued and outstanding, as adjusted; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	—	5,800	—	—
Series F: 6,000,000 shares authorized and 3,663,254 shares, issued and outstanding, actual and as adjusted; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	9,158	9,158	—	—
Total redeemable convertible preferred stock	18,034	23,834	—	—
Stockholders' (deficit) equity:				
Undesignated preferred stock, $0.0001 par value per share: no shares authorized, issued and outstanding, actual or as adjusted; 25,000,000 shares authorized and no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	—	—
Common stock, $0.0001 par value per share:				
Class A: 100,000,000 shares authorized; 2,627,293 shares issued and outstanding, actual; 4,674,968 shares issued and outstanding, as adjusted; 9,302,983 shares issued and outstanding pro forma; shares issued and outstanding, pro forma as adjusted	1	1	1	
Class B: 7,303,533 shares authorized and 2,409,738 shares issued and outstanding, actual, and as adjusted; 2,409,738 shares authorized, issued and outstanding, pro forma and pro forma as adjusted	1	1	1	1
Additional paid-in capital	9,346	9,354	33,188	
Accumulated deficit	(12,390)	(12,390)	(12,390)	(12,390)
Accumulated other comprehensive loss	(247)	(247)	(247)	(247)
Total ACM Research, Inc. stockholders' (deficit) equity	(3,289)	(3,281)	20,553	
Non-controlling interests	4,809	—	—	—
Total stockholders' equity	1,520	(3,281)	20,553	
Total capitalization	$ 19,554	$ 20,553	$ 20,553	$

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the initial public offering price range set forth on the cover page of this prospectus, would increase (decrease) the amount of additional paid-in capital, total stockholders' (deficit) equity and total capitalization by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and offering expenses. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) additional paid-in capital, total stockholders' (deficit) equity and total capitalization by $ million, assuming the assumed initial public offering price of $ per share remains the same, and after deducting estimated underwriting discounts and commissions and offering expenses. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

The table above excludes the shares of Class A common stock issuable upon the exercise of an outstanding warrant and outstanding options as well as shares of Class A common stock reserved for future issuance under our equity incentive plan, which consisted of:

- 397,502 shares of Class A common stock issuable upon the exercise of an outstanding warrant, with an exercise price of $7.50 per share, at June 30, 2017 and September 11, 2017, as described under “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Issuance of Warrant”);
- 3,489,959 shares of Class A common stock issuable upon the exercise of outstanding options with a weighted-average exercise price of $2.29 per share at June 30, 2017 and 3,442,743 shares of Class A common stock issuable upon the exercise of outstanding options with a weighted-average exercise price of $2.31 per share at September 11, 2017; and
- 705,383 shares of Class A common stock reserved for issuance under our equity incentive plan at June 30, 2017 and September 11, 2017.

DILUTION

If you invest in Class A common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the initial public offering price per share you will pay in this offering and the pro forma as adjusted net tangible book value per share of Class A common stock immediately after this offering.

As of June 30, 2017, the actual net tangible book value of Class A and Class B common stock was $14.7 million, or $1.84 per share. Actual net tangible book value per share of common stock represents (a) total tangible assets less total liabilities and non-controlling interests, divided by (b) the total number of shares of common stock outstanding on an as-converted basis, assuming the conversion of all outstanding shares of our convertible preferred stock into an aggregate of 2,960,968 shares of Class A common stock, upon completion of this offering.

As of June 30, 2017, the as adjusted net tangible book value of Class A and Class B common stock was $20.5 million, or $1.75 per share. Our as adjusted net tangible book value per share gives effect to:

- the closing of strategic investment transactions on September 11, 2017, with Ninebell, in which we issued 133,334 shares of Class A common stock to Ninebell for a purchase price of $1.0 million and Ninebell issued ordinary shares, representing 20% of its post-closing equity, to us for a purchase price of $1.2 million;
- the completion of transactions with minority investors in ACM Shanghai, pursuant to which in the third-quarter of 2017 (i) we issued, 3,572,844 shares of Class A common stock (on an as-converted basis) to the minority investors for an aggregate purchase price of $20.1 million and (ii) ACM Research acquired 18.77% of the outstanding ACM Shanghai equity interests for a purchase price of $5.8 million and expects to acquire, prior to the closing of this offering, all of the remaining outstanding minority ACM Shanghai equity interests for an aggregate purchase price of $14.3 million, as described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Acquisition of Outstanding Minority Interests in Our Operating Company”; and
- the conversion, upon completion of this offering, of all outstanding shares of our convertible preferred stock into an aggregate of 4,628,015 shares of Class A common stock.

Our pro forma as adjusted net tangible book value of Class A common stock as of June 30, 2017 would have been $ million, or $ per share. Pro forma as adjusted net tangible book value further adjusts as adjusted data to reflect our sale of shares of Class A common stock in this offering at an assumed initial public offering price of $, the midpoint of the offering price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and offering expenses, and our issuance to the underwriters upon the closing of this offering of warrants to purchase shares of Class A common stock (see “Underwriting—Discounts, Commissions and Expenses”). This represents an immediate increase in pro forma as adjusted net tangible book value of $ per share to our existing stockholders and an immediate dilution of $ per share to purchasers

Assumed initial public offering price per share		$
As adjusted net tangible book value per share as of June 30, 2017	$1.75	
Increase in net tangible book value per share attributable to this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to purchasers of Class A common stock in this offering		$

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the initial public offering price range reflected on the cover page of this prospectus, would increase (decrease) the as adjusted net tangible book value by $ per share and the dilution per share to purchasers of Class A common stock in this offering by $ per share, assuming the number of shares offered by us, as set forth on

the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and offering expenses. We may also increase (decrease) the number of shares we are offering. An increase (decrease) of 1,000,000 in the number of shares offered by us would increase (decrease) the as adjusted net tangible book value by $ per share and the dilution per share to purchasers of Class A common stock in this offering by $ per share, assuming the assumed initial public offering price of $ per share remains the same, and after deducting estimated underwriting discounts and commissions and offering expenses. The pro forma information discussed above is illustrative only and will adjust based on the actual initial public offering price and other terms of this offering determined at pricing.

The following table summarizes, on a pro forma as adjusted basis as of June 30, 2017, the differences between existing stockholders and purchasers of Class A common stock in this offering with respect to the number of shares of Class A common stock purchased from us, the total consideration paid to us and the average price per share paid. The calculation below is based on the assumed initial public offering price of $ per share, the midpoint of the initial public offering price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and offering expenses.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	11,712,721	%	$42,953,811	%	$ 3.67
Purchasers of Class A common stock in this offering					
Totals		100.0%		100.0%	

The table above excludes the shares of Class A common stock issuable upon the exercise of an outstanding warrant and outstanding options as well as shares of Class A common stock reserved for future issuance under out equity incentive plan, which consisted of:

- 397,502 shares of Class A common stock issuable upon the exercise of an outstanding warrant, with an exercise price of $7.50 per share, at June 30, 2017 and September 11, 2017, as described under “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Issuance of Warrant”);
- 3,489,959 shares of Class A common stock issuable upon the exercise of outstanding options with a weighted-average exercise price of $2.29 per share at June 30, 2017 and 3,442,743 shares of Class A common stock issuable upon the exercise of outstanding options with a weighted-average exercise price of $2.31 per share at September 11, 2017; and
- 705,383 shares of Class A common stock reserved for issuance under our equity incentive plan at June 30, 2017 and September 11, 2017.

EXCHANGE RATE INFORMATION

This prospectus contains translations of Renminbi, or RMB, amounts into U.S. dollars at specific rates solely for the convenience of the reader. We make no representation that any Renminbi or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, the rates stated below, or at all. The PRC government imposes control over its foreign currency reserves in part through direct regulation of the conversion of Renminbi into foreign exchange and through restrictions on foreign trade. On September 11, 2017, the conversion rate was RMB 6.4997 to U.S. $1.00.

The following table sets forth information concerning exchange rates between the Renminbi and the U.S. dollar for the periods indicated. These rates are provided solely for your convenience and are not necessarily the exchange rates that we used in this prospectus or will use in the preparation of our periodic reports or any other information to be provided to you.

Period	Exchange Rate			
	Period End	Average(1)	Low	High
	(RMB per U.S. $1.00)			
2012	6.3001	6.2928	6.2670	6.3495
2013	6.2897	6.1933	6.0969	6.2898
2014	6.0990	6.1090	6.0930	6.1710
2015	6.4936	6.2284	6.1079	6.4936
2016	6.9370	6.6423	6.4565	6.9508
2017 (through September 11)	6.4997	6.8166	6.4997	6.9526

Source: safe.gov.cn

(1) Calculated using the average of the daily exchange rates during the relevant period.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following tables set forth selected consolidated financial data. We derived the consolidated statement of operations data for the years ended December 31, 2015 and 2016 and the consolidated balance sheet data as of December 31, 2016 from our consolidated financial statements audited by BDO China Shu Lun Pan Certified Public Accountants LLP and included at the end of this prospectus. We derived the consolidated statement of operations data for the six months ended June 30, 2016 and June 30, 2017 and the consolidated balance sheet data as of June 30, 2017 from our unaudited consolidated financial statements included elsewhere in this prospectus. In the opinion of management, the unaudited consolidated financial statements have been prepared on the same basis as our audited consolidated financial statements and include all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the information set forth therein. The following tables also show certain operational and non-GAAP financial measures. Our historical results and key metrics are not necessarily indicative of the results to be expected for any future period, and the results for any interim period are not necessarily indicative of the results that may be expected for a full year. The following should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included at the end of this prospectus.

Pro forma information in the following tables gives effect to the automatic conversion of all outstanding shares of our convertible preferred stock into Class A common stock upon completion of this offering. See note 2 to the consolidated financial statements appearing at the end of this prospectus for an explanation of the method used to determine the number of shares used in computing historical and pro forma net income (loss) per share.

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands, except share and per share data)			
Consolidated Statement of Operations Data:				
Revenue	$ 14,423	$ 8,122	$ 27,371	$ 31,206
Cost of revenue	8,570	5,292	14,042	17,085
Gross profit	5,853	2,830	13,329	14,121
Operating expenses:				
Sales and marketing	2,583	1,818	3,907	4,213
Research and development	1,867	1,486	3,259	2,942
General and administrative	3,158	1,089	2,673	2,103
Total operating expenses, net	7,608	4,393	9,839	9,258
Income (loss) from operations	(1,755)	(1,563)	3,490	4,863
Interest expense, net	(159)	(45)	(165)	(105)
Other income (expense), net	(292)	506	(343)	632
Income (loss) before income taxes	(2,206)	(1,102)	2,982	5,390
Income tax benefit (expense)	(749)	73	(595)	2,525
Net income (loss)	(2,955)	(1,029)	2,387	7,915
Less: Net income (loss) attributable to non-controlling interests(1)	(208)	(476)	1,356	2,535
Net income (loss) attributable to ACM Research, Inc.	$ (2,747)	(553)	$ 1,031	$ 5,380
Net income (loss) per share of common share:				
Basic	$ (0.56)	$ (0.27)	$ 0.30	$ 1.50
Diluted	$ (0.56)	$ (0.27)	$ 0.18	$ 0.97
Weighted-average common shares outstanding used in computing per share amounts:				
Basic	4,927,973	2,061,339	2,176,315	2,047,383
Diluted	4,927,973	2,061,339	3,792,137	3,144,120
Pro forma net income (loss) per common share:				
Basic	$ (0.35)		$ 0.20	
Diluted	$ (0.35)		$ 0.15	
Pro forma weighted-average common shares outstanding used in computing per share amounts:				
Basic	7,889,818		5,137,211	
Diluted	7,889,818		6,753,033	

(1) As of each date, ACM Research held 62.87% of the outstanding equity interests of ACM Shanghai and the remaining 37.13% was held by three third-party investors. As described under “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Acquisition of Minority Interests in Our Operating Company,” ACM Research acquired an additional 18.77% of the outstanding ACM Shanghai equity interests as of August 31, 2017 and expects to acquire, prior to the closing of this offering, all of the remaining outstanding equity interests held by the minority investors.

	Six Months Ended June 30, 2017	Year Ended December 31, 2016	2015
		(in thousands)	
Consolidated Balance Sheet Data:			
Cash and cash equivalents	$ 13,206	$ 10,119	$ 4,401
Working capital(1)	23,433	23,278	7,381
Total assets	47,437	44,467	32,151
Total indebtedness	4,595	4,772	9,691
Total liabilities	27,883	23,948	27,754
Total redeemable convertible preferred stock	18,034	18,034	8,876
Total ACM Research, Inc. stockholders' deficit	(3,289)	(2,434)	(8,236)
Non-controlling interests	4,809	4,919	3,757
Total stockholders' (deficit) equity	1,520	2,485	(4,479)

(1) Calculated as current assets minus current liabilities.

To supplement our consolidated financial statements presented in accordance with U.S. generally accepted accounting principles, or GAAP, we monitor and consider adjusted EBITDA, free cash flow and adjusted operating income (loss), which are non-GAAP financial measures. These measures are commonly used by management and investors as performance measures. They are not considered measures of financial performance under GAAP, and the items excluded from the measures are significant components in understanding and assessing our financial performance. Each of adjusted EBITDA, free cash flow and adjusted operating income (loss) has limitations as an analytical tool, and should not be considered in isolation or as an alternative to such GAAP measures as net income, cash flows provided by or used in operations, investing or financing activities, or other financial statement data presented in our consolidated financial statements as an indicator of financial performance or liquidity. In addition, because they are not measures determined in accordance with GAAP and are susceptible to varying calculations, adjusted EBITDA, free cash flow and adjusted operating income (loss), as presented, may not be comparable to other similarly titled measures of other companies.

- We define adjusted EBITDA as our net income excluding interest expense (net), income tax benefit (expense), depreciation and amortization, and stock-based compensation. The following table reconciles net income (loss), the most directly comparable GAAP financial measure, to adjusted EBITDA:

	Six Months Ended June 30, 2017	2016	Year Ended December 31, 2016	2015
		(in thousands)		
Adjusted EBITDA Data:				
Net income (loss)	$ (2,955)	$ (1,029)	$ 2,387	$ 7,915
Interest expense, net	159	45	165	105
Income tax expense (benefit)	749	(73)	595	(2,525)
Depreciation and amortization	118	88	187	160
Stock-based compensation	1,348	193	383	423
Adjusted EBITDA	$ (581)	$ (776)	$ 3,717	$ 6,078

- We define free cash flow as net cash provided by operating activities less purchases of property and equipment, net of proceeds from disposals, and purchase of intangible assets. The following table reconciles net cash provided by operating activities, the most directly comparable GAAP financial measure, to free cash flow:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands)			
Consolidated Statement of Cash Flows and Free Cash Flow Data:				
Net cash provided by operating activities	$ 2,983	$ 4,739	$ (3,702)	$ 2,702
Purchase of property and equipment, net	(26)	(95)	(788)	(1,371)
Purchase of intangible assets	(36)	(9)	(22)	—
Free cash flow	$ 2,921	$ 4,635	$ (4,512)	$ (1,331)

- We define adjusted operating income (loss) as our income (loss) from operations excluding stock-based compensation. The following table reconciles income (loss) from operations, the most directly comparable GAAP financial measure, to adjusted operating income (loss):

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands)			
Adjusted Operating Income (Loss) Data:				
Income (loss) from operations	$ (1,755)	$ (1,563)	$ 3,490	$ 4,863
Stock-based compensation	1,348	193	383	423
Adjusted operating income (loss)	$ (407)	$ (1,370)	$ 3,873	$ 5,286

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion in conjunction with our consolidated financial statements and related notes appearing at the end of this prospectus. In addition to historical information, the following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. You should read "Risk Factors" for a discussion of factors that could cause our actual results to differ materially from our expectations.

Overview

We develop, manufacture and sell single-wafer wet cleaning equipment, which semiconductor manufacturers can use in numerous manufacturing steps to remove particles, contaminants and other random defects, and thereby improve product yield, in fabricating advanced integrated circuits, or chips. Our Ultra C equipment is designed to remove random defects from a wafer surface effectively, without damaging a wafer or its features, even at an increasingly advanced process node (the minimum line width on a chip) of 22 nanometers, or nm, or less. Our equipment is based on our innovative, proprietary Space Alternated Phase Shift, or SAPS, and Timely Energized Bubble Oscillation, or TEBO, technologies. We developed our proprietary technologies to enable manufacturers to produce chips that reach their ultimate physical limitations while maintaining product yield, which is the percentage of chips on a wafer that meet manufacturing specifications

We seek to market our wet processing equipment by first establishing a referenceable base of leading logic and memory chip makers, whose use of our products can influence decisions by other manufacturers. We believe this process will help us to penetrate the mature integrated circuit manufacturing markets and to build credibility with industry leaders. We have placed evaluation SAPS equipment with selected memory and logic chip customers since 2009 and recognized revenue from SAPS equipment since 2011. Using a similar "demo-to-sales" process, we began placing TEBO evaluation equipment with selected customers in 2016 and recognized revenue from our initial sale of TEBO equipment in December 2016. As of June 30, 2017, we had sold and deployed more than 30 single-wafer wet cleaning tools. We recognized revenue from the selected customers' purchases of single-wafer wet cleaning equipment totaling $10.6 million, or 73.6% of our revenue, in the first half of 2017, $21.5 million, or 78.4% of our revenue, in 2016, and $26.8 million, or 86.0% of our revenue, in 2015.

We market and sell our products worldwide using a combination of our direct sales force and third-party representatives. We employ direct sales teams in Asia, Europe and North America, and have located these teams near our customers, primarily in the People's Republic of China, or PRC, Korea, Taiwan and the United States. To supplement our direct sales teams, we have contacts with several independent sales representatives in the PRC, Taiwan and Korea. We also provide after-sales services to our customers by installing new replacement parts as well as making small scale modifications to improve our customers' product yields.

We established our operational center in Shanghai in 2006 to help us establish and build relationships with chip manufacturers in China and throughout Asia. In addition to our SAPS and TEBO tools, we offer a range of custom-made wafer assembly and packaging equipment, such as coaters and developers, to wafer assembly and packaging factories, principally in the PRC.

Corporate Background

ACM Research incorporated in California in 1998 and redomesticated to Delaware in November 2016. Key events in our corporate development have included:

- Initially we focused on developing tools for semiconductor manufacturing process steps involving the integration of ultra-low-K materials and copper. In the early 2000s, we sold tools based on stress-free copper-polishing technology.

- In 2006 we moved our operational center to Shanghai, where we began to conduct our business through our subsidiary ACM Shanghai. This move was made to help us establish and build relationships with chip manufacturers in the PRC. We have financed our operations in part through the sale of minority equity interests in ACM Shanghai.
- In 2007 we began to focus our development efforts on single-wafer wet-cleaning solutions for the front-end chip fabrication process.
- In 2008 ACM Shanghai received an initial grant from local and central governmental authorities in the PRC. The grant relates to the development and commercialization of 65nm to 45nm stress-free polishing technology.
- In 2009 we introduced SAPS megasonic technology, which can be applied in wet wafer cleaning at numerous steps during the chip fabrication process.
- In 2011 ACM Shanghai formed a wholly owned subsidiary in the PRC, ACM Research (Wuxi), Inc., to manage sales and service operations.
- In 2014 ACM Shanghai received an additional grant from local and central governmental authorities in the PRC. The grant relates to the development of electro copper-plating technology.
- In March 2016 we introduced TEBO technology, which can be applied at numerous steps during the fabrication of small node conventional two-dimensional and three-dimensional patterned wafers.
- In March and August 2017, we entered into agreements pursuant to which we expect to acquire all of the outstanding minority equity interests in ACM Shanghai prior to the closing of this offering, as described below under "—Recent Equity Transactions—Acquisition of Outstanding Minority Interests in Our Operating Company."
- In June 2017 we formed a wholly owned subsidiary in Hong Kong, CleanChip Technologies Limited, to act on our behalf in Asian markets outside the PRC by, for example, serving as a trading partner between ACM Shanghai and its customers, procuring raw materials and components, performing sales and marketing activities, and making strategic investments.

Recent Equity Transactions

Issuance of Warrant

In December 2016 Shengxin (Shanghai) Management Consulting Limited Partnership, or SMC, delivered to our subsidiary ACM Shanghai 20,123,500 RMB (approximately $3.0 million as of the date of funding) in cash, which we refer to as the SMC Investment, for potential investment pursuant to terms to be subsequently negotiated. SMC is a PRC limited partnership owned by Jian Wang, our Vice President, Research and Development and the brother of our Chief Executive Officer and President David H. Wang, and other employees of ACM Shanghai. In March 2017 we issued to SMC a warrant exercisable to purchase 397,502 shares of Class A common stock at a price of $7.50 per share, for a total exercise price of approximately $3.0 million. The warrant may be exercised for cash or on a cashless basis, at the option of SMC, at any time on or before May 17, 2023 to acquire all, but not less than all, of the shares of Class A common stock subject to the warrant.

- If SMC does not exercise the warrant by May 17, 2023, ACM Shanghai will be obligated, subject to approval of PRC governmental authorities and ACM Shanghai's equity holders, to deliver an equity interest of 3.6394% (subject to dilution) in satisfaction of the SMC Investment.
- If SMC exercises the warrant or SMC does not exercise the warrant and the issuance of the equity interest in ACM Shanghai is not completed by August 17, 2023 due to the inability of the parties to obtain required governmental or equity holder approvals, then ACM Shanghai will be obligated to pay to SMC, in satisfaction of the SMC Investment, an amount equal to approximately $3.0 million.

For more information, see "Related Party Transactions—Issuance of Warrant," "Principal Stockholders," and "Description of Capital Stock—Warrant."

Acquisition of Outstanding Minority Interests in Our Operating Company

Until August 31, 2017, ACM Research owned 62.87% of the outstanding equity interests in ACM Shanghai and three PRC-based third-party investors held the remaining 37.13% of equity interests, which are reflected as "non-controlling interests" in our consolidated balance sheets and related notes. We have taken the following actions in order to enable ACM Research to acquire, consistent with requirements of arrangements previously entered into in connection with the investors' acquisition of ACM Shanghai equity interests, the outstanding non-controlling interests in ACM Shanghai:

- In March 2017 we entered into a securities purchase agreement with Shanghai Science and Technology Venture Capital Co., Ltd., or SSTVC, which held 18.77% of the ACM Shanghai equity interests. Pursuant to that agreement, effective as of August 31, 2017, we (a) acquired, for a purchase price of $5.8 million, SSTVC's equity interests in ACM Shanghai and (b) issued to SSTVC, for a purchase price of $5.8 million, shares of Series E preferred stock that will convert, upon the closing of this offering, into 1,666,170 shares of Class A common stock, which SSTVC will have acquired at an effective purchase price of $3.48 per share.
- In August 2017 we entered into a securities purchase agreement with Shanghai Pudong High-Tech Investment Co., Ltd., or PDHTI, and its subsidiary Pudong Science and Technology (Cayman) Co., Ltd., or PST, in which we agreed to bid, in an auction process mandated by PRC regulations, to purchase PDHTI's 10.78% equity interests in ACM Shanghai and to sell shares of Class A common stock to PST. The auction process for PDHTI's equity interests commenced on September 5, 2017. On September 8, 2017, we issued 1,119,576 shares of Class A common stock to PST for a purchase price of $7.50 per share, representing an aggregate purchase price of $8.4 million.
- In August 2017 we entered into a securities purchase agreement with Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd., or ZSTVC, and its subsidiary Zhangjiang AJ Company Limited, or ZJAJ, in which we agreed to bid, in an auction process mandated by PRC regulations, to purchase ZSTVC's 7.58% equity interests in ACM Shanghai and to sell shares of Class A common stock to ZJAJ. The auction process for ZSTVC's equity interest commenced on September 5, 2017. On September 8, 2017, we issued 787,098 shares of Class A common stock to ZJAJ for a purchase price of $7.50 per share, or an aggregate purchase price of $5.9 million.

As a result of the foregoing arrangements, ACM Research owned 81.64% of ACM Shanghai's equity interests as of August 31, 2017 and expects to own 100% of those equity interests as of the closing of this offering.

In accordance with the foregoing agreements, we will (a) enter into a voting agreement with SSTVC pursuant to which SSTVC will have certain rights to designate one individual for nomination and election to our board of directors, as described in "Management—Board of Directors—Director Nomination Rights," and (b) grant SSTVC, PST and ZJAJ certain registration rights with respect to the shares of Class A common stock, as described in "Description of Capital Stock—Registration Rights."

Strategic Investment in Key Supplier

Ninebell Co., Ltd., or Ninebell, which is located in Seoul, Korea, is the principal supplier of robotic delivery system subassemblies used in our single-wafer cleaning equipment. On September 11, 2017 we and Ninebell entered into:

- an ordinary share purchase agreement pursuant to which, contemporaneously with signing, Ninebell issued to us, for a purchase price of $1.2 million, ordinary shares representing 20% of Ninebell's post-closing equity; and
- a common stock purchase agreement pursuant to which, contemporaneously with signing, we issued 133,334 shares of Class A common stock to Ninebell for a purchase price of $7.50 per share, or an aggregate purchase price of $1.0 million.

In addition, under the ordinary share purchase agreement, Ninebell granted us a preemptive right for all future issuances of equity-related securities by Ninebell and the founder of Ninebell, who is the only other equity holder of Ninebell, granted us a right of first refusal with respect to any future sales of his equity securities.

Key Components of Results of Operations

Revenue

We develop, manufacture and sell single-wafer wet cleaning equipment and custom-made wafer assembly and packaging equipment. Because we currently sell our capital equipment, or tools, to a small number of customers and we customize those tools to fulfill the customers' specific requirements, our revenue generation fluctuates, depending on the length of the sales, development and evaluation phases:

Sales and Development. During the sale process we may, depending on a prospective customer's specifications and requirements, need to perform additional research, development and testing to establish that a tool can meet the prospective customer's requirements. We then host an in-house demonstration of the customized tool prototype. Sales cycles for orders that require limited customization and do not require that we develop new technology usually take from 6 to 12 months, while the product life cycle, including the initial design, demonstration and final assembly phases, for orders requiring development and testing of new technologies can take as long as 2 to 4 years. As we expand our customer base, we expect to gain more repeat purchase orders for tools that we have already developed and tested, which will eliminate the need for a demonstration phase and shorten the development cycle.

Evaluation Periods. When a chip manufacturer proposes to purchase a particular type of tool from us for the first time, we offer the manufacturer an opportunity to evaluate the tool for a period that can extend for 24 months or longer. We do not receive any payment on first-time purchases until the tool is accepted. As a result, we may spend between $1.0 and $2.0 million to produce a tool without receiving payment for more than 24 months or, if the tool is not accepted, without receiving any payment. Please see "Risk Factors—Risks Related to Our Business and Our Industry—We may incur significant expenses long before we can recognize revenue from new products, if at all, due to the costs and length of research, development, manufacturing and customer evaluation process cycles."

Purchase Orders. In accordance with industry practice, sales of our tools are made pursuant to purchase orders. Each purchase order from a customer for one of our tools contains specific technical requirements intended to ensure, among other things, that the tool will be compatible with the customer's manufacturing process line. Until a purchase order is received, we do not have a binding purchase commitment. Our SAPS and TEBO customers to date have provided us with non-binding one- to two-year forecasts of their anticipated demands, and we expect future customers to furnish similar non-binding forecasts for planning purposes. Any of those forecasts would be subject to change, however, by the customer at any time, without notice to us.

Fulfillment. We seek to obtain a purchase order for a tool from three to four months in advance of the expected delivery date. Depending upon the nature of a customer's specifications, the lead time for production of a tool generally will extend from two to four months. The lead-time can be as long as six months, however, and in some cases we may need to begin producing a tool based on a customer's non-binding forecast, rather than waiting to receive a binding purchase order.

We expect our sales prices generally to range between $2.5 million and $5.0 million for SAPs tools and between $3.5 million and $6.5 million for TEBO tools. The sales price of a particular tool will vary depending upon the required specifications. We have designed equipment models using a modular configuration that we customize to meet customers' technical specifications. For example, our Ultra C models for SAPS and TEBO solutions use modular configurations that enable us to create a wet-cleaning tool meeting a customer's specific requirements, while using pre-existing designs for chamber, electrical, chemical delivery and other modules.

Because of the relatively large purchase prices of our tools, customers generally pay in installments. For a customer's repeat purchase of a particular type of tool, the specific payment terms are negotiated in connection

with acceptance of a purchase order. Based on our limited experience with repeat sales of SAPS and TEBO tools, we expect that we will receive an initial payment upon delivery of a tool in connection with a repeat purchase, with the balance being paid once the tool has been tested and accepted by the customer. Our sales arrangements for repeat purchases do not include a general right of return.

Since introducing SAPS technology in 2009, we have focused on selling SAPS-based tools and, beginning in 2016, TEBO-based tools. Our revenue from sales of single-wafer wet cleaning equipment totaled $10.6 million, or 73.6% of our revenue, in the first half of 2017 (compared with $5.6 million, or 69.1% of revenue, in the first half of 2016), $21.5 million, or 78.4% of our revenue, in 2016 and $26.8 million, or 86.0% of our revenue, in 2015.

We have generated most of our revenue from a limited number of customers as the result of our strategy of initially placing SAPS- and TEBO-based equipment with a small number of leading chip manufacturers that are driving technology trends and key capability implementation. In the first half of 2017, 62.8% of our revenue was derived from three customers: SK Hynix Inc., a leading Korean memory chip company that accounted for 22.8% of our revenue; Shanghai Huali Microelectronics Corporation, a leading PRC foundry that accounted for 20.6% of our revenue; and Yangtze Memory Technologies Co., Ltd., a leading PRC memory chip company that, together with one of its subsidiaries, accounted 19.4% of our revenue. In 2016 99.3% of our revenue was derived from four customers: Shanghai Huali Microelectronics Corporation, which accounted for 33.7% of our revenue; Semiconductor Manufacturing International Corporation, a leading PRC foundry that accounted for 25.0% of our revenue; SK Hynix Inc., which accounted for 24.0% of our revenue; and JiangYin ChangDian Advanced Packaging Co. Ltd., a leading PRC foundry that accounted for 16.6% of our revenue. In 2015 all of our revenue was derived from three customers, including SK Hynix Inc., which accounted for 86.0% of our revenue, and JiangYin ChangDian Advanced Packaging Co., Ltd., which accounted for 10.1% of our revenue.

Based on our market experience, we believe that implementation of our equipment by one of our selected leading companies will attract and encourage other manufacturers to evaluate our equipment, because the leading company's implementation will serve as validation of our equipment and will enable the other manufacturers to shorten their evaluation processes. We placed our first SAPS-based tool in 2009 as a prototype. We worked closely with the customer for two years in debugging and modifying the tool, and the customer then spent two more years of qualification and running pilot production before beginning volume manufacturing. Our revenue in 2015 included sales of SAPS-based tools following the customer's completion of its qualification process. We expect that the period from new product introduction to high volume manufacturing will be three years or less in the future. Please see "Risk Factors—Business—We depend on a small number of customers for a substantial portion of our revenue, and the loss of, or a significant reduction in orders from, one or more of our major customers could have a material adverse effect on our revenue and operating results. There are also a limited number of potential customers for our products."

All of our sales in 2015, 2016 and the first half of 2017 were to customers located in Asia, and we anticipate that a substantial majority of our revenue will continue to come from customers located in this region for the near future. We have increased our sales efforts to penetrate the markets in North America and Western Europe.

We recognize revenue in accordance with the Securities and Exchange Commission's Staff Accounting Bulletin No. 104, as described below under "—Critical Accounting Policies and Significant Judgments and Estimates—Revenue Recognition."

We offer extended maintenance service contracts to provide services such as trouble-shooting or fine-tuning tools, and installing spare parts, following expiration of applicable initial warranty coverage periods, which for sales to date have extended from 12 to 36 months as described under "—Critical Accounting Policies and Significant Judgments and Estimates—Warranty." A limited number of the single-wafer wet cleaning tools we have sold to date are no longer covered by their initial warranties. In 2015, 2016 and the first half of 2017, we received payments for parts and labor for service activities provided from time to time, but as of June 30, 2017

we had not yet entered into extended maintenance service contracts with respect to any of the tools for which initial warranty coverage had expired. We expect to enter into extended maintenance service contracts with customers as additional initial warranties expire, but we do not expect revenue from extended maintenance service contracts to represent a material portion of our revenue in the future.

The loss or delay of one or more large sale transactions in a quarter could impact our results of operations for that quarter and any future quarters for which revenue from that transaction is lost or delayed, as described under "Risk Factors—Risks Related to Our Business and Our Industry—Our quarterly operating results can be difficult to predict and can fluctuate substantially, which could result in volatility in the price of Class A common stock." It is difficult to predict accurately when, or even if, we can complete a sale of a tool to a potential customer or to increase sales to any existing customer. Our tool demand forecasts are based on multiple assumptions, including non-binding forecasts received from customers years in advance, each of which may introduce error into our estimates. Difficulties in forecasting demand for our tools make it difficult for us to project future operating results and may lead to periodic inventory shortages or excess spending on inventory or on tools that may not be purchased, as further described in "Risk Factors—Risks Related to Our Business and Our Industry—Difficulties in forecasting demand for our tools may lead to periodic inventory shortages or excess spending on inventory items that may not be used."

Cost of Revenue

Cost of revenue for capital equipment consists primarily of:

- direct costs, which consist principally of costs of tool components and subassemblies purchased from third-party vendors;
- compensation of personnel associated with our manufacturing operations, including stock-based compensation;
- depreciation of manufacturing equipment;
- amortization of costs of software used for manufacturing purposes;
- other expenses attributable to our manufacturing department; and
- allocated overhead for rent and utilities.

We are not party to any long-term purchasing agreements with suppliers. Please see "Risk Factors—Risks Related to Our Business and Our Industry—Our customers do not enter into long-term purchase commitments, and they may decrease, cancel or delay their projected purchases at any time."

As our customer base and tool installations continue to grow, we will need to hire additional manufacturing personnel. The rates at which we add customers and install tools will affect the level and time of this spending. In addition, because we often import components and spare parts from the United States, we have experienced, and expect to continue to experience, the effect of the dollar's growth on our cost of revenue.

Gross Margin

Our gross margin was 40.6% in the first half of 2017 (compared with 34.8% in the first half of 2016), 48.7% in 2016 and 45.3% in 2015. Gross margin may vary from period to period, primarily related to the level of utilization and the timing and mix of purchase orders. We expect gross margin to be between 40% and 45% for the foreseeable future, with direct manufacturing costs approximating 50% to 55% of revenue and overhead costs totaling approximately 5% of revenue.

We seek to maintain our gross margin by continuing to develop proprietary technologies that avoid pricing pressure for our wet cleaning equipment. We actively manage our operations through principles of operational

excellence designed to ensure continuing improvement in the efficiency and quality of our manufacturing operations by, for example, implementing factory constraint management and change control and inventory management systems. In addition, our purchasing department actively seeks to identify and negotiate supply contracts with improved pricing to reduce cost of revenue.

A significant portion of our raw materials are denominated in Renminbi, or RMB, while the majority of our purchase orders are denominated in U.S. dollars. As a result, currency exchange rates may have a significant effect on our gross margin. For further information, please see “Exchange Rate Information.”

Operating Expenses

We have experienced, and expect to continue to experience, growth in the dollar amount of our operating expenses, as we make investments to support the anticipated growth of our customer base and the continued development of proprietary technologies. As we continue to grow our business, we expect operating expenses to increase in absolute dollars.

Sales and Marketing

Sales and marketing expense accounted for 17.9% of our revenue in the first half of 2017 (compared with 22.4% of revenue in the first half of 2016), 14.3% of our revenue in 2016 and 13.5% of our revenue in 2015. Sales and marketing expense consists primarily of:

- compensation of personnel associated with pre- and after-sales support and other sales and marketing activities, including stock-based compensation;
- sales commissions paid to independent sales representatives;
- fees paid to sales consultants;
- shipping and handling costs for transportation of products to customers;
- warranty costs;
- cost of trade shows;
- travel and entertainment; and
- allocated overhead for rent and utilities.

Sales and marketing expense can be significant and may fluctuate, in part because of the resource-intensive nature of our sales efforts and the length and variability of our sales cycle. The length of our sales cycle, from initial contact with a customer to the execution of a purchase order, is generally 6 to 24 months.

During the sales cycle, we expend significant time and money on sales and marketing activities, including educating customers about our tools, participating in extended tool evaluations and configuring our tools to customer-specific needs. Sales and marketing expense in a given period can be particularly affected by the increase in travel and entertainment expenses associated with the finalization of purchase orders or the installation of tools.

We expect that, for the foreseeable future, sales and marketing expense will increase in absolute dollars, as we continue to invest in sales and marketing by hiring additional employees and expanding marketing programs in existing or new markets. We must invest in sales and marketing processes in order to develop and maintain close relationships with customers. We are making dollar-based investments in dollars in order to support growth of our customer base in the United States, and the relative strength of the dollar could have a significant effect on our sales and marketing expense.

Research and Development

Research and development expense accounted for 13.0% of our revenue in the first half of 2017 (compared with 18.3% of revenue in the first half of 2016), 11.9% of our revenue in 2016 and 9.4% of our revenue in 2015. Research and development expense relates to the development of new products and processes and encompasses our research, development and customer support activities. Research and development expense consists primarily of:

- compensation of personnel associated with our research and development activities, including stock-based compensation;
- costs of components and other research and development supplies;
- travel expense associated with customer support;
- amortization of costs of software used for research and development purposes; and
- allocated overhead for rent and utilities.

Some of our research and development has been funded by grants from the PRC government, as described in "—PRC Government Research and Development Funding" below.

We expect that, for the foreseeable future, research and development expense will increase in absolute dollars and will range between 10% and 12% of revenue, as we continue to invest in research and development to advance our technologies. We intend to continue to invest in research and development to support and enhance our existing single-wafer wet cleaning products and to develop future product offerings to build and maintain our technology leadership position.

General and Administrative

General and administrative expense accounted for 21.9% of our revenue in the first half of 2017 (compared with 13.4% of revenue in the first half of 2016), 9.8% of our revenue in 2016 and 6.7% of our revenue in 2015. General and administrative expense consists primarily of:

- compensation of executive, accounting and finance, human resources, information technology, and other administrative personnel, including stock-based compensation;
- professional fees, including accounting and legal fees;
- other corporate expenses; and
- allocated overhead for rent and utilities.

We expect that, for the foreseeable future, general and administrative expense will increase in absolute dollars, as we incur additional costs associated with growing our business and operating as a public company.

Stock-Based Compensation Expense

We grant stock options to employees and non-employee consultants and directors, and we accounts for those stock-based awards in accordance with Accounting Standards Codification, or ASC, Topic 718, *Compensation—Stock Compensation* and ASC Subtopic 505-50, *Equity-Based Payments to Non-Employees*, each as adopted by the Financial Accounting Standards Board, or FASB.

- Stock-based awards granted to employees are measured at the fair value of the awards on the grant date and are recognized as expenses either (a) immediately on grant, if no vesting conditions are required, or (b) using the graded vesting method, net of estimated forfeitures, over the requisite service period. The fair value of stock options is determined using the Black-Scholes valuation model. Stock-based compensation expense, when recognized, is charged to cost of revenue or to the category of operating expense corresponding to the employee's service function.

- Stock-based awards granted to non-employees are accounted for at the fair value of the awards at the earlier of (a) the date at which a commitment for performance by the non-employee to earn the awards is reached and (b) the date at which the non-employee's performance is complete. The fair value of such non-employee awards is re-measured at each reporting date using the fair value at each period end until the vesting date. Changes in fair value between the reporting dates are recognized by the graded vesting method.

Cost of revenue and operating expenses during the periods presented below have included stock-based compensation as follows:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands)			
Stock-Based Compensation Expense:				
Cost of revenue	$ 10	$ 6	$ 11	$ 9
Sales and marketing expense	18	2	5	4
Research and development expense	26	2	5	4
General and administrative expense	1,294	183	362	406
	$ 1,348	$ 193	$383	$423

We recognized stock-based compensation expense to employees of $128,000 in the first half of 2017 (compared to $46,000 in the first half of 2016), $92,000 in 2016 and $73,000 in 2015. As of June 30, 2017 and December 31, 2016 and 2015, there was $788,000, $726,000 and $299,000 of total unrecognized employee share-based compensation expense, net of estimated forfeitures, related to unvested share-based awards, which are expected to be recognized over a weighted-average period of 2.12 years, 2.25 years and 1.24 years, respectively.

We recognized stock-based compensation expense to non-employees of $1.2 million in the first half of 2017 (compared to $148,000 in the first half of 2016), $291,000 in 2016 and $350,000 in 2015. The fair value of each option granted to a non-employee is re-measured at each period end until the vesting date.

PRC Government Research and Development Funding

ACM Shanghai has received three grants from local and central governmental authorities in the PRC. The first grant, which was awarded in 2008, relates to the development and commercialization of 65nm to 45nm stress-free polishing technology. The second grant was awarded in 2009 to fund interest expense on short-term borrowings. The most recent grant was made in 2014 and relates to the development of electro copper-plating technology. PRC governmental authorities provide the majority of the funding, although ACM Shanghai is also required to invest certain amounts in the projects.

The PRC governmental grants contain certain operating conditions, and we are required to go through a government due diligence process once the project is complete. The grants therefore are recorded as long-term liabilities upon receipt, although we are not required to return any funds we receive. Grant amounts are recognized in our statements of operations and comprehensive income as follows:

- Government subsidies relating to current expenses are reflected as reductions of those expenses in the periods in which they are reported. Those reductions totaled $2.1 million in the first half of 2017 (compared to $2.0 million in the first half of 2016), $6.2 million in 2016 and $3.8 million in 2015.
- Government subsidies for interest on short-term borrowings are reported as reductions of interest expense in the periods the interest is accrued. Those reductions totaled $0 in the first half of 2017 (compared to $101,000 in the first half of 2016), $99,000 in 2016 and $303,000 in 2015.

- Government grants used to acquire depreciable assets are transferred from long-term liabilities to property, plant and equipment when the assets are acquired and then the recorded amounts of the assets are credited to other income over the useful lives of the assets. Related government subsidies recognized as other income totaled $65,000 in the first half of 2017 (compared to $63,000 in the first half of 2016), $127,000 in 2016 and $105,000 in 2015.

Net Income Attributable to Non-Controlling Interests

Since 2006 we have conducted our business through our subsidiary ACM Shanghai, and we have financed our operations in part through sale of minority equity interests in ACM Shanghai. From January 1, 2015 to August 31, 2017, ACM Research owned 62.87% of the equity interests of ACM Shanghai and three non-controlling, unrelated investors held the remaining 37.13%. As described above under "—Our Company—Acquisition of Outstanding Minority Interests in Our Operating Company," ACM Research (a) acquired an additional 18.77% equity interest from one of the minority investors as of August 31, 2017 and (b) entered into agreements with the other two minority investors pursuant to which we expect it will acquire the remaining non-controlling interests prior to the closing of this offering.

How We Evaluate Our Operations

We present information below with respect to three measures of financial performance:

- We define "adjusted EBITDA" as our net income excluding interest expense (net), income tax benefit (expense), depreciation and amortization, and stock-based compensation. We define adjusted EBITDA to also exclude restructuring costs, although we have not incurred any such costs to date.
- We define "free cash flow" as net cash provided by operating activities less purchases of property and equipment (net of proceeds from disposals) and of intangible assets.
- We define "adjusted operating income (loss)" as our income (loss) from operations excluding stock-based compensation.

These financial measures are not based on any standardized methodologies prescribed by accounting principles generally accepted in the United States, or GAAP, and are not necessarily comparable to similarly titled measures presented by other companies.

We have presented adjusted EBITDA, free cash flow and adjusted operating income (loss) because they are key measures used by our management and board of directors to understand and evaluate our operating performance, to establish budgets and to develop operational goals for managing our business. We believe that these financial measures help identify underlying trends in our business that could otherwise be masked by the effect of the expenses that we exclude. In particular, we believe that the exclusion of the expenses eliminated in calculating adjusted EBITDA and adjusted operating income (loss) can provide useful measures for period-to-period comparisons of our core operating performance and that the exclusion of property and equipment purchases from operating cash flow can provide a usual means to gauge our capability to generate cash. Accordingly, we believe that these financial measures provide useful information to investors and others in understanding and evaluating our operating results, enhancing the overall understanding of our past performance and future prospects, and allowing for greater transparency with respect to key financial metrics used by our management in its financial and operational decision-making.

Adjusted EBITDA, free cash flow and adjusted operating income (loss) are not prepared in accordance with GAAP, and should not be considered in isolation of, or as an alternative to, measures prepared in accordance with GAAP. There are a number of limitations related to the use of adjusted EBITDA rather than net income (loss), which is the nearest GAAP equivalent. Some of these limitations are:

- adjusted EBITDA excludes depreciation and amortization and, although these are non-cash expenses, the assets being depreciated or amortized may have to be replaced in the future;

- we exclude stock-based compensation expense from adjusted EBITDA and adjusted operating income (loss), although (a) it has been, and will continue to be for the foreseeable future, a significant recurring expense for our business and an important part of our compensation strategy and (b) if we did not pay out a portion of our compensation in the form of stock-based compensation, the cash salary expense included in operating expenses would be higher, which would affect our cash position;
- the expenses and other items that we exclude in our calculation of adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude from adjusted EBITDA when they report their operating results;
- adjusted EBITDA does not reflect changes in, or cash requirements for, working capital needs;
- adjusted EBITDA does not reflect interest expense, or the requirements necessary to service interest or principal payments on debt;
- adjusted EBITDA does not reflect income tax expense (benefit) or the cash requirements to pay taxes;
- adjusted EBITDA does not reflect historical cash expenditures or future requirements for capital expenditures or contractual commitments;
- although depreciation and amortization charges are non-cash charges, the assets being depreciated and amortized will often have to be replaced in the future, and adjusted EBITDA does not reflect any cash requirements for such replacements; and
- adjusted EBITDA includes expense reductions and non-operating other income attributable to PRC governmental grants, which may mask the effect of underlying developments in net income (loss), including trends in current expenses and interest expense, and free cash flow includes the PRC governmental grants, the amount and timing of which can be difficult to predict and are outside our control.

The following table reconciles net income (loss), the most directly comparable GAAP financial measure, to adjusted EBITDA:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands)			
Adjusted EBITDA Data:				
Net income (loss)	$(2,955)	$(1,029)	$2,387	$ 7,915
Interest expense, net	159	45	165	105
Income tax expense (benefit)	749	(73)	595	(2,525)
Depreciation and amortization	118	88	187	160
Stock-based compensation	1,348	193	383	423
Adjusted EBITDA	$ (581)	$ (776)	$3,717	$ 6,078

Adjusted EBITDA in the six months ended June 30, 2017, as compared with the comparable period in 2016, reflected an increase of $3.2 million in net operating expenses, substantially offset by an increase of $3.0 million in gross profit. Adjusted EBITDA in 2016, as compared with 2016, reflected a decrease of $792,000 in gross profit and an increase of $582,000 in net operating expenses, in addition to the other factors driving net income. We do not exclude from adjusted EBITDA expense reductions and non-operating other income attributable to PRC governmental grants because we consider and incorporate the expected amounts and timing of those grants in incurring expenses and capital expenditures. If we did not receive the grants, our cash expenses therefore would be lower, and our cash position would not be affected, to the extent we have accurately anticipated the amounts of the grants. For additional information regarding our PRC grants, please see “—Key Components of Results of Operations—PRC Government Research and Development Funding.”

The following table reconciles net cash provided by operating activities, the most directly comparable GAAP financial measure, to free cash flow:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands)			
Free Cash Flow Data:				
Net cash (used in) provided by operating activities	$2,983	$4,739	$(3,702)	$ 2,702
Purchases of property and equipment, net of proceeds from disposals	(26)	(95)	(788)	(1,371)
Purchases of intangible assets	(36)	(9)	(22)	—
Free cash flow	$2,921	$4,635	$(4,512)	$ 1,331

Free cash flow in the six months ended June 30, 2017, as compared with the comparable period in 2016, reflected, in addition to the factors driving net cash provided by operating activities, (a) decreases in accounts receivable offset by increases in accounts payable and (b) increases in stock-based compensation. Free cash flow in 2016, as compared with 2015, reflected, in addition to the factors driving net cash provided by operating activities, (a) increases in inventory and accounts receivable resulting from increased sales activities and (b) our continued expenditures on property and equipment. Consistent with our methodology for calculating adjusted EBITDA, we do not adjust free cash flow for the effects of PRC government subsidies, because we take those subsidies into account in incurring expenses and capital expenditures.

Adjusted operating income (loss) excludes stock-based compensation from income (loss) from operations. Although stock-based compensation is an important aspect of the compensation of our employees and executives, determining the fair value of certain of the stock-based instruments we utilize involves a high degree of judgment and estimation and the expense recorded may bear little resemblance to the actual value realized upon the vesting or future exercise of the related stock-based awards. Furthermore, unlike cash compensation, the value of stock options, which is an element of our ongoing stock-based compensation expense, is determined using a complex formula that incorporates factors, such as market volatility, that are beyond our control. Management believes it is useful to exclude stock-based compensation in order to better understand the long-term performance of our core business and to facilitate comparison of our results to those of peer companies. The use of non-GAAP financial measures excluding stock-based compensation has limitations, however. If we did not pay out a portion of our compensation in the form of stock-based compensation, the cash salary expense included in operating expenses would be higher, which would affect our cash position. The following tables reflect the exclusion of stock-based compensation from line items comprising income (loss) from operations:

	Six Months Ended June 30,					
	2017			2016		
	Actual (GAAP)	SBC	Adjusted (Non-GAAP)	Actual (GAAP)	SBC	Adjusted (Non-GAAP)
	(in thousands)					
Adjusted Operating Income (Loss):						
Revenue	$14,423	$ —	$ 14,423	$ 8,122	$ —	$ 8,122
Cost of revenue	(8,570)	(10)	(8,560)	$(5,292)	(6)	(5,286)
Gross profit	5,853		5,863	2,830		2,836
Operating expenses:						
Sales and marketing	(2,583)	(18)	(2,565)	(1,818)	(2)	(1,816)
Research and development	(1,867)	(26)	(1,841)	(1,486)	(2)	(1,484)
General and administrative	(3,158)	(1,294)	(1,864)	(1,089)	(183)	(906)
Income (loss) from operations	$ (1,755)	$(1,348)	$ (407)	$(1,563)	(193)	$ (1,370)

	Year Ended December 31,					
	2016			2015		
	Actual (GAAP)	SBC	Adjusted (Non-GAAP)	Actual (GAAP)	SBC	Adjusted (Non-GAAP)
	(in thousands)					
Adjusted Operating Income (Loss):						
Revenue	$ 27,371	$ —	$ 27,371	$ 31,206	$ —	$ 31,206
Cost of revenue	(14,042)	(11)	(14,031)	(17,085)	(9)	(17,076)
Gross profit	13,329		13,340	14,121		14,130
Operating expenses:						
Sales and marketing	(3,907)	(5)	(3,902)	(4,213)	(4)	(4,209)
Research and development	(3,259)	(5)	(3,254)	(2,942)	(4)	(2,938)
General and administrative	(2,673)	(362)	(2,311)	(2,103)	(406)	(1,697)
Income (loss) from operations	$ 3,490	$(383)	$ 3,873	$ 4,863	$(423)	$ 5,286

Adjusted operating loss in the six months ended June 30, 2017, as compared with the comparable period in 2016, reflected an increase of $1.2 million in stock-based compensation expense. Adjusted operating income in 2016, as compared with 2015, reflected a decrease of $44,000 in stock based compensation expense.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of our consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions in applying our accounting policies that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosures of contingent assets and liabilities. We base these estimates and assumptions on historical experience, and evaluate them on an on-going basis to ensure that they remain reasonable under current conditions. Actual results could differ from those estimates. The accounting policies that reflect our more significant estimates, judgments and assumptions and that we believe are the most critical to aid in fully understanding and evaluating our reported financial results include the following:

Revenue Recognition

We utilize the guidance set forth in the FASB's ASC Topic 605, *Revenue Recognition*, regarding the recognition, presentation and disclosure of revenue in our financial statements. We recognize revenue when persuasive evidence of an arrangement exists; delivery has occurred and the major risks and remunerations of ownership have been transferred to the customer; collectability is probable; and the selling price is fixed or determinable.

In general, we recognize revenue when a tool has been demonstrated to meet the customer's predetermined specifications and is accepted by the customer. If terms of the sale provide for a lapsing customer acceptance period, we recognize revenue as of the earlier of the expiration of the lapsing acceptance period and customer acceptance. In the following circumstances, however, we recognize revenue upon shipment or delivery, when legal title to the tool is passed to a customer as follows:

- when the customer has previously accepted the same type of tool with the same specifications and when we can objectively demonstrate that the tool meets all of the required acceptance criteria;
- when the sales contract or purchase order does not contain an acceptance agreement or a lapsing acceptance provision and when we can objectively demonstrate that the tool meets all of the required acceptance criteria;
- when the customer withholds acceptance due to issues unrelated to product performance, in which case revenue is recognized when the system is performing as intended and meets predetermined specifications; or
- when our sales arrangements do not include a general right of return.

Customization, production, installation and delivery are essential elements of the functionality of our delivered tools, but the related services we offer, principally warranty services, are not essential to tool functionality. We treat the customization, production, installation and delivery of tools, together with the provision of related warranty and other services, as a single unit of accounting in accordance with the FASB's ASC Subtopic 605-25, *Revenue Recognition—Multiple Element Arrangements.* In the first half of 2017 and in 2016 and 2015 all of our tools were sold in stand-alone arrangements.

We offer post-warranty period services, which consist principally of the installation and replacement of parts and small-scale modifications to the equipment. The related revenue and costs of revenue are recognized when parts have been delivered and installed, risk of loss has passed to the customer, and collection is probable. We do not expect revenue from extended maintenance service contracts to represent a material portion of our revenue in the future.

Stock-Based Compensation

We account for grants of stock options based on their grant date fair value and recognize compensation expense over the vesting periods. We estimate the fair value of stock options as of the date of grant using the Black-Scholes option pricing model. Stock options granted to non-employees are subject to periodic revaluation over their vesting terms.

Stock-based compensation expense represents the cost of the grant date fair value of employee stock option grants recognized over the requisite service period of the awards (usually the vesting period) on a straight-line basis, net of estimated forfeitures. We estimate the fair value of stock option grants using the Black-Scholes option pricing model, which requires the input of highly subjective assumptions, including (a) the risk-free interest rate, (b) the expected volatility of our stock, (c) the expected term of the award and (d) the expected dividend yield.

- The risk-free interest rates for periods within the expected life of the option are based on the yields of zero-coupon U.S. Treasury securities.
- Due to the lack of a public market for the trading of the common stock and a lack of company-specific historical and implied volatility data, we have based our estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. For these analyses, we have selected companies with comparable characteristics to ours including enterprise value, risk profile, position within the industry, and with historical share price information sufficient to meet the expected life of the stock-based awards. We compute the historical volatility data using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of our stock-based awards. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.
- The expected term represents the period of time that options are expected to be outstanding. The expected term of stock options is based on the average between the vesting period and the contractual term for each grant according to Staff Accounting Bulletin No. 110.
- The expected dividend yield is assumed to be 0%, based on the fact that we have never paid cash dividends and have no present intention to pay cash dividends.

No stock options were granted to employees during the six months ended June 30, 2016. For employee stock option grants made during the six months ended June 30, 2017 and the years ended December 31, 2016 and 2015, the weighted-average assumptions used in the Black-Scholes option pricing model to determine the fair value of those grants were as follows:

	Six Months Ended June 30, 2017	Year Ended December 31, 2016	Year Ended December 31, 2015
Risk-free interest rate	2.22%	2.02% - 2.32%	1.87%
Expected volatility	29.18%	29.93%	37.67%
Expected term (in years)	6.25%	5.75 - 6.25	6.25
Expected dividend yield	0%	0%	0%

For non-employee stock option grants made during the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, the weighted-average assumptions used in the Black-Scholes option pricing model to determine the fair value of those grants were as follows:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
Risk-free interest rate	1.85% - 2.33%	0.71% - 1.21%	1.00% - 2.25%	1.31% - 1.76%
Expected volatility	28.87% - 29.41%	30.59% - 31.43%	29.93%	33.21%
Expected term (in years)	4.08 - 6.19	2.62 - 5.69	2.11 - 6.24	3.12 - 5.94
Expected dividend yield	0%	0%	0%	0%

The following table summarizes by grant date the number of shares of common stock underlying stock options granted since January 1, 2015, as well as the associated per share exercise price and the estimated fair value per share of common stock on the grant date:

Grant Dates	Number of Common Shares Underlying Options Granted	Exercise Price per Common Share	Estimated Fair Value per Common Share
May 1, 2015	783,338	$ 1.50	$ 1.50
September 8, 2015	263,335	1.50	1.50
December 28, 2016	1,424,596	3.00	2.28
March 9, 2017	33,334	7.50	7.50
May 9, 2017	183,335	7.50	7.50

As of June 30, 2017, the unrecognized compensation cost related to outstanding options was $788,000 and is expected to be recognized as expense over a weighted-average of 2.12 years. As of December 31, 2016, the unrecognized compensation cost related to outstanding options was $726,000 and is expected to be recognized as expense over a weighted-average of 2.25 years. As of December 31, 2015, the unrecognized compensation cost related to outstanding options was $299,000 and is expected to be recognized as expense over a weighted-average of 1.24 years.

Based on the assumed initial public offering, or IPO, price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus), the intrinsic value of stock options outstanding as of June 30, 2017 would be $, of which $ would have been related to stock options that were vested and $ would have been related to stock options that were unvested.

Determination of Fair Value of Common Stock

We are required to estimate the fair value of common stock underlying our stock-based awards when performing fair value calculations. All options to purchase shares of common stock are intended to be granted with an exercise price per share no less than the fair value per share of the common stock underlying those options on the date of grant, based on the information known to us on the date of grant. In the absence of a public trading market for the common stock, on each grant date we develop an estimate of the fair value of the common stock with the assistance of a third party valuation specialist to determine an exercise price for the option grants.

We historically have granted stock options at exercise prices equal to the fair value of the common stock as of the date of grant, as determined by the board of directors with input from management. Because there has been no public market for the common stock, the board determined the fair value of the common stock by considering a number of objective and subjective factors, including our financial performance and projections, the relative illiquidity of the common stock, the pricing of sales of convertible preferred stock to third parties, the preferences of our outstanding convertible preferred stock as compared to the common stock, including the liquidation preferences and dividend rights, peer group trading multiples, and trends in the broad semiconductor equipment market.

On December 28, 2016, the compensation committee of the board of directors, acting with the assistance of a third-party valuation specialist, considered the fair value of the common stock. In considering the fair value, the compensation committee took into account the methodologies, approaches and assumptions provided by the *Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation of the American Institute of Certified Public Accountants*, or the Practice Aid.

There are significant judgments and estimates inherent in the compensation committee's determination of the fair value of the common stock. These judgments and estimates include assumptions regarding our future operating performance, the time to completing an IPO or other liquidity event, and the determination of the appropriate valuation methods. If we had made different assumptions, our stock-based compensation expense, net loss and net loss per common share could have been significantly different.

In accordance with the Practice Aid, the compensation committee considered the various methods for allocating the enterprise value across the classes and series of capital stock to determine the fair value of our common stock at each valuation date.

The compensation committee considered, but did not use, the following methods:

- The *liquidation value method* assumes the discontinuance of the business as a going concern.
- The *single period capitalization method* is most appropriate when a company's current and historical operations can reasonably be considered indicative of its future operations. The compensation committee determined that, since we are planning for higher annual growth than shown by our current and historical results, this method will not produce a value indicative of our growing company.
- The *excess earnings method* estimates the value of a company's intangible assets and assumes that earnings in excess of a reasonable return of the net tangible assets are a product of a company's intangible assets. The compensation committee deemed this method not to be a meaningful indication of value for the same reasons it rejected the single period capitalization method and also because our actual investment in net tangible assets is minimal.
- The *comparative transaction method* derives indications of fair value from actual merger and acquisition transactions in the markets. The purchase prices in merger and acquisition transactions may be a better reflection of investment value than fair value of a target. Given the stage of our growth, the compensation committee determined a comparative transaction would not adequately reflect our value.
- The *capital market method* seeks valuation guidance from prices paid by shareholders for similarly situated publicly traded companies. With the capital market method, the compensation committee

would determine an appropriate multiple to apply to our financial measures by dividing the price of a guideline company's stock and, in some instances, the value of all invested capital, by some relative economic variable observed or calculated from such company's financial statement. Given the stage of our growth, the compensation committee determined the application of value metrics fails to capture value that we have created but that has not yet been reflected in our operating results.

- The *discounted cash flow method* is based on the assumed returns from a company's assets, and converts this into an enterprise value. The present value of a stream of benefits is obtained by a discount rate that takes into account a company's stage of development and risks involved. The compensation committee deemed this method not suitable in the instant case due to our then-recent transactions involving the sale of our securities.

In light of our placement and sale of Series F preferred stock in December 2016, the compensation committee applied the *company transaction method*, which uses the most recent negotiated arm's-length transactions involving the sale or transfer of stock or other equity interests. In applying the company transaction method, the compensation committee used the option-pricing model, or OPM, under which shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The values of preferred stock and common stock are inferred by analyzing these options.

Under the company transaction method, the compensation committee analyzed equity value in the context of both an initial public offering and a sale or merger of our company. Using the OPM and the post-money value of the Series F preferred stock, it was possible to determine the implied equity value for all classes of stock. In applying the OPM, the compensation committee relied on the equity value of our company based upon the Series F preferred stock investment, which was completed at a price of $2.50 per share. This value was then used to determine the implied Class A common stock value using the OPM, considering (a) the applicable conversion rate of 0.3333 shares of Class A common stock for each share of Series F preferred stock and (b) the claims of the various classes of equity securities. The compensation committee then applied a discount for lack of marketability to obtain the value of Class A common stock on a minority/marketable basis. The assumptions used in calculating the fair value of option grants in 2016 were a risk-free rate based on the weighted average of the one year and two year Treasury Constant Maturity Rates, expected expiration at 1.25 years from the valuation date, and expected volatility estimated at 45%. These assumptions represented the best estimates of management and the compensation committee, but the estimates necessarily involve inherent uncertainties and the application of judgment.

Based on the foregoing, the compensation committee determined the fair value of Class A common stock for financial reporting purposes to be $2.28 as of December 28, 2016. As a result, the exercise price of $3.00 of the stock options granted on December 28, 2016 exceeded the fair value of Class A common stock on that date.

On March 9, 2017, the compensation committee of the board of directors considered the fair value of the common stock. In considering the fair value, the compensation committee took into account the methodologies, approaches and assumptions provided by the Practice Aid. In accordance with the Practice Aid, the compensation committee considered the various methods for allocating the enterprise value across the classes and series of capital stock to determine the fair value of our common stock at each valuation date. Consistent with its process and analysis on December 28, 2016, the compensation committee considered, but did not use, the liquidation value, single period capitalization, excess earnings, comparative transaction, capital market and discounted cash flow methods. The compensation committee determined that the terms of a share purchase agreement being negotiated and discussed at arm's length in March 2017 and involving the transfer of Class A common stock provided the best evidence of the fair value of the Class A common stock. In the transaction, we expected to issue, and ultimately issued, 133,334 shares of Class A common stock at a purchase price of $7.50 per share. Because this direct evidence of the fair value of the Class A common stock was available, the compensation committee did not need to apply the company transaction method.

Based on the foregoing, the compensation committee determined the fair value of Class A common stock for financial reporting purposes to be $7.50 as of March 9, 2017. As a result, the exercise price of $7.50 of the stock option granted on March 9, 2017 equaled the fair value of Class A common stock on that date.

On May 9, 2017, the compensation committee of the board of directors considered the fair value of the common stock. In considering the fair value, the compensation committee took into account the methodologies, approaches and assumptions provided by the Practice Aid. In accordance with the Practice Aid, the compensation committee considered the various methods for allocating the enterprise value across the classes and series of capital stock to determine the fair value of our common stock at each valuation date. Consistent with its process and analysis on December 28, 2016 and March 9, 2017, the compensation committee considered, but did not use, the liquidation value, single period capitalization, excess earnings, comparative transaction, capital market and discounted cash flow methods. The compensation committee determined that the terms of the share purchase agreement considered in connection with the option grants on March 9, 2017, but still being negotiated as of May 9, 2017, provided the best evidence of the fair value of the Class A common stock. Pursuant to this proposed agreement, we continued to contemplate the issuance and sale of 133,334 shares of Class A common stock at a purchase price of $7.50 per share. Because this direct evidence of the fair value of the Class A common stock was available, the compensation committee did not need to apply the company transaction method.

Based on the foregoing, the compensation committee determined the fair value of Class A common stock for financial reporting purposes to be $7.50 as of May 9, 2017. As a result, the exercise price of $7.50 of the stock option granted on May 9, 2017 equaled the fair value of Class A common stock on that date.

Inventory

Inventories consist of finished goods, raw materials, work-in-process and consumable materials. Finished goods are comprised of direct materials, direct labor, depreciation and manufacturing overhead. Inventory is stated at the lower of cost and net recognizable value of the inventory at June 30, 2017 and at the lower of cost and market value of the inventory at December 31, 2016 and 2015. The cost of a general inventory item is determined using the weighted average method. The cost of an inventory item purchased specifically for a customized tool is determined using the specific identification method. Market value is determined as the lower of replacement cost and net realizable value, which is the estimated selling price, in the ordinary course of business, less estimated costs to complete or dispose.

We assess the recoverability of all inventories quarterly to determine if any adjustments are required. We write down excess or obsolete tool-related inventory based on management’s analysis of inventory levels and forecasted 12-month demand and technological obsolescence and spare parts inventory based on forecasted usage. These factors are affected by market and economic conditions, technology changes, new product introductions and changes in strategic direction, and they require estimates that may include uncertain elements. Actual demand may differ from forecasted demand, and those differences may have a material effect on recorded inventory values.

Our manufacturing overhead standards for product costs are calculated assuming full absorption of forecasted spending over projected volumes, adjusted for excess capacity. Abnormal inventory costs such as costs of idle facilities, excess freight and handling costs, and spoilage are recognized as current period charges.

Allowance for Doubtful Accounts

Accounts receivable are reflected in our consolidated balance sheets at their estimated collectible amounts. A substantial majority of our accounts receivable are derived from sales to large multinational semiconductor manufacturers in Asia. We follow the allowance method of recognizing uncollectible accounts receivable, pursuant to which we regularly assess our ability to collect outstanding customer invoices and make estimates of the collectability of accounts receivable. We provide an allowance for doubtful accounts when we determine that the collection of an outstanding customer receivable is not probable. The allowance for doubtful accounts is reviewed

on a quarterly basis to assess the adequacy of the allowance. We take into consideration (a) accounts receivable and historical bad debts experience, (b) any circumstances of which we are aware of a customer's inability to meet its financial obligations, (c) changes in our customer payment history, and (d) our judgments as to prevailing economic conditions in the industry and the impact of those conditions on our customers. If circumstances change, such that the financial conditions of our customers are adversely affected and they are unable to meet their financial obligations to us, we may need to record additional allowances, which would result in a reduction of our net income.

Deferred Initial Public Offering Costs

Direct costs attributable to this offering have been deferred and recorded in other current assets and will be offset against the gross proceeds received from this offering. At June 30, 2017 and December 30, 2016 and 2015, deferred costs attributable to this offering were $797,000, $41,000 and $0, respectively.

Property, Plant and Equipment

Assets comprising property, plant and equipment are recorded at cost. Depreciation is recorded on a straight-line basis over the estimated useful lives of the assets and begins when the assets are placed in service. Betterments or renewals are capitalized when incurred. Maintenance and repairs with respect to an asset are expensed as incurred if they neither materially add to the value of the asset nor appreciably prolong its life. Assets comprising plant, property and equipment are reviewed each year to determine whether any events or circumstances indicate that the carrying amount of the asset may not be recoverable.

Intangible Assets

Intangible assets represent the fair value of separately recognizable intangible assets acquired in connection with our business operations. We evaluate intangibles for impairment on an annual basis or whenever events or circumstances indicate that an impairment may have occurred.

Valuation of Long-Lived Assets

Long-lived assets are evaluated for impairment whenever events or changes in circumstance indicate that the carrying value of an asset may not be fully recoverable or that the useful life is shorter than we had originally estimated. When these events or changes occur, we evaluate the impairment of the long-lived assets by comparing the carrying value of the assets to an estimate of future undiscounted cash flows expected to be generated from the use of the assets and their eventual disposition. If the sum of the expected future undiscounted cash flow is less than the carrying value of the assets, we recognize an impairment loss based on the excess of the carrying value over the fair value. No impairment charge was recognized in 2015, 2016 and the six months ended June 30, 2017.

Income Taxes

Income taxes are accounted for using the liability method. Under this method, deferred income tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which these temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance would be provided for the deferred tax assets if it is more likely than not that the related benefit will not be realized.

On a quarterly basis, we provide income tax provisions based upon an estimated annual effective income tax rate. The effective tax rate is highly dependent upon the geographic composition of worldwide earnings, tax regulations governing each region, availability of tax credits and the effectiveness of our tax planning strategies. We carefully monitor the changes in many factors and adjust our effective income tax rate on a timely basis. If actual results differ from these estimates, this could have a material effect on our financial condition and results of operations.

We maintained a partial valuation allowance as of December 31, 2016 with respect to certain net deferred tax assets based on our estimates of recoverability. We determined that the partial valuation allowance was appropriate given our historical operating losses and uncertainty with respect to our ability to generate profits from our business model sufficient to take advantage of the deferred tax assets in all applicable tax jurisdictions.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations. In accordance with the authoritative guidance on accounting for uncertainty in income taxes, we recognize liabilities for uncertain tax positions based on the two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained in audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than fifty-percent likely of being realized upon ultimate settlement. We reevaluate these uncertain tax positions on a quarterly basis. This evaluation is based on factors including changes in facts or circumstances, changes in tax law, effectively settled issues under audit and new audit activity. Any change in these factors could result in the recognition of a tax benefit or an additional charge to the tax provision.

Interest and penalties related to uncertain tax positions are recorded in the provision for income tax expense on the consolidated statements of operations.

Foreign Currency Translation

Our consolidated financial statements are presented in U.S. dollars, which is our reporting currency, while the functional currency of our subsidiaries in the PRC is RMB. Transactions in foreign currencies are initially recorded at the functional currency rate prevailing at the date of the transactions. Any difference between the initially recorded amount and the settlement amount is recorded as a gain or loss on foreign currency transaction in our consolidated statements of operations. Monetary assets and liabilities denominated in a foreign currency are translated at the functional currency rate of exchange as of the date of a consolidated balance sheet. Any difference is recorded as a gain or loss on foreign currency translation in the appropriate consolidated statement of operations. In accordance with the FASB's ASC Topic 830, *Foreign Currency Matters*, we translate the assets and liabilities into U.S. dollars from RMB using the rate of exchange prevailing at the applicable balance sheet date and the consolidated statements of operations and cash flows are translated at an average rate during the reporting period. Adjustments resulting from the translation are recorded in stockholders' equity as part of accumulated other comprehensive income.

The PRC government imposes significant exchange restrictions on fund transfers out of the PRC that are not related to business operations. To date these restrictions have not had a material impact on us because we have not engaged in any significant transactions that are subject to the restrictions.

Warranty

We have provided warranty coverage on our tools for 12 to 36 months, covering labor and parts necessary to repair a tool during the warranty period. We account for the estimated warranty cost as sales and marketing expense at the time revenue is recognized. Warranty obligations are affected by historical failure rates and associated replacement costs. Utilizing historical warranty cost records, we calculate a rate of warranty expenses to revenue to determine the estimated warranty charge. We update these estimated charges on a regular basis. The actual product performance and field expense profiles may differ, and in those cases we adjust our warranty accruals accordingly.

Recent Accounting Pronouncements

The following description summarizes recent accounting pronouncements that we have adopted or will be required to adopt in the future.

In July 2017 the FASB issued Accounting Standards Update ("*ASU*") ASU No. 2017-11, *Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815)*: *(Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*, which addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. For public business entities, the amendments in Part I of this update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. For all other entities, the amendments in Part I of this update are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. We are currently evaluating the impact of adoption of ASU 2017-11.

In May 2017 the FASB issued ASU No. 2017-09, *Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting*, which provides guidance on determining which changes to the terms or conditions of share-based payment awards require an entity to apply modification accounting under Topic 718. The amendments in this ASU are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period, for (a) public business entities for reporting periods for which financial statements have not yet been issued and (b) all other entities for reporting periods for which financial statements have not yet been made available for issuance. The amendments in this ASU should be applied prospectively to an award modified on or after the adoption date. We do not expect the adoption of ASU No. 2017-09 to have a material impact on our consolidated financial statements.

In February 2017 the FASB issued ASU No. 2017-05, *Other Income —Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets*, which clarifies the scope of nonfinancial asset guidance in Subtopic 610-20. This ASU also clarifies that derecognition of all businesses and nonprofit activities (except those related to conveyances of oil and gas mineral rights or contracts with customers) should be accounted for in accordance with the derecognition and deconsolidation guidance in Subtopic 810-10. The amendments in this ASU also provide guidance on the accounting for so-called "partial sales" of nonfinancial assets within the scope of Subtopic 610-20 and contributions of nonfinancial assets to a joint venture or other noncontrolled investee. The amendments in this ASU are effective for annual reporting reports beginning after December 15, 2017, including interim reporting periods within that reporting period. We do not expect the adoption of ASU No. 2017-05 to have a material impact on our consolidated financial statements.

In January 2017 the FASB issued ASU No. 2017-04, *Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which removes Step 2 from the goodwill impairment test. An entity will apply a one-step quantitative test and record the amount of goodwill impairment as the excess of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit. The new guidance does not amend the optional qualitative assessment of goodwill impairment. A business entity that is a U.S. Securities and Exchange Commission filer must adopt the amendments in this ASU for its annual or any interim goodwill impairment test in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We do not expect the adoption of ASU No. 2016-18 to have a material impact on our consolidated financial statements.

In November 2016 the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash

equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments in this ASU do not provide a definition of restricted cash or restricted cash equivalents. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. We are currently evaluating the impact of the adoption of ASU No. 2016-18 on our consolidated financial statements.

In August 2016 the FASB issued Accounting Standards Update, or ASU, No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which addresses the following cash flow issues: (a) debt prepayment or debt extinguishment costs; (b) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; (c) contingent consideration payments made after a business combination; (d) proceeds from the settlement of insurance claims; (e) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (f) distributions received from equity method investees; (g) beneficial interests in securitization transactions; and (h) separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and are effective for all other entities for fiscal years beginning after December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. We are currently evaluating the impact of the adoption of ASU No. 2016-15 on our consolidated financial statements.

In April 2016 the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which simplifies several aspects of the accounting for employee stock-based payment transactions. The areas for simplification in ASU No. 2016-09 include the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in this ASU will be effective for annual periods beginning after December 15, 2016 and interim periods within those annual periods. The adoption of ASU No. 2016-09 did not have a material impact on our consolidated financial statements.

In February 2016 the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The amendments in this update create Topic 842, *Leases*, and supersede the leases requirements in Topic 840, *Leases*. Topic 842 specifies the accounting for leases. The objective of Topic 842 is to establish the principles that lessees and lessors shall apply to report useful information to users of financial statements about the amount, timing and uncertainty of cash flows arising from a lease. The main difference between Topic 842 and Topic 840 is the recognition of lease assets and lease liabilities for those leases classified as operating leases under Topic 840. Topic 842 retains a distinction between finance leases and operating leases. The classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital leases and operating leases in the previous leases guidance. The result of retaining a distinction between finance leases and operating leases is that under the lessee accounting model in Topic 842, the effect of leases in the statement of comprehensive income and the statement of cash flows is largely unchanged from previous GAAP. The amendments in ASU No. 2016-02 are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years for public business entities. Early application of the amendments in ASU No. 2016-02 is permitted. We are currently evaluating the impact of the adoption of ASU No. 2016-02 on our consolidated financial statements.

In November 2015 the FASB issued ASU No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*. Topic 740, *Income Taxes*, requires an entity to separate deferred income tax liabilities and assets into current and noncurrent amounts in a classified statement of financial position. Deferred tax liabilities and assets are classified as current or noncurrent based on the classification of the related asset or liability for financial reporting. Deferred tax liabilities and assets that are not related to an asset or liability for financial reporting are classified according to the expected reversal date of the temporary difference. To simplify the presentation of deferred income taxes, the amendments in ASU No. 2015-17 require that deferred income tax

liabilities and assets be classified as noncurrent in a classified statement of financial position. For public business entities, the amendments in this update are effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods. The adoption of ASU No. 2015-17 did not have a material impact on our consolidated financial statements.

In July 2015 the FASB issued ASU No. 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory*. The amendments in this update require an entity to measure inventory within the scope of ASU No. 2015-11 (the amendments in ASU No. 2015-11 do not apply to inventory that is measured using last-in, first-out or the retail inventory method. The amendments apply to all other inventory, which includes inventory that is measured using first-in, first-out or average cost) at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. Subsequent measurement is uncharged for inventory measured using last-in, first-out or the retail inventory method. The amendments in ASU No. 2015-11 more closely align the measurement of inventory in GAAP with the measurement of inventory in International Financial Reporting Standards. ASU No. 2015-11 is effective for public business entities for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The amendments in ASU No. 2015-11 should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The adoption of ASU No. 2015-11 did not have a material impact on our consolidated financial statements. The relevant descriptions have been included in the inventory accounting policy.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements—Going Concern*. The amendments in this update require management to evaluate whether there are conditions and events that raise substantial doubt about an entity's ability to continue as a going concern for both annual and interim reporting. The guidance is effective for us for the annual period ended after December 15, 2016 and interim periods thereafter. Management performed an evaluation of the our ability to fund operations and to continue as a going concern according to ASC Topic 205-40, *Presentation of Financial Statements—Going Concern*. The adoption of ASU No. 2014-15 did not have a material impact on our consolidated financial statements.

In May 2014 the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which ASU No. 2014-09 supersedes the revenue recognition requirements in *Revenue Recognition (Topic 605)* and requires entities to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, in August 2015. The amendments in ASU No. 2015-14 defer the effective date of ASU No. 2014-09. Public business entities, certain not-for-profit entities and certain employee benefit plans should apply the guidance in ASU No. 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. Earlier adoption is permitted only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. Further to ASU No. 2014-09 and ASU No. 2015-14, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, in March 2016, ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing* in April 2016, ASU No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*, and ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, respectively. The amendments in ASU No. 2016-08 clarify the implementation guidance on principal versus agent considerations, including indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to the customers. ASU No. 2016-10 clarifies guideline related to identifying performance obligations and licensing implementation guidance contained in the new revenue recognition standard. The updates in ASU No. 2016-10 include targeted improvements based on input the FASB received from the Transition Resource Group for Revenue Recognition and other stakeholders. It seeks to proactively address areas in which diversity in practice potentially could arise, as well as to reduce the cost and complexity

of applying certain aspects of the guidance both at implementation and on an ongoing basis. ASU No. 2016-12 addresses narrow-scope improvements to the guidance on collectability, non-cash consideration and completed contracts at transition. Additionally, the amendments in this ASU provide a practical expedient for contract modifications at transition and an accounting policy election related to the presentation of sales taxes and other similar taxes collected from customers. The amendments in ASU No. 2016-20 represent changes to make minor corrections or minor improvements to the ASC that are not expected to have a significant effect on current accounting practice or create a significant administrative cost to most entities. The effective date and transition requirements for ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12 and ASU No. 2016-20 are the same as ASU No. 2014-09. We will adopt ASU No. 2014-09, ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12 and ASU No. 2016-20 at January 1, 2018 if this offering is completed by December 31, 2017. We are currently in the process of assessing the potential effects of these ASUs on our consolidated financial statements, business processes, systems and controls. While the assessment process is ongoing, we anticipate adopting ASC Topic 606, *Revenue from Contracts with Customers*, using the modified retrospective transition approach. Under this approach, ASC Topic 606 would apply to all new contracts initiated on or after January 1, 2018. For existing contracts that have remaining obligations as of January 1, 2018, any difference between the recognition criteria in these ASUs and our current revenue recognition practices would be recognized using a cumulative effect adjustment to the opening balance of accumulated deficit. We do not expect the adoption of these ASUs to have a material impact on our consolidated financial statements.

Results of Operations

The following table sets forth our results of operations for the periods presented, as percentages of revenue.

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(percentage of revenue)			
Revenue	100.0%	100.0%	100.0%	100.0%
Cost of revenue	59.4	65.2	51.3	54.7
Gross margin	40.6	34.8	48.7	45.3
Operating expenses:				
Sales and marketing	17.9	22.4	14.3	13.5
Research and development	13.0	18.3	11.9	9.4
General and administrative	21.9	13.4	9.7	6.8
Total operating expenses, net	52.8	54.1	35.9	29.7
Income (loss) from operations	(12.2)	(19.3)	12.8	15.6
Interest expense, net	(1.1)	(0.6)	(0.6)	(0.3)
Other income (expense), net	(2.0)	6.2	(1.3)	2.0
Income (loss) before income taxes	(15.3)	(13.7)	10.9	17.3
Income tax (expense) benefit	(5.2)	0.9	(2.2)	8.1
Net income (loss)	(20.5)	(12.8)	8.7	25.4
Less: Net income (loss) attributable to non-controlling interests	(1.4)	(5.9)	4.9	8.2
Net income (loss) attributable to ACM Research, Inc.	(19.1)%	(6.9)%	3.8%	17.2%

Comparison of Six Months Ended June 30, 2017 and 2016

Revenue

	Six Months Ended June 30,		% Change
	2017	2016	2016 v 2017
	(in thousands)		
Revenue	$14,423	$8,122	77.6%

The increase in revenue of $6.3 million in the six months ended June 30, 2017 reflected increases in revenue from single-wafer cleaning equipment of $5.0 million and from advanced packing equipment of $1.1 million. Our revenue in the six months ended June 30, 2017 compared to the corresponding period of 2016 reflected sales of $4.5 million to two new customers and an increase of $1.8 million in sales to existing customers.

Cost of Revenue and Gross Margin

	Six Months Ended June 30,		% Change
	2017	2016	2016 v 2017
	(in thousands)		
Cost of revenue	$8,570	$5,292	61.9%
Gross profit	$5,853	$2,830	106.8
Gross margin	40.6%	34.8%	16.5

Cost of revenue increased $3.3 million, and gross profit increased $3.0 million, from the six months ended June 30, 2016 to the comparable period in 2017, reflecting the growth in sales. Gross margin increased 5.8%, primarily due to sales of relatively lower-margin tools to new customers during the six months ended June 30, 2017.

Operating Expenses

	Six Months Ended June 30,		% Change
	2017	2016	2016 v 2017
	(in thousands)		
Sales and marketing expense	$2,583	$1,818	42.1%
Research and development expense	1,867	1,486	25.6
General and administrative expense	3,158	1,089	190.0
Total operating expenses, net	$7,608	$4,393	73.2%

Sales and marketing expense increased $765,000 in the six months ended June 30, 2017 as compared to the corresponding period in 2016, primarily due to an increase in employee salaries and sales services.

Research and development expense increased $381,000 in the six months ended June 30, 2017 as compared to the corresponding period in 2016, principally as a result of increases of in employee salaries and research and development parts. Research and development expense represented 12.9% and 18.3% of our revenue in the six months ended June 30, 2017 and 2016, respectively. Without reduction by grant amounts received from PRC governmental authorities (see "—Key Components of Results of Operations—PRC Government Research and Development Funding"), gross research and development expense totaled $5.0 million, or 34.8% of revenue, in the six months ended June 30, 2017 and $3.5 million, or 42.6% of revenue, in the six months ended June 30, 2016.

General and administrative expense increased $2.1 million in the six months ended June 30, 2017 as compared to the corresponding period in 2016, principally resulting from preparations to become a public company. These costs reflected increases of $1.1 million in stock compensation expense, $511,000 in professional fees, $90,000 in consulting fees, $80,000 in personnel costs and $75,000 in tax expense.

Other Income and Expenses

	Six Months Ended June 30,		% Change
	2017	2016	2016 v 2017
	(in thousands)		
Interest expense, net	$(159)	$ (45)	253.3%
Other income (expense), net	(292)	506	(157.7)

Interest expense consists of interest incurred from outstanding short-term borrowings and notes payable. Interest expense increased to $164,000 in the six months ended June 30, 2017 from $51,000 in the six months ended June 30, 2016, principally as a result of increased borrowings under short-term bank loans. We earn interest income from depositary accounts. Interest income was nominal in the six months ended June 30, 2017 and 2016.

Other income, net primarily reflects (a) gains or losses recognized from the effect of exchange rates on our foreign currency-denominated asset and liability balances, (b) depreciation of assets acquired with government subsidies, as described under "—Key Components of Results of Operations—PRC Government Research and Development Funding" above, and (c) losses we recognized upon dispositions of fixed assets.

Income Tax (Expense) Benefit

The following presents components of income tax (expense) benefit for the indicated periods:

	Six Months Ended June 30,	
	2017	2016
	(in thousands)	
Current:		
U.S. federal	$ —	$ —
U.S. state	—	—
Foreign	—	—
Total current income tax (expense) benefit	—	—
Deferred:		
U.S. federal	—	—
U.S. state	—	—
Foreign	(749)	73
Total deferred income tax (expense) benefit	(749)	73
Total income tax (expense) benefit	$ (749)	$ 73

Our effective tax rate differs from statutory rates of 34% for U.S. federal income tax purposes and 15% to 25% for Chinese income tax purpose due to the effects of the valuation allowance and certain permanent differences as it pertains to book-tax differences in the value of client equity securities received for services. Our two PRC subsidiaries, ACM Shanghai and ACM Wuxi, are liable for PRC corporate income taxes at the rates of 15% and 25%, respectively. Pursuant to the Corporate Income Tax Law of the PRC, our PRC subsidiaries generally would be liable for PRC corporate income taxes as a rate of 25%. According to Guoshuihan 2009 No. 203, an entity certified as an "advanced and new technology enterprise" is entitled to a preferential income

tax rate of 15%. ACM Shanghai was certified as an “advanced and new technology enterprise” in 2012 and again in 2016, with an effective period of three years.

We file income tax returns in the United States and state and foreign jurisdictions. Those federal, state and foreign income tax returns are under the statute of limitations subject to tax examinations for 2009 through 2016. To the extent we have tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service or state or foreign tax authorities to the extent utilized in a future period.

We intend to reinvest indefinitely our PRC earnings as of June 30, 2017 outside of the United States, and we therefore have not provided for taxes with respect to the remissions of such earnings from the PRC to the United States.

Comparison of Years Ended 2016 and 2015

Revenue

	Year Ended December 31,		% Change
	2016	2015	2015 v 2016
	(in thousands)		
Revenue	$27,371	$31,206	(12.3)%

The decrease in revenue in 2016 from 2015 reflected a decline in revenue from single-wafer wet cleaning equipment of $5.4 million, offset in part by a $1.5 million increase in revenue from advanced packaging equipment. Our revenue in 2016 compared to 2015 reflected a $20.2 million reduction in sales, from $26.8 million in 2015 to $6.6 million in 2016, to our largest customer in 2015, offset in part by (a) a $1.3 million increase from 2015 to 2016 in purchases by our second largest customer in 2015 and (b) $16.1 million in revenue in 2016 from initial purchases of our single-wafer wet cleaning equipment by two PRC foundries. Chip fabricators typically purchase types of tools in phases based on multi-year capital plans, and their purchases of specific types of tools therefore vary from year to year. We believe the decline in sales to our largest customer from 2015 to 2016 reflected the customer’s multi-year capital plan.

Cost of Revenue and Gross Margin

	Year Ended December 31,		% of Change
	2016	2015	2015 v 2016
	(in thousands)		
Cost of revenue	$14,042	$17,085	(17.8)%
Gross profit	$13,329	$14,121	(5.6)
Gross margin	48.7%	45.3%	7.6%

Cost of revenue decreased $3.0 million in 2016 from 2015, primarily due to decreases in component costs related to lower volume Gross margin increased 3.4%, reflecting a relative increase in sales of higher-margin products.

Operating Expenses

	Year Ended December 31,		% Change
	2016	2015	2015 v 2016
	(in thousands)		
Sales and marketing expense	$3,907	$4,213	(7.3)%
Research and development expense	3,259	2,942	10.8
General and administrative expense	2,673	2,103	27.1
Total operating expenses, net	$9,839	$9,258	6.3

Sales and marketing expense decreased $306,000 in 2016 compared to 2015, primarily due to a decrease of $520,000 in sales commissions reflecting our lower level of sales in 2016, offset in part by a $385,000 increase in consulting fees.

Research and development expense increased $317,000 in 2016 from 2015, principally as a result of increases of $147,000 in personnel costs, $104,000 in material consumption expense and $57,000 in travel expense. Research and development expense represented 11.9% of revenue in 2016 and 9.4% of revenue in 2015. Without reduction by grant amounts received from PRC governmental authorities (see "—Key Components of Results of Operations—PRC Government Research and Development Funding"), gross research and development expense totaled $7.5 million, or 27.4% of revenue, in 2016 and $6.6 million, or 21.1% of revenue, in 2015.

General and administrative expense increased $571,000 in 2016 compared to 2015, principally resulting from preparations to become a public company. These costs reflected increases of $321,000 in professional fees, $84,000 in personnel costs and $77,000 in travel expense.

Other Income and Expenses

	Year Ended December 31,		% Change
	2016	2015	2015 v 2016
	(in thousands)		
Interest expense, net	$(165)	$(105)	57.1%
Other income, net	(343)	632	(154.3)

Interest expense consists of interest incurred from outstanding short-term borrowings and notes payable. Interest expense increased to $181,000 in 2016 from $122,000 in 2015, principally as a result of increased borrowings under short-term bank loans. We earn interest income from depositary accounts. Interest income totaled $16,000 in 2016 and $17,000 in 2015.

Income Tax Benefit (Expense)

The following presents components of income tax benefit (expense) for the indicated periods:

	Year Ended December 31,	
	2016	2015
	(in thousands)	
Current:		
U.S. federal	$ —	(40)
U.S. state	(1)	30
Foreign	—	—
Total current income tax benefit (expense)	(1)	(10)
Deferred:		
U.S. federal	—	—
U.S. state	—	—
Foreign	(594)	2,535
Total deferred income tax benefit	(594)	2,535
Total income tax benefit	$(595)	$2,525

Our effective tax rate differs from statutory rates of 34% for U.S. federal income tax purposes and 15% to 25% for PRC income tax purposes, due to the effects of the valuation allowance and permanent book-tax differences pertaining to the value of client equity securities received for services.

Liquidity and Capital Resources

Initially we funded our operations principally through issuances of four series of convertible preferred stock from our formation in 1998 through 2001 and issuances of convertible and term promissory notes in 2003 and 2004. We issued additional convertible and term promissory notes in 2005 and 2006 in anticipation of moving our operational center to Shanghai in 2006, and following that transition, our new subsidiary ACM Shanghai initially raised funds through sales of its non-controlling equity interests in 2007. Since 2008 we have funded our technology development and operations through:

- issuances of two additional series of convertible preferred stock in 2016 and the third quarter of 2017;
- an investment deposit in 2016 made in connection with issuance of a Class A common stock warrant in March 2017;
- additional issuances of ACM Shanghai equity interests in 2008 and 2009;
- subsidies received from PRC governmental authorities pursuant to grants made in 2008, 2009 and 2014;
- short-term borrowings by ACM Shanghai from local financial institutions in 2009 and each year since 2011;
- additional issuances of term promissory notes in 2013, 2014 and 2015; and
- operating cash flow in 2015 and the first half of 2017.

We believe our existing cash and cash equivalents, our cash flow from operating activities, short-term bank borrowings by ACM Shanghai and our net proceeds of this offering will be sufficient to meet our anticipated cash needs for at least the next twelve months. We do not expect that our anticipated cash needs for the next twelve months will require our receipt of any PRC government subsidies. Our future working capital needs will depend on many factors, including the rate of our business and revenue growth, the payment schedules of our

customers, and the timing of investment in our research and development as well as sales and marketing. To the extent our cash and cash equivalents, cash flow from operating activities, short-term bank borrowings and net proceeds of this offering are insufficient to fund our future activities, we may need to raise additional funds through bank credit arrangements or public or private debt or equity financings. We also may need to raise additional funds in the event we determine in the future to effect one or more acquisitions of businesses, technologies and products. If additional funding is required, we may not be able to obtain bank credit arrangements or to effect an equity or debt financing on terms acceptable to us or at all.

Sources of Funds

Equity and Equity-Related Securities

Since 1998 we have received gross proceeds of $41.9 million from sales of common stock, convertible preferred stock, convertible preferred notes and a warrant of ACM Research Inc. and sales of equity securities of ACM Shanghai, as described below.

Common Stock. From 1998 through September 11, 2017 we sold common stock to founders, investors and exercising option holders for gross proceeds of $2.7 million.

Convertible Preferred Stock. We have sold convertible preferred stock to investors for gross proceeds of $23.7 million, as follows:

Year Issued	Convertible Preferred Stock	Gross Proceeds (in thousands)
1998	Series A	$ 288
1998	Series B	1,572
1999	Series C	2,041
2001	Series D	4,975
2016	Series F	9,040
2017	Series E	5,800
		$ 23,716

Convertible Promissory Notes. In the years following our issuance of Series D convertible preferred stock in 2001, we borrowed an aggregate of $1.6 million pursuant to promissory “bridge” notes that bore interest at the rate of 6% per annum and subsequently converted into equity securities.

Year Issued	Gross Proceeds (in thousands)
2003	$ 444
2004	292
2005	200
2006	616
	$ 1,552

The convertible promissory notes were issued with common stock warrants, all of which expired unexercised. Upon the closing of our issuance of Series F convertible preferred stock in December 2016, the outstanding convertible promissory notes converted into 47,454 shares of Series F convertible preferred stock and 1,812,069 shares of Class A common stock.

ACM Shanghai Equity. Three investors have paid a total of $11.0 million to purchase from ACM Shanghai equity interests currently representing 37.1% of ACM Shanghai's outstanding equity.

Year Issued	Gross Proceeds (in thousands)
2007	$ 5,252
2008	2,358
2009	3,365
	$ 10,975

We have entered into agreements with the three minority investors pursuant to which ACM Research expects to acquire, before the closing of this offering, all of the minority equity interests in ACM Shanghai, as described under "—Recent Equity Transactions—Acquisitions of Outstanding Minority Interests in Our Operating Company."

Warrant. In December 2016 SMC delivered to ACM Shanghai 20,123,500 RMB (approximately $3.0 million as of the date of funding) in cash for potential investment pursuant to terms to be subsequently negotiated. In March 2017 we issued to SMC a warrant exercisable to purchase 397,502 shares of Class A common stock at a price of $7.50 per share, for a total exercise price of approximately $3.0 million. ACM Shanghai may become obligated to repay to SMC an amount equal to approximately $3.0 million in the circumstances described under "—Recent Equity Transactions—Issuance of Warrant."

Indebtedness

Promissory Notes. From 2003 through 2014 we borrowed an aggregate of $888,000 pursuant to non-convertible term notes as well as from convertible promissory notes that were repaid in cash. All of these notes bore interest at a rate of 6% per annum.

Date Issued	Gross Proceeds (in thousands)
2003	$ 98
2004	162
2006	468
2013	100
2014	60
	$ 888

ACM Shanghai Short-Term Loan Facilities. ACM Shanghai is a party to two lines of credit with Bank of Shanghai Pudong Branch for a total of up to RMB9,558,750 ($1,470,665 as of September 11, 2017), under which $1.4 million was outstanding as of September 11, 2017, with an annual interest rate of 5.66% and maturity dates in September and October 2017. All of the amounts owing under the lines of credit are guaranteed by David Wang, our Chief Executive Officer and President and one of our directors. We currently are negotiating with Bank of Shanghai Pudong Branch for a line of credit agreement for a total of up to RMB25,000,000 ($3,846,331 as of September 11, 2017) that would be entered into before, or contemporaneously with, the expiration of the existing line that matures in September 2017. The new line of credit agreement will replace both of the existing facilities.

Cash Flow from Operating Activities

As we initiated and grew our business from our inception in 1998 through 2014, in 2016 and in the first half of 2017, our operating activities used cash flow. Our operations provided cash flow of $2.7 million in 2015, and

used cash flow of $3.7 million in 2016 and provided cash flow of $3.0 million in the first half of 2017. Our cash flow from operating activities is influenced by (a) the amount of cash we invest in personnel and technology development to support anticipated future growth in our business, (b) increases in the number of customers using our products and services, and (c) the amount and timing of payments by customers.

Government Research and Development Grants

As described under "—Key Components of Results of Operations—PRC Government Research and Development Funding," ACM Shanghai has received research and development grants from local and central PRC governmental authorities.

Award Date	Grant Amount (in thousands)
2007-2010	$ 4,288
2011	6,334
2012	3,278
2013	2,442
2014	6,256
2015	6,579
2016	6,620
2017 (through August 15)	2,387
	$ 38,184

Not all grant amounts are received in the year in which a grant is awarded. As of August 15, 2017, ACM Shanghai expected to receive an additional $2.9 million in the future. We currently estimate ACM Shanghai will receive between $1.6 and $2.7 million in 2017, $2.4 million of which had been received as of August 15, 2017. Because of the nature and terms of the grants, the amounts and timing of payments under the grants are difficult to predict and vary from period to period. In addition, we expect to apply for additional grants when available in the future, but the grant application process can extend for a significant period of time and we cannot predict whether, or when, we will determine to apply for any such grants.

Working Capital

The following table sets forth selected working capital information:

	June 30, 2017 (in thousands)
Cash and cash equivalents	$ 13,206
Accounts receivable, less allowance for doubtful amounts	12,310
Inventory	14,106
Working capital	23,433

Our cash and cash equivalents at June 30, 2017 were unrestricted and held for working capital purposes. ACM Shanghai, our only direct PRC subsidiary, is, however, subject to PRC restrictions on distributions to equity holders. We currently intend for ACM Shanghai to retain all available funds any future earnings for use in the operation of its business and do not anticipate its paying any cash dividends. See "Dividend Policy."

We have not entered into, and do not expect to enter into, investments for trading or speculative purposes.

Our accounts receivable balance fluctuates from period to period, which affects our cash flow from operating activities. Fluctuations vary depending on cash collections, client mix, and the timing of shipment and acceptance of our tools.

Uses of Funds

Capital Expenditures

Our capital expenditures totaled $795,000 in 2016. Substantially all of the capital expenditures were made to purchase equipment or improve infrastructure for our research and development and manufacturing facilities.

During 2017 we are continuing to invest in equipment and infrastructure improvements for our manufacturing and research and development facilities and, to a lesser extent, leasehold improvements for our administrative facilities. The extent of these investments may be affected by the pace with which we add new customers and obtain additional purchase orders. Our capital expenditures totaled $26,000 in the six months ended June 30, 2017. We are not currently party to any purchase contracts related to future capital expenditures.

Contractual Obligations and Requirements

The following table sets forth sets forth our commitments to settle contractual obligations as of December 31, 2016:

	Less than 1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years	Total
			(in thousands)		
Operating leases:	$ 2,538	$ 8	$ —	$ —	$2,546

Operating lease obligations with respect to office space consisted of amounts arising under lease agreements for our headquarters in Fremont, California, our operation center in Shanghai, PRC, and other small regional office locations. For additional information about these lease agreements, see “Business—Facilities.” The commitment amounts in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, including fixed or minimum services to be used, fixed, minimum or variable price provisions, and the approximate timing of the actions under the contracts. The table does not include obligations under agreements that we can cancel without a significant penalty.

As of June 30, 2017, we did not have any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities, that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. We do not engage in trading activities involving non-exchange traded contracts. We therefore believe we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships.

Effects of Inflation

Inflation and changing prices have not had a material effect on our business, and we do not expect that they will materially affect our business in the foreseeable future. Any impact of inflation on cost of revenue and operating expenses, especially employee compensation costs, may not be readily recoverable in the price of our product offerings.

Off-Balance Sheet Arrangements

As of June 30, 2017, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K of the Securities and Exchange Commission.

Quantitative and Qualitative Disclosures about Market Risks

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in foreign exchange rates and interest rates. We do not hold or issue financial instruments for trading purposes.

Foreign Exchange Risk

Although our financial statements are denominated in U.S. dollars, a sizable portion of our revenues and costs are denominated in other currencies, primarily the Renminbi. The Renminbi is not freely convertible into foreign currencies for capital account transactions. The value of the Renminbi against the U.S. dollar and other currencies is affected by changes in the PRC's political and economic conditions and by the PRC's foreign exchange policies, among other things. In July 2005, the PRC government changed its decades-old policy of pegging the value of the Renminbi to the U.S. dollar, and the Renminbi appreciated more than 20% against the U.S. dollar over the following three years. Between July 2008 and June 2010, this appreciation subsided and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. Since June 2010, the Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future.

To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. To the extent that we need to convert U.S. dollars we received from this offering into Renminbi for our operations or capital expenditures, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we would receive from the conversion. Conversely, if we decide to convert our Renminbi into U.S. dollars for the purpose of making payments for dividends on our Class A common stock or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount available to us.

We estimate that we will receive net proceeds from this offering of $ million, if the underwriters do not exercise their over-allotment option, assuming an initial public offering price of $ per share, the midpoint of the initial public offering price range reflected on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and offering expenses. Assuming that we convert the full amount of the net proceeds from this offering into Renminbi, a 10% appreciation of the U.S. dollar against Renminbi, from a rate of RMB to $1.00 to a rate of RMB to $1.00, will result in an increase of RMB million in our net proceeds from this offering. Conversely, a 10% depreciation of the U.S. dollar against the Renminbi, from a rate of RMB to $1.00 to a rate of RMB to $1.00, will result in a decrease of RMB million in our net proceeds from this offering.

Interest Rate Risk

At June 30, 2017, we had unrestricted cash and cash equivalents totaling $13.2 million. These amounts were held for working capital purposes and were primarily in checking accounts of various banks. We believe we do not have any material exposure to changes in our cash balance as a result of changes in interest rates. Declines in interest rates, however, would reduce future interest income.

BUSINESS

Overview

We develop, manufacture and sell single-wafer wet cleaning equipment, which semiconductor manufacturers can use in numerous manufacturing steps to remove particles, contaminants and other random defects, and thereby improve product yield, in fabricating advanced integrated circuits, or chips. Our Ultra C equipment is designed to remove random defects from a wafer surface effectively, without damaging a wafer or its features, even at an increasingly advanced process node (the minimum line width on a chip) of 22 nanometers, or nm, or less. Our equipment is based on our innovative, proprietary Space Alternated Phase Shift, or SAPS, and Timely Energized Bubble Oscillation, or TEBO, technologies. We developed our proprietary technologies to enable manufacturers to produce chips that reach their ultimate physical limitations while maintaining product yield, which is the percentage of chips on a wafer that meet manufacturing specifications.

Since 2007 we have focused our development efforts on developing single-wafer wet cleaning equipment based on differentiated proprietary technology:

- Our SAPS technology, which we introduced in 2009, employs alternating phases of megasonic waves to deliver megasonic energy to flat and patterned wafer surfaces in a highly uniform manner on a microscopic level. We have shown SAPS technology to be more effective than conventional megasonic and jet spray technologies in removing random defects across an entire wafer as node sizes shrink from 300nm to 45nm, including node sizes, for which jet spray technology has proven to be ineffective.
- Our TEBO technology, which we introduced in March 2016, has been developed to provide effective, damage-free cleaning for both conventional two-dimensional, or 2D, and three-dimensional, or 3D, patterned wafers at advanced process nodes. We have demonstrated the damage-free cleaning capabilities of TEBO technology on 3D patterned wafers for feature nodes as small as 16nm.

As of September 11, 2017, we had been issued more than 140 patents in the United States, the People’s Republic of China or the PRC, Japan, Korea, Singapore and Taiwan.

We seek to market our single-wafer wet processing equipment by first establishing a referenceable base of leading logic and memory chip makers, whose use of our products can influence decisions by other manufacturers. Our SAPS technology employs alternating phases of megasonic waves to deliver megasonic energy to flat and patterned wafer surfaces in a highly uniform manner on a microscopic level. We believe this process is helping us penetrate the mature integrated circuit manufacturing markets and build credibility with industry leaders. Since beginning to place evaluation SAPS equipment with a small number of selected customers in 2009, we have worked on equipment improvements and qualification with those customers, who include a leading Korean memory chip company and four leading PRC memory and logic chip foundries. Using a similar “demo-to-sales” process, we have placed TEBO evaluation equipment with a leading PRC foundry and a leading Taiwanese foundry and we recognized revenue from our initial sale of TEBO equipment in 2016. Our revenue from the selected customers’ purchases of single-wafer wet cleaning equipment totaled $10.6 million, or 73.6% of our revenue, in the first half of 2017, $21.5 million, or 78.4% of our total revenue, in 2016 and $26.8 million, or 86.0% of our total revenue, in 2015.

In 2006 we established our operational center in Shanghai, and we currently conduct substantially all of our development and manufacturing activities in the PRC. Our Shanghai operations position us near potential customers in not only the PRC but also Taiwan, Korea and throughout Asia, giving us increased access to those customers and reducing shipping and manufacturing costs for equipment they purchase. We continue to perform strategic planning and marketing activities in our corporate headquarters in Fremont, California, and we intend to increase the personnel and functions at our Fremont headquarters as part of our plan to expand our market presence in North America and Europe.

Industry Background

Semiconductors are the foundation of the exponential growth of digital technologies and applications. For more than thirty years, strong demand for personal computers, tablet computers, mobile phones and other digital products has fueled the growth of the semiconductor industry. Today the migration of computing, networking and storage to the cloud and the proliferation of "smart" appliances, buildings, cars and devices—the "Internet of Things"—are driving semiconductor development and manufacturing. IC Insights, Inc. (March 2016) estimates that worldwide semiconductor shipments grew from 103.7 billion units in 1987 to 840.4 billion units in 2015 and will increase at a compound annual growth rate, or CAGR, of 6.7% to reach 1.0 trillion units in 2018.

Continuing Demand for Faster, Better, Cheaper Chips

New and enhanced digital applications and products have relied on the development and deployment of progressively faster and more powerful—but ever smaller and less costly—semiconductors known as integrated circuits, or chips. A chip is an array of transistors and other circuit elements built on a wafer of substrate material, typically silicon, with wiring and other interconnects that connect the circuit elements to each other and to outside devices. Chips store and manipulate data in binary form, with the two largest categories of integrated circuits being memory chips, for data storage and retrieval, and logic chips, for computer processing and control.

For a half century the number of transistors that can fit in a given area has roughly doubled every two years, a rate of improvement referred to as "Moore's Law." Chip feature sizes have been repeatedly scaled down to pack more transistors in smaller chips. The minimum line width on a chip, known as the node, shrank from 30,000nm in 1963 to 1,000nm in 1989, 90nm in 2003 and 14nm in 2014. A chip today may contain more than thirty billion transistors, with features finer than one ten-thousandth of the diameter of a human hair.

In recent years, however, the rate of chip improvement delivered solely by shrinking feature sizes has slowed. At the 22nm node, transistor and interconnect parameters for conventional chips, in which features are arrayed in 2D structures, begin to approach their critical performance limitations. For example, photolithography, a key chip manufacturing process that projects 193nm laser light through masks to print patterns on a wafer surface, may be unable to create patterning with sufficient resolution and selectivity. Moreover, the feature density and power levels of a 22nm chip may require additional circuit elements, such as special circuitry to correct errors or to track and adapt to performance variations, that occupy chip area and increase cost.

In order to extend Moore's Law, chip designers and manufacturers are developing and implementing technologies and architectures to transition to advanced chips with 3D structures. Logic chip makers are rapidly adopting use of 3D, fin-shaped Fin Field Effect Transistors, or *FinFET*, which provide faster switching while consuming less power. For memory chip manufacturers, *3D NAND* stacks memory cells to deliver greater capacity at lower cost and *3D cross point*, a transistor-less memory cell architecture, is being developed to accelerate processing of massive data sets. *EUV lithography* is a promising manufacturing technology that could improve patterning capability and increase feature density at nodes of 5nm and beyond by extending photolithography to the extreme ultraviolet wavelength of 13.5nm.

Escalating Need for Advanced Chip Manufacturing Equipment

Manufacturing steps differ for logic and memory chips, but all chips are manufactured in two general processes:

- In the front-end fabrication process, hundreds of copies of functional circuitry are created on a 100–to 300–millimeter, or mm, silicon wafer over a period of 6 to 8 weeks. A sequence of a few hundred complex, repetitive steps forms transistors, other circuit elements and interconnects on the wafer through the deposit and selective removal of successive material layers, using *photolithography* to create a design, *deposition* to add layers of materials, *etching* to remove unwanted exposed materials, and *chemical mechanical planarization* or *CMP* to smooth the surface for the next cycle of process steps.

- In the back-end assembly and testing process, a completed wafer from the front-end process is cut into individual “dies.” Each die is tested against specifications and, if compliant, encapsulated in a package that protects the die and supports critical power and electrical connections. The resulting chip is then subjected to final electrical and reliability tests.

Manufacturing advanced chips at smaller nodes requires a more complex process flow that incorporates enhanced, more expensive capital equipment, or tools, to perform increasingly complex process steps, as well as an increased number of tools to perform a greater number of process steps per wafer. A chip fabrication plant, or fab, may have more than 500 highly specialized tools representing more than 70 categories of equipment, all situated in an environmentally controlled “clean room.” As a result, construction of a new advanced fab can cost between $5 and $10 billion (Semiconductor Industry Association/Nathan Associates, May 2016). Semiconductor Equipment and Materials International or SEMI (August 2016) estimates that worldwide fab tool billings totaled $36.0 billion in 2015 and will reach $41.4 billion by 2017, a CAGR of 7.2%.

Because of the significant capital expenditures and manufacturing expenses, chip makers focus on improving their yield, which is the percentage of chips on a wafer that conform to specifications. Even with use of precision tools in a controlled manufacturing environment, a substantial number of chips may contain defects and be rejected, directly impacting cost-per-chip and profitability. We estimate that a 1% decrease in yield can reduce annual profits by $30 to $50 million for a fab producing dynamic random-access memory, or DRAM, chips on 100,000 wafers per month—and a 1% yield loss may decrease profits even more for a fab making logic chips, which typically have higher prices. Moreover, lower yield may necessitate greater fab capacity, increasing capital expenditures.

New technologies and architectures introduced in transitioning to more advanced nodes can lead to significant yield loss. We believe chip manufacturers with state-of-the-art, established fabs for process nodes of 22nm or more typically target a yield of 90% or more, but yield can drop to as low as 50% when, for example, a manufacturer migrates to chips incorporating FinFET. To reduce yield loss, a manufacturer transitioning to a more advanced node must implement additional fabrication steps and new process capabilities, which in turn require innovative, reliable front-end tool solutions.

Growing Influence of the PRC Across the Semiconductor Industry

The PRC is both the largest and the fastest-growing market for semiconductors. According to a study by PricewaterhouseCoopers (January 2017), during the ten-year period ending in 2015, the PRC’s semiconductor consumption grew at a CAGR of 14.3% while worldwide consumption increased by only 4.0%, and by 2015 the PRC consumed 58.5% of the world’s semiconductors. The PRC government is implementing focused policies, including state-led investment initiatives, that aim to create and support an independent domestic semiconductor supply chain spanning from design to final system production. The PRC has already made significant progress across the principal semiconductor industry sectors, as shown in the following market information compiled by PricewaterhouseCoopers:

- The chip design, or “fabless,” industry is the fastest growing segment of the PRC’s semiconductor industry, with revenue increasing from $1.5 billion in 2005 to $21.1 billion in 2015, a CAGR of 30.1%.
- China’s share of worldwide semiconductor manufacturing capacity expanded from 7.3% in 2006 to 12.7% in 2015, and its semiconductor manufacturing revenue increased at a CAGR of 17.6% over the ten-year period ending in 2015.
- China’s semiconductor packaging, assembly and test revenue also grew at a CAGR of 18% over the ten-year period ending in 2015.

The PRC’s semiconductor tools industry produced less than 0.5% of the world’s semiconductor manufacturing equipment in 2014 (International Trade Association of U.S. Department of Commerce, July 2016). The PRC’s governmental goals anticipate significant growth in all segments of the domestic semiconductor industry, however, and tool manufacturers with a Chinese presence should experience support from both upstream and downstream Chinese companies in the semiconductor supply chain.

Emerging Criticality of Wafer Cleaning

In the chip fabrication process, random defects such as particles, residual chemicals and other contaminants can lead directly to yield loss by distorting images for pattern formation in a lithographic step, obstructing deposition of a film, blocking an etch or otherwise impairing chip performance. Random defects can originate from substrate material, tools, fab personnel, clean room air and nearly every other aspect of the manufacturing process. Shapes and sizes of random defects vary widely, and with each decrease in process node, the dimension of the smallest random defect that can cause a chip to fail, known as the "killer defect" size, shrinks.

Chip fabrication includes steps designed to eliminate random defects without collapsing patterns, causing loss of materials or otherwise damaging features. The number of these steps has increased dramatically with chip complexity. Cleaning is now the most frequently repeated step in chip fabrication and may be performed in as many as 200 steps for each wafer. A sub-optimal cleaning process has repeated opportunities to reduce yield by being either insufficiently forceful, which leaves random defects behind, or overly aggressive, which damages the chip. Over the past decade, fabricators seeking to improve cleaning performance have switched from batch processes, in which several wafers are processed at the same time, to single-wafer cleaning tools.

There are two basic types of cleaning methods. *Wet cleaning* uses liquid chemistry by applying combinations of solvents, acids and water to spray, scrub, etch and dissolve random defects. *Dry cleaning* uses gas phase chemistry, relying on chemical reactions and techniques such as lasers, aerosols and ozonated chemistries. Wet cleaning typically outperforms dry cleaning in achieving wafer surface cleanliness and smoothness, and it is the standard method for single-wafer cleaning, constituting more than 90% of the cleaning steps in the fabrication process. RCA clean, a standardized process using hot alkaline and acidic hydrogen peroxide solutions, has been the industry standard for wet cleaning for a quarter century.

Wet cleaning's chemistry has not changed appreciably over the past 25 years, but its implementation has shifted from simple immersion to increasingly sophisticated techniques such as jet spraying and megasonic vibration. Jet spray cleaning shoots high-velocity, tens of micron-sized water droplets at a wafer surface to remove random defects. Megasonic cleaning transmits acoustic waves through a fluid bath to produce, in a process known as transient cavitation, bubble oscillation that dislodges random defects. The cavitation can dislodge defects unreachable by jet spray, but the bubbles collapse quickly and can generate energy that damages wafer features.

As jet spray and megasonic cleaning techniques have continued to develop, chip makers have regularly upgraded from simple tanks with on-off switches to complex, specialized, expensive single-wafer cleaning tools. According to Transparency Market Research Pvt. Ltd, the global market for cleaning equipment for single-wafer processing systems totaled $2.6 billion in 2015 and is expected to increase to $3.7 billion in 2020, a CAGR of 6.8%.

Inadequacy of Traditional Single-Wafer Cleaning Technologies

At process nodes of 100nm or more, chips consisted of 2D features and architectures, which made wafer cleaning relatively straightforward. Cleaning was most commonly performed in batch processes using an immersion tool with megasonic energy. Megasonic vibrations transmit at relatively high frequencies and therefore create smaller bubbles that remove more-diminutive defects and that generate lower levels of destructive transient energy when they collapse.

As process nodes shrank below 100nm, equipment manufacturers introduced single-wafer megasonic cleaning tools, which processed wafers one by one, rather than in batches. Because these tools did not deliver energy uniformly across the wafer surface, manufacturers found the tools did not clean wafers thoroughly and evenly and, increasingly as process nodes continued to shrink, led to damage to patterned wafer structures. Equipment makers also began to offer single-wafer cleaning tools that used jet spraying rather than acoustic

vibrations. The physical energy of jet spraying enabled these tools to be used with less assertive chemicals, which reduced wafer material loss. Once process nodes reach 45nm, however, the force of jet sprayed water droplets can damage finer chip features and jet spraying can fail to eliminate killer defect-sized contaminants due to its reduced lateral fluid speed as the fluid approaches the wafer surfaces.

As process nodes continue to shrink to 22nm and less, finer feature sizes and denser, more complex architectures make the cleaning process even more complicated and challenging:

- Random defects are harder to remove as the killer defect size decreases. Smaller random defects are denser and bind to a wafer more strongly than larger contaminants, and additional energy is required to deliver greater levels of necessary force to more minuscule sizes.
- New 3D architectures are often more delicate or fragile than 2D conventional structures. FinFET structures, for example, are relatively tall, thin and deep, which makes them more susceptible to damage or destruction by the physical force of jet sprays and megasonic transient cavitation used in the cleaning process.
- New chip technologies and architectures amplify cleaning challenges. It is, for example, progressively more difficult to remove random defects from the bottom of a chip structure, such as a via, as the “aspect ratio” of the structure’s depth to its width increases. While conventional 2D structures typically have aspect ratios of 3-to-1 or less, FinFET structures have aspect ratios of 10-to-1 currently and are expected to have aspect ratios in excess of 20-to-1 for future process nodes. Moreover, aspect ratios for 3D NAND, 3D cross point and other 3D structures may reach 60-to-1.

Effective, damage-free cleaning poses a significant challenge for manufacturers seeking to fabricate chips in the advanced process nodes available today or introduced in the future, including the 10nm node announced for 2017 and the 7nm node announced for 2018. In order to extend Moore’s law, chip manufacturers must be able to remove ever smaller random defects from not only flat wafer surfaces but also progressively more intricate, finer-featured 3D chip architectures, in each case without incurring damage or material loss that curtails yield and profits. Because fabrication of chips at 22nm or less requires an increasingly complex, specialized process flow, a next-generation single-wafer cleaning tool solution should be designed to be easily tailored to meet a manufacturer’s unique process requirements. The single-wafer cleaning tools should produce less environmentally harmful chemical waste and should be easily accessible to manufacturers in the burgeoning Chinese market.

Our Solutions

We have developed single-wafer wet cleaning equipment that chip manufacturers can use in numerous steps of the fabrication process in order to avoid yield loss at existing and future process nodes. Using our proprietary technologies, we have designed our wet cleaning equipment to remove random defects from chip wafers with fine feature sizes, complex patterning, dense circuit architectures and high aspect ratios more effectively than traditional jet spray and transient megasonic technologies. Key elements of our solutions include:

Differentiated technologies for advanced chips. Our proprietary single-wafer wet cleaning technologies control the power intensity and distribution of megasonic cleaning in order to remove random defects from a wafer surface effectively, without damaging the wafer or its features, even at process nodes of 22nm or less. We developed these technologies to help semiconductor manufacturers produce chips that reach their ultimate physical limitations.

- *Flat and patterned wafer surfaces.* Our Space Alternated Phase Shift, or SAPS, technology, which we introduced in 2009, employs alternating phases of megasonic waves to deliver megasonic energy to flat and patterned wafer surfaces in a highly uniform manner on a microscopic level. We have shown SAPS technology to be more effective than conventional megasonic and jet spray technologies in removing random defects across an entire wafer as node sizes shrink from 300nm to 45nm, including node sizes

less than 50nm in size, for which jet spray technology has proven to be ineffective. Based on their initial mass production experience with SAPS equipment, customers have increased their use of SAPS equipment by adding cleaning steps to the manufacturing processes for advanced chips in order to achieve higher yields and reduce chemical usage.

- *High-aspect ratio conventional 2D and advanced 3D patterned wafer surfaces.* Our Timely Energized Bubble Oscillation, or TEBO, technology, which we introduced in March 2016, has been developed to provide effective, damage-free cleaning for both conventional 2D and 3D patterned wafers at advanced process nodes. TEBO technology provides multi-parameter control of bubble cavitation during megasonic cleaning by using a sequence of rapid pressure changes to force bubbles to oscillate at controlled sizes, shapes and temperatures. Because the bubbles oscillate instead of imploding or collapsing, TEBO technology avoids the pattern damage caused by transient cavitation in traditional megasonic cleaning processes. We have demonstrated the damage-free cleaning capabilities of TEBO technology on patterned wafers for feature nodes as small as 1xnm (16nm to 19nm), and we have shown that TEBO technology can be applied in manufacturing processes for patterned chips with 3D architectures such as FinFET, DRAM, 3D NAND and 3D cross point memory having aspect ratios as high as 60-to-1. We believe TEBO technology can be applied for even smaller process nodes. TEBO tools are currently being evaluated by a selected group of leading memory and logic chip manufacturers.

China-based operations. In 2006 we established our operational center in Shanghai, and currently we conduct substantially all of our development and manufacturing activities in the PRC. This strategy positions us near potential customers throughout Asia, giving us increased access to those customers and reducing shipping and manufacturing costs for equipment they purchase. An estimated 78% of new front-end facilities and production lines starting operation from 2017 through 2020 are projected to be constructed in Asia, with 42% expected to be built in the PRC. Our Shanghai location also gives us access to a large pool of highly qualified potential employees.

Extensive intellectual property protection. Since our formation in 1998, we have focused on building a strategic portfolio of intellectual property to support and protect our key innovations, including most recently our SAPS and TEBO technologies. As of September 11, 2017, we had been issued more than 140 patents in the United States, the PRC, Japan, Korea, Singapore and Taiwan.

Custom-made wafer assembly packaging solutions. In addition to our product offerings for single-wafer cleaning in the front-end wafer fabrication process, we leverage our technology and expertise to provide a wide range of advanced packaging equipment, such as coaters, developers, photoresist strippers, scrubbers, wet etchers and copper-plating tools, to back-end wafer assembly and packaging factories, particularly in the PRC. For these offerings, we focus on providing customized equipment with competitive performance, service and pricing.

Our Strategy

Our objective is to be the leading global provider of a full range of wet cleaning equipment for the manufacture of advanced integrated circuits. To achieve this goal, we are pursuing the following strategies:

Extend technology leadership. We intend to build upon our technology leadership in wet processing by continuing to develop and refine our differentiated SAPS and TEBO technologies and equipment designed to address cleaning challenges presented by the manufacture of increasingly advanced chip nodes. To continue to build our strategic intellectual property portfolio, which included more than 140 patents as of September 11, 2017. Our investment in research and development totaled $1.9 million, or 12.9% of our revenue, in the first half of 2017 and $3.3 million, or 11.9% of our revenue, in 2016. We will continue to invest in product development and to strengthen our global patent portfolio in strategic jurisdictions.

Establish referenceable customer base. Semiconductors fall into two principal product categories, memory and logic, and the processes associated with manufacturing products in those two categories differ. In

commercializing our SAPS equipment, we placed evaluation equipment with selected customers, who subsequently purchased additional SAPS equipment to enable them to add more cleaning steps during their manufacturing processes. We have initiated a similar process for TEBO equipment, and have placed TEBO evaluation equipment with two leading memory and logic chip customers, whose use of our products can influence decisions by other manufacturers.

Leverage local presence to address growing PRC market. The market for semiconductor manufacturing equipment in the PRC is expected to grow markedly in the upcoming years. Our experience has shown that chip manufacturers in the PRC demand equipment meeting their specific technical requirements and prefer building relationships with local suppliers. Since establishing our operations in Shanghai a decade ago, we have leveraged our local presence to begin displacing some incumbent providers of wet cleaning equipment. We will continue to work closely with PRC-based chip manufacturers to understand their specific requirements, encourage them to adopt our SAPS and TEBO technologies, and enable us to design innovative products and solutions to address their needs.

Continue to improve performance through operational excellence. As we increase the breadth of our product offerings and the size of our operations and customer base, we must continually improve the efficiency and quality of our operations in order to satisfy our customers' needs and meet our financial goals. We actively manage our business through principles of operational excellence designed to ensure continuous improvement of our key operational and financial metrics. We will continue to develop and implement these principles to, for example, identify key quantifiable annual goals for all aspects of our business, implement factory constraint management, change control and inventory management systems, and enhance our risk management system.

Pursue strategic acquisitions and relationships. To complement and accelerate our internal growth, we may pursue acquisitions of businesses, technologies and products that will expand the functionality of our products, provide access to new markets or customers, or otherwise complement our existing operations. We also may seek to expand our product and service offerings by entering into business relationships involving additional distribution channels, investments in other enterprises and joint ventures, or similar arrangements. On September 11, 2017, we acquired 20% of the outstanding equity of Ninebell, one of our key subassembly providers, as described under "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Strategic Investment in Key Supplier."

Our Products and Technologies

We develop, manufacture and sell single-wafer wet cleaning equipment usable at numerous steps of the chip manufacturing process flow to improve product yield for conventional 2D and advanced 3D patterned chips at small process nodes. Our equipment, which we market and sell under the brand name "Ultra C," is designed to remove random defects from a wafer surface effectively, without damaging the wafer or its features, even at increasingly advanced process nodes.

After incorporating in 1998, we initially focused on developing tools for manufacturing process steps involving the integration of ultra-low-K materials and copper. Ultra-low-K materials, which insulate better than silicon, presented opportunities for size scaling and performance improvement, and higher conductivity copper had begun to replace aluminum in forming interconnects. Our early efforts focused in particular on stress-free copper-polishing technology, and we sold tools based on that technology in the early 2000s.

In 2006 we established our operational center in Shanghai. This strategic decision was made to help us establish and build relationships with chip manufacturers in China and throughout Asia, which helps us to understand their requirements and to develop innovative technologies and tools addressing their needs.

In 2007 we began to focus our development efforts on single-wafer wet-cleaning solutions for the front-end fabrication process. We have developed innovative, proprietary technologies that reintroduce megasonic

technology to the wafer cleaning process. Our approach is based on our understanding of the shortfalls and limitations of previously existing megasonic cleaning technologies that led to ineffective cleaning and damaged chip features. In 2009 we introduced our proprietary Space Alternated Phase Shift, or SAPS, megasonic technology, which can be applied in flat patterned wafer cleaning at numerous steps during the chip fabrication process. By delivering megasonic energy uniformly across a wafer, SAPS technology eliminates the particle removal inefficiencies that characterized traditional megasonic cleaning technologies. In March 2016 we introduced our proprietary Timely Energized Bubble Oscillation, or TEBO, technology, which can be applied at numerous steps during the fabrication of small node conventional 2D and 3D patterned wafers. By providing multi-parameter control of bubble cavitation during megasonic cleaning, TEBO technology avoids the fine-pattern damage caused by previously existing megasonic cleaning processes.

We have designed our equipment models for SAPS and TEBO solutions using a modular configuration that enables us to create a wet-cleaning tool meeting the specific requirements of a customer, while using pre-existing designs for chamber, electrical, chemical delivery and other modules. Our modular approach supports a wide range of customer needs and facilitates the adaptation of our model tools for use with the optimal chemicals selected to meet a customer's requirements. Our tools are offered principally for use in manufacturing chips from 300mm silicon wafers, but we also offer solutions for 150mm and 200mm wafers and for nonstandard substrates, including quartz, sapphire and glass.

In addition to our SAPS and TEBO tool offerings, we offer a range of custom-made equipment, such as cleaners, coaters, developers, photoresist strippers, wet etchers and copper-plating tools, to back-end wafer assembly and packaging factories, principally in the PRC.

Space Alternated Phase Shift Cleaning

SAPS Technology

SAPS technology delivers megasonic energy uniformly to every point on an entire wafer by alternating phases of megasonic waves in the gap between a megasonic transducer and the wafer. Radicals for removing random defects are generated in dilute solution, and the radical generation is promoted by megasonic energy. Unlike "stationary" megasonic transducers used by conventional megasonic cleaning methods, SAPS technology moves or tilts a transducer while a wafer rotates, enabling megasonic energy to be delivered uniformly across all points on the wafer, even if the wafer is warped. The mechanical force of cavitations generated by megasonic energy enhances the mass transfer rate of dislodged random defects and improves particle removal efficiency.

By delivering megasonic energy in a highly uniform manner on a microscopic level, SAPS technology can precisely control the intensity of megasonic energy and can effectively remove random defects of all sizes across the entire wafer in less total cleaning time than conventional megasonic cleaning products, without loss of material or roughing of wafer surfaces. We have conducted trials demonstrating SAPS technology to be more effective than conventional megasonic and jet spray cleaning technologies as defect sizes shrink from 300nm to 45nm. These trials show that SAPs technology has an even greater relative advantage over conventional jet spray technology when cleaning defects between 50 and 65nm in size and that SAPs technology continues to be effective for defects of sizes between 45 nm and 50nm, for which jet spray technology has proven to be ineffective.

SAPS Applications

SAPS megasonic cleaning technology can be applied during the chip fabrication process to clean wafer surfaces and interconnects. It also can be used to clean, and lengthen the lifetime of, recycled test wafers.

Wafer Surfaces. SAPS technology can enhance removal of random defects following planarization and deposition, which are among the most important, and most repeated, steps in the fabrication process:

- *Post CMP*: Chemical mechanical planarization, or CMP, uses an abrasive chemical slurry following other fabrication processes, such as deposition and etching, in order to achieve a smooth wafer surface in preparation for subsequent processing steps. SAPS technology can be applied following each CMP process to remove residual random defects deposited or formed during CMP.
- *Post Hard Mask Deposition:* As part of the photolithographical patterning process, a mask is applied with each deposition of a material layer to prevent etching of material intended to be retained. Hard masks have been developed to etch high aspect-ratio features of advanced chips that traditional masks cannot tolerate. SAPS technology can be applied following each deposition step involving hard masks that use nitride, oxide or carbon based materials to achieve higher etch selectivity and resolution.

For these purposes, SAPS technology uses environmentally friendly dilute chemicals, reducing chemical consumption. Chemical types include dilute solutions of chemicals used in RCA cleaning, such as dilute hydrofluoric acid and RCA SC-1 solutions, and, for higher quality wafer cleaning, functional de-ionized water produced by dissolving hydrogen, nitrogen or carbon dioxide in water containing a small amount of chemicals, such as ammonia. Functional water removes random defects by generating radicals, and megasonic excitation can be used in conjunction with functional water to further increase the generation of radicals. Functional water has a lower cost and environmental impact than RCA solutions, and using functional water is more efficient in eliminating random defects than using dilute chemicals or de-ionized water alone. We have shown that SAPS megasonic technology using functional water exhibits high efficiency in removing random defects, especially particles smaller than 65nm, with minimal damage to structures.

Interconnects and Barrier Metals. Each successive advanced process node has led to finer feature sizes of interconnects such as contacts, which form electrical pathways between a transistor and the first metal layer, and vias, which form electrical pathways between two metal layers. Advanced nodes have also resulted in higher aspect ratios for interconnect structures, with thinner, redesigned metal barriers being used to prevent diffusion. SAPS technology can improve the removal of residues and other random defects from interconnects during the chip fabrication process:

- *Post Contact/Via Etch:* Wet etching processes are commonly used to create patterns of high-density contacts and vias. SAPS technology can be applied after each such etching process to remove random defects that could otherwise lead to electrical shorts.
- *Pre Barrier Metal Deposition*: Copper wiring requires metal diffusion barriers at the top of via holes to prevent electrical leakage. SAPS technology can be applied prior to deposition of barrier metal to remove residual oxidized copper, which otherwise would adhere poorly to the barrier and impair performance.

For these applications, SAPS technology uses environmentally friendly dilute chemicals such as dilute hydrofluoric acid, RCA SC-1 solution, ozonated de-ionized water and functional de-ionized water with dissolved hydrogen. These chemical solutions take the place of piranha solution, a high-temperature mixture of sulfuric acid and hydrogen peroxide used by conventional wet wafer cleaning processes. We have shown that SAPS technology exhibits greater efficiency in removing random defects, and lower levels of material loss, than conventional processes, and our chemical solutions are less expensive and more environmentally conscious than piranha solution.

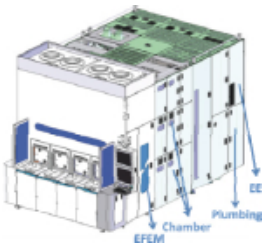
Recycled Test Wafers. In addition to using silicon wafers for chip production, chip manufacturers routinely process wafers through a limited portion of the front-end fabrication steps in order to evaluate the health,

performance and reliability of those steps. Manufacturers also use wafers for non-product purposes such as inline monitoring. Wafers used for purposes other than manufacturing revenue products are known as test wafers, and it is typical for twenty to thirty percent of the wafers circulating in a fab to be test wafers. In light of the significant cost of wafers, manufacturers seek to re-use a test wafer for more than one test. As test wafers are recycled, surface roughness and other defects progressively impair the ability of a wafer to complete tests accurately. SAPS technology can be applied to reduce random defect levels of a recycled wafer, enabling the test wafer to be reclaimed for use in additional testing processes. For these purposes, SAPS technology includes improved fan filter units that balances intake and exhaust flows, precise temperature and concentration controls that ensure better handling of concentrated acid processes, and two-chemical recycle capability that reduces chemical consumption.

SAPS Equipment

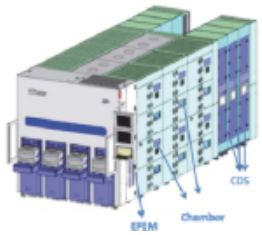
We currently offer two models of wet wafer cleaning equipment based on our SAPS technology, Ultra C SAPS II and Ultra C SAPS V. Each of these models is a single-wafer, serial-processing tool that can be configured to customer specifications and, in conjunction with appropriate dilute chemicals, used to remove random defects from wafer surfaces or interconnects and barrier metals as part of the chip front-end fabrication process or for purposes of recycling test wafers. By combining our megasonic and chemical cleaning technologies, we have designed these tools to remove random defects with greater efficacy and efficiency than conventional wafer cleaning processes, with enhanced process flexibility and reduced quantities of chemicals. Each of our SAPS models was initially built to meet specific requirements of a key customer. We expect the sales prices of our SAPS tools generally to range between $2.5 million and $5.0 million, although the sales price of a particular tool will vary depending upon the required specifications.

SAPS II was released in 2011. Its key features include:



- compact design, with footprint of 2.65m x 4.10m x 2.85m (WxDxH), requiring limited clean room floor space;
- up to 8 chambers, providing throughput of up to 225 wafers per hour;
- double-sided cleaning capability, with up to 5 cleaning chemicals for process flexibility;
- 2-chemical recycling capability for reduced chemical consumption;
- image wafer detection method for lowering wafer breakage rates; and
- chemical delivery module for delivery of dilute hydrofluoric acid, RCA SC-1 solution, functional de-ionized water and carbon dioxide to each of the chambers.

SAPS V, which was released in 2014, offers increased productivity for chip manufacturers moving to advanced nodes. SAPS V provides all of the features and functionality of SAPS II, upgraded as follows:



- compact design, with footprint of 2.55m x 5.1m x 2.85m (WxDxH);
- up to 12 chambers, providing throughput of up to 375 wafers per hour;
- chemical supply system integrated into mainframe;
- inline mixing method replaces tank auto-changing, reducing process time; and
- improved drying technology using hot isopropyl alcohol and de-ionized water.

Timely Energized Bubble Oscillation Cleaning

TEBO Technology

We developed TEBO technology for application in wet wafer cleaning during the fabrication of both conventional 2D and 3D patterned wafers with fine feature sizes. TEBO technology facilitates effective cleaning even with patterned features too small or fragile to be addressed by conventional jet spray and megasonic cleaning technologies.

TEBO technology solves the problems created by transient cavitation in conventional megasonic cleaning processes. Cavitation is the formation of bubbles in a liquid, and transient cavitation is a process in which a bubble in fluid implodes or collapses. In conventional megasonic cleaning processes, megasonic energy forms bubbles and then causes those bubbles to implode or collapse, blasting destructive high-pressure, high-temperature micro jets toward the wafer surface. Our internal testing has confirmed that at any level of megasonic energy capable of removing random defects, the sonic energy and mechanical force generated by transient cavitation are sufficiently strong to damage fragile patterned structures with features less than 70nm.

TEBO technology provides multi-parameter control of cavitation by using a sequence of rapid changes in pressure to force a bubble in liquid to oscillate at controlled sizes, shapes and temperatures, rather than implode or collapse. As a result, cavitation remains stable during TEBO megasonic cleaning processes, and a chip fabricator can, using TEBO technology, apply the level of megasonic energy needed to remove random defects without incurring the pattern damage created by transient cavitation in conventional megasonic cleaning.

We have demonstrated the damage-free cleaning capabilities of TEBO technology on customers' patterned wafers as small as 1xnm (16nm to 19nm), and we believe TEBO technology will be applicable in even smaller fabrication process nodes. TEBO technology can be applied in manufacturing processes for conventional 2D chips with fine features and advanced chips with 3D structures, including FinFET, DRAM, 3D NAND and 3D cross point memory as well as other 3D architectures that may be developed in the future, such as carbon nanotubes and quantum devices. As a result of the thorough, controlled nature of TEBO processes, cleaning time for TEBO-based solutions may take longer than conventional megasonic cleaning processes. Conventional processes have proven ineffective, however, for process nodes of 20nm or less, and we believe the increased yield that can be achieved by using TEBO technology for nodes up to 70nm can more than offset the cost of the additional time in utilizing TEBO technology.

TEBO Applications

At process nodes of 28nm and less, chip makers face escalating challenges in eliminating nanometric particles and maintaining the condition of inside pattern surfaces. In order to maintain chip quality and avoid yield loss, cleaning technologies must control random defects of diminishing killer defect sizes, without roughing or otherwise damaging surfaces of transistors, interconnects or other wafer features. TEBO technology can be applied in numerous steps throughout the manufacturing process flow for effective, damage-free cleaning:

- *Memory Chips:* TEBO technology can be applied in up to a total of 47 steps in the fabrication of a dynamic random-access memory, or DRAM, chip, consisting of 8 steps in cleaning ISO structures, 19 steps in cleaning buried gates, and 20 steps in cleaning high aspect-ratio storage nodes and stacked films.
- *Logic Chips:* In the fabrication process for a logic chip with a FinFET structure, TEBO technology can be used in 15 or more cleaning steps.

For purposes of solving inside pattern surface conditions for memory or logic chips, TEBO technology uses environmentally friendly dilute chemicals such as RCA SC-1 and hydrogen gas doped functional water.

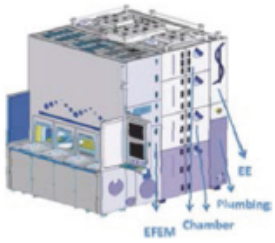
TEBO Equipment

We currently offer two models of wet wafer cleaning equipment based on our TEBO technology, Ultra C TEBO II and Ultra C TEBO V. Each of these models is a single-wafer, serial-processing tool that can be configured to customer specifications and, in conjunction with appropriate dilute chemicals, used at numerous manufacturing processing steps for effective, damage-free cleaning of chips at process nodes 28nm or less. TEBO equipment solves the problem of pattern damage caused by transient cavitation in conventional jet spray and megasonic cleaning processes, providing better particle removal efficiency with limited material loss or roughing. TEBO equipment currently is being evaluated by a select group of leading memory and logic chip customers, some of which recently have indicated an intent to move to production. We expect the sales prices of our TEBO tools generally to range between $3.5 million and $6.5 million, although the sales price of a particular tool will vary depending upon the required specifications.

Each model of TEBO equipment includes:

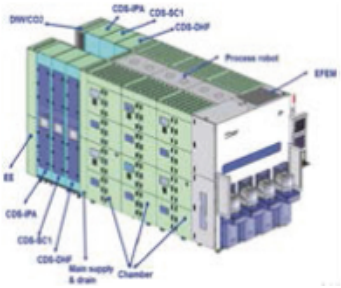
- an equipment front-end module, or EFEM, which moves wafers from chamber to chamber;
- one or more chamber modules, each equipped with a TEBO megasonic generator system;
- an electrical module to provide power for the tool; and
- a chemical delivery module.

Ultra C TEBO II was released in 2016. Its key features include:



- compact design, with footprint of 2.25m x 2.25m x 2.85m (WxDxH);
- up to 8 chambers with an upgraded transport system and optimized robotic scheduler, providing throughput of up to 300 wafers per hour;
- EFEM module consisting of 4 load ports, transfer robot and 1 process robot; and
- focus on dilute chemicals contributes to environmental sustainability and lower cost of ownership.

Ultra C TEBO V also was introduced in 2016, and its key features include:



- footprint of 2.45m x 5.30m x 2.85m (WxDxH);
- up to 12 chamber modules, providing throughput of up to 300 wafers per hour;
- EFEM module consisting of 4 load ports, 1 transfer robot and 1 process robot; and
- chemical delivery module for delivery of isopropyl alcohol, dilute hydrofluoric acid, RCA SC-1 solution, functional de-ionized water and carbon dioxide to each of the chambers.

Custom-Made Wafer Assembly and Packaging Equipment

We leverage our technology and expertise to provide a range of single-wafer tools for back-end wafer assembly and packaging factories, principally in the PRC. We focus on providing custom-made, differentiated

equipment that incorporates customer-requested features, at a competitive price. The sales prices for these tools generally range between $500,000 and $1.0 million, and these offerings generated $5.7 million, or 20.9%, of our revenue in 2016 and $4.2 million, or 13.5%, of our revenue in 2015.

For example, our Ultra C Coater is used in applying photoresist, a light-sensitive material used in photolithography to transfer a pattern from a mask onto a wafer. Coaters typically provide input and output elevators, shuttle systems and other devices to handle and transport wafers during the coating process. Unlike most coaters, the Ultra C Coater is fully automated. In addition, based on requests from customers, we developed and incorporated the special function of chamber auto-clean module into the Ultra C Coater, which further differentiates it from other products in the market. The Ultra C Coater is designed to deliver improved throughput and more efficient tool utilization while eliminating particle generation.

Our other advanced packaging tools include: Ultra C Developer, which applies liquid developer to selected parts of photoresist to resolve an image; Ultra C PR Megasonic-Assisted Stripper, which removes photoresist; Ultra C Scrubber, which scrubs and cleans wafers; and Ultra C Thin Wafer Scrubber, which addresses a sub-market of cleaning very thin wafers for certain Asian assembly factories; and Ultra C Wet Etcher, which etches silicon wafers and copper and titanium interconnects.

Our Customers

As of June 30, 2017, customers had purchased and deployed more than 30 Ultra C SAPS and TEBO cleaning tools. All of our sales in 2015, 2016 and the first half of 2017 were to customers located in Asia, and we anticipate that a substantial majority of our revenue will continue to come from customers located in this region for the near future. We have increased our efforts to penetrate the markets in North America and Western Europe, and we believe we are well positioned to begin generating sales in those regions.

We generate most of our revenue from a limited number of customers as the result of our strategy of initially placing SAPS- and TEBO-based equipment with a small number of leading chip manufacturers that are driving technology trends and key capability implementation. In the first half of 2017, 62.8% of our revenue was derived from three customers: SK Hynix Inc., a leading Korean memory chip company that accounted for 22.8% of our revenue; Shanghai Huali Microelectronics Corporation, a leading PRC foundry that accounted for 20.6% of our revenue; and Yangtze Memory Technologies Co., Ltd., a leading PRC memory chip company that, together with one of its subsidiaries, accounted 19.4% of our revenue. In 2016 99.3% of our revenue was derived from four customers: Shanghai Huali Microelectronics Corporation accounted for 33.7% of our revenue; Semiconductor Manufacturing International Corporation, a leading PRC foundry that accounted for 25.0% of our revenue; SK Hynix Inc. accounted for 24.0% of our revenue; and JiangYin ChangDian Advanced Packaging Co. Ltd., a leading PRC foundry that accounted for 16.6% of our revenue. In 2015 all of our revenue was derived from three customers, including SK Hynix Inc., which accounted for 86.0% of our revenue, and JiangYin ChangDian Advanced Packaging Co., Ltd., which accounted for 10.1% of our revenue.

Based on our market experience, we believe that implementation of our equipment by one of our selected leading companies will attract and encourage other manufacturers to evaluate our equipment, because the leading company’s implementation will serve as validation of our equipment and will enable the other manufacturers to shorten their evaluation processes. We placed our first SAPS-based tool in 2009 as a prototype. We worked closely with the customer for two years in debugging and modifying the tool, and the customer then spent two more years of qualification and running pilot production before beginning volume manufacturing. Our revenue in 2015 included sales of SAPS-based tools following the customer’s completion of its qualification process. We expect that the period from new product introduction to high volume manufacturing will be three years or less in the future. Please see “Risk Factors—Business—We depend on a small number of customers for a substantial portion of our revenue, and the loss of, or a significant reduction in orders from, one or more of our major customers could have a material adverse effect on our revenue and operating results. There are also a limited number of potential customers for our products.”

Customers continue to establish joint ventures, alliances and licensing arrangements that have the potential to positively or negatively impact our competitive position and market opportunities. A material reduction in orders from our large customers could adversely affect our results of operations and projected financial condition. Our business depends upon the expenditures of semiconductor manufacturers. Semiconductor manufacturers' businesses, in turn, depend on many factors, including their financial capability, the current and anticipated market demand for integrated circuits, the global economy and the availability of equipment capacity to support that demand.

Sales and Marketing

We market and sell our products worldwide using a combination of our direct sales force and third-party representatives. We employ direct sales teams in Asia, Europe and North America, and have located these teams near our customers, primarily in the PRC, Korea, Taiwan and the United States. Each sales person has specific local market expertise. We also employ field application engineers, who are typically co-located with our direct sales teams, to provide technical pre- and post-sale support tours and other assistance to existing and potential customers throughout the customers' fab planning and production line qualification and fab expansion phases. Our field application engineers are organized by end markets as well as core competencies in hardware, control system, software and process development to support our customers.

To supplement our direct sales teams, we have contacts with several independent sales representatives in the PRC, Taiwan and Korea. We select these independent representatives based on their ability to provide effective field sales, marketing forecast and technical support for our products. In the case of representatives, our customers place purchase orders with us directly rather than with the representatives.

Our sales have historically been made using purchase orders with agreed technical specifications. Our sales terms and conditions are generally consistent with industry practice, but may vary from customer to customer. We seek to obtain a purchase order three to four months ahead of the customer's desired delivery date. For some customers, we receive a letter of intent three weeks ahead, followed by the corresponding purchase order five weeks ahead, of the customer's desired delivery date. Consistent with industry practice, we allow customers to reschedule or cancel orders on relatively short notice. Because of our relatively short delivery period and our practice of permitting rescheduling or cancellation, we believe that backlog is not a reliable indicator of our future revenue.

Our marketing team focuses on our product strategy and technology road maps, product marketing, new product introduction processes, demand assessment and competitive analysis, customer requirement communication and public relations. Our marketing team also has the responsibility to conduct environmental scans, study industry trends and arrange our participation at major trade shows.

Manufacturing

All of our products are built to order at our facility in Shanghai. Our manufacturing facility has a total of 36,000 square feet, with 8,000 square feet of class 10,000 clean room space for product assembly and testing, plus 800 square feet of class 1 clean room space for product demonstration purposes. The rest of the area is used for product sub-assembly, component inventory and manufacturing related offices. A class designation for a clean room denotes the number of particles of size 0.5mm or larger permitted per cubic foot of air. Our manufacturing facility is ISO-9000 certified, and we have implemented certain manufacturing science-based factory practices such as constraint management, statistical process control and failure mode and effect analysis methodology.

In each of 2015, 2016 and the first half of 2017, we sourced approximately one-third of the parts and components (by value) for our products from Chinese suppliers and the remaining parts and components were sourced from suppliers in the United States and, to a lesser extent, Japan and Korea. We employ sub-contractors

to make certain sub-systems and software algorithms. Depending upon the nature of a customer's specifications, the lead time for production of a tool generally will extend from two to four months, but can be as long as six months. We plan our production capacity to be about twice the average orders to ensure we can respond to demand fluctuations. Currently we estimate that our production capacity is close to plan, namely sufficient to produce two tools for each tool shipped to a customer.

We purchase some of the components and assemblies that we include in our products from single source suppliers. We believe that we could obtain and qualify alternative sources to supply these components. Nevertheless, any prolonged inability to obtain these components could have an adverse effect on our operating results and could unfavorably impact our customer relationships. Please see "Risk Factors—Risks Related to Our Business and Our Industry—We depend on a limited number of suppliers, including single source suppliers, for critical components and assemblies, and our business could be disrupted if they are unable to meet our needs."

Research and Development

We believe that our success depends in part on our ability to develop and deliver breakthrough technologies and capabilities to meet our customers' ever-more challenging technical requirements. For this reason, we devote significant financial and personnel resources to research and development. Our research and development team is comprised of highly skilled engineers and technologists with extensive experience in megasonic technology, cleaning processes and chemistry, mechanical design, and control system design. As of September 11, 2017, approximately one half of our research and development personnel held advanced technical degrees. To supplement our internal expertise, we also collaborate with external research and development entities such as International SEMATECH, a global consortium of computer chip manufacturers, on specific areas of interests and retain, as technical advisors, several experts in semiconductor technology.

For the foreseeable future we are focusing on enhancing our existing Ultra C SAPS and TEBO tools and integrating additional capabilities to meet and anticipate requirements from our existing and potential customers. Our particular areas of focus include development of the following:

- new cleaning steps for Ultra C SAPS cleaners for application in logic chips and for DRAM, 3D NAND and 3D cross point memory technologies;
- new cleaning steps for Ultra C TEBO cleaners for FinFET in logic chips, gates in DRAM, and deep vias in both 3D NAND and 3D cross point memory technologies;
- new hardware, including new system platforms, new chamber structures and new chemical blending systems; and
- new software to integrate new functionalities to improve tool performance.

Longer term, we are working on new proprietary process capabilities based on our existing tool hardware platforms. We are also working to integrate our tools with third-party tools in adjacent process areas in the chip manufacturing flow.

Our research and development expense was $1.9 million, or 13.0% of revenue, in the first half of 2017, $3.3 million, or 11.9% of revenue, in 2016 and $2.9 million, or 9.0% of revenue, in 2015. Without reduction by grant amounts received from PRC governmental authorities (see "—Key Components of Results of Operations—PRC Government Research and Development Funding"), our gross research and development expense totaled $5.0 million, or 34.8% of revenue, in the first half of 2017, $7.5 million, or 27.4% of revenue, in 2016 and $6.6 million, or 21.0% of revenue, in 2015. We intend to continue to invest in research and development to support and enhance our existing cleaning products and to develop future product offerings to build and maintain our technology leadership position.

Intellectual Property

Our success and future revenue growth depend, in part, on our ability to protect our intellectual property. We control access to and use of our proprietary technologies, software and other confidential information through the use of internal and external controls, including contractual protections with employees, consultants, advisors, customers, partners and suppliers. We rely primarily on patent, copyright, trademark and trade secret laws, as well as confidentiality procedures, to protect our proprietary technologies and processes. All employees and consultants are required to execute confidentiality agreements in connection with their employment and consulting relationships with us. We also require them to agree to disclose and assign to us all inventions conceived or made in connection with the employment or consulting relationship.

We have aggressively pursued intellectual property since our founding in 1998. We focus our patent efforts in the United States, and, when justified by cost and strategic importance, we file corresponding foreign patent applications in strategic jurisdictions such as the European Union, the PRC, Japan, Korea, Singapore, and Taiwan. Our patent strategy is designed to provide a balance between the need for coverage in our strategic markets and the need to maintain costs at a reasonable level.

As of September 11, 2017, we had 20 issued patents and numerous pending applications in the United States. These patents carry expiration dates from 2018 through 2027. Many of the US patents and applications have also been filed internationally, in one or more of the European Union, PRC, Japan, Korea, Singapore and Taiwan.

Specifically, we own patents in wafer cleaning, electro-polishing and plating, wafer preparation, and other semiconductor processing technologies.

We currently manufacture advanced single-wafer cleaning systems equipped with our SAPS and TEBO technologies. Our wafer cleaning technologies are protected by US Patent Numbers 8580042, 8671961, 9070723 and 9281177, as well as their corresponding international patents. We have 22 patents granted internationally protecting our SAPS technologies. We also have filed four international patent applications for key TEBO technologies in accordance with the Patent Cooperation Treaty, in anticipation of filing in the U.S. national phase.

In addition to the above core technologies, we have patents reflecting innovations in other aspects of wafer cleaning systems, such as cleaning solution recycling and wafer holding and positioning. During a wafer cleaning cycle, multiple cleaning solutions may be sequentially used. Our cleaning solution recycling technology prevents cross-contamination and allows recycling of the cleaning solutions. These innovations are protected by US Patent Numbers 6248222, 6495007, 6749728, 6726823, 6447668 and 7136173, as well as their corresponding international patents.

We have technologies for stress-free polishing, or SFP, and electrochemical plating, or ECP, that are used in certain of our tools. SFP is an integral part of the CMP process. Our technology was a breakthrough in electro-chemical-copper-planarization technology when it was first introduced, because it can polish, stress-free, oxidizing tantalum barrier layers used in copper low-K interconnects. Our innovations in SFP and ECP are reflected in US Patent Numbers 6395152, 6837984, 6440295, 6638863, 6391166 and 8518224, and their corresponding international counterparts.

We also have technologies in other semiconductor processing areas, such as wafer preparation and some specific processing steps. The wafer preparation technology is covered by US Patent Numbers 8383429 and 9295167. The specific processing steps include US Patent Number 7119008 titled “Integrating metal layers with ultra-low-K dielectrics,” and US Patent Number 8598039 titled “Barrier layer removal method and apparatus.”

To date we have not granted licenses to third parties under the patents described above. Not all of these patents have been implemented in products. We may enter into licensing or cross-licensing arrangements with other companies in the future.

We cannot assure you that any patents will issue from any of our pending applications. Any rights granted under any of our existing or future patents may not provide meaningful protection or any commercial advantage to us. With respect to our other proprietary rights, it may be possible for third parties to copy or otherwise obtain and use our proprietary technology or marks without authorization or to develop similar technology independently.

The semiconductor equipment industry is characterized by vigorous protection and pursuit of intellectual property rights or positions, which have resulted in often protracted and expensive litigation. We may in the future initiate claims or litigation against third parties to determine the validity and scope of proprietary rights of others. In addition, we may in the future initiate litigation to enforce our intellectual property rights or the rights of our customers or to protect our trade secrets.

Our customers could become the target of litigation relating to the patent or other intellectual property rights of others. This could trigger technical support and indemnification obligations in some of our customer agreements. These obligations could result in substantial expenses, including the payment by us of costs and damages related to claims of patent infringement. In addition to the time and expense required for us to provide support or indemnification to our customers, any such litigation could disrupt the businesses of our customers, which in turn could hurt our relations with our customers and cause the sale of our products to decrease. We do not have any insurance coverage for intellectual property infringement claims for which we may be obligated to provide indemnification.

Additional information about the risks relating to our intellectual property is provided under “Risk Factors—Risks Relating to Our Intellectual Property.”

Competition

The chip equipment industry is characterized by rapid change and is highly competitive throughout the world. We compete with semiconductor equipment companies located around the world, and we may also face competition from new and emerging companies, including new competitors from the PRC. We consider our principal competitors to be those companies that provide single-wafer cleaning products to the market, including Lam Research Corp., DNS Electronics LLC, Tokyo Electron Ltd., SEMES Co. Ltd., Mujin Electronics Co., Ltd. and Beijing Sevenstar Science & Technology Co., Ltd.

Compared to our company, our current and potential competitors may have:

- better established credibility and market reputations, longer operating histories, and broader product offerings;
- significantly greater financial, technical, marketing and other resources, which may allow them to pursue design, development, manufacturing, sales, marketing, distribution and service support of their products;
- more extensive customer and partner relationships, which may position them to identify and respond more successfully to market developments and changes in customer demands; and
- multiple product offerings, which may enable them to offer bundled discounts for customers purchasing multiple products or other incentives that we cannot match or offer.

The principal competitive factors in our market include:

- performance of products, including particle removal efficiency, rate of damage to wafer structures, high temperature chemistry, throughput, tool uptime and reliability, safety, chemical waste treatment, and environmental impact;
- service support capability and spare parts delivery time;

- innovation and development of functionality and features that are must-haves for advanced fabrication nodes;
- ability to anticipate customer requirements, especially for advanced process nodes of less than 45nm;
- ability to identify new process applications;
- brand recognition and reputation; and
- skill and capability of personnel, including design engineers, manufacturing engineers and technicians, application engineers, and service engineers.

In addition, semiconductor manufacturers must make a substantial investment to qualify and integrate new equipment into semiconductor production lines. Some manufacturers have announced they will fabricate chips for the 10nm node beginning in 2017 and the 7nm node commencing in 2018, and we have one customer that currently is evaluating implementation of our equipment for both the 10nm and 7nm nodes. Once a semiconductor manufacturer has selected a particular supplier's equipment and qualified it for production, the manufacturer generally maintains that selection for that specific production application and technology node as long as the supplier's products demonstrate performance to specification in the installed base. Accordingly, we may experience difficulty in selling to a given manufacturer if that manufacturer has qualified a competitor's equipment. If, however, that cleaning equipment constrains chip yield, we expect, based on our experience to date, that the manufacturer will evaluate implementing new equipment that cleans more effectively.

We focus on the high-end fabrication market with advanced nodes, and we believe we compete favorably with respect to the factors described above. Most of our competitors offer single-wafer cleaning products using jet spray technology, which has relatively poor particle removal efficiency for random defects less than 30nm in size and presents increased risk of damage to the fragile patterned architectures of wafers at advanced process nodes. Certain of our competitors offer single-wafer cleaning products with megasonic cleaning capability, but we believe these products, which use conventional megasonic technology, are unable to maintain energy dose uniformity on the entire wafer and often lack the ability to repeat the requisite uniform energy dose wafer to wafer in production, resulting in poor efficiency in removing random defects, longer processing time and greater loss of material. In addition, these conventional megasonic products generate transient cavitation, which results in more incidents of damage to wafer structures with feature sizes of 70nm or less. We design our cleaning tools equipped with our proprietary SAPS and TEBO technologies, which we believe offer better performance, including at advanced process nodes of 22nm or less. Moreover, with our operations based in Shanghai, we are well positioned to take advantage of the Chinese government's policies to develop an independent domestic semiconductor supply chain.

Employees

As of September 11, 2017, we had 185 full-time employees, of whom 23 were in administration, 47 were in manufacturing, 79 were in research and development, and 36 were in sales and marketing and customer services. Of these employees, 177 were located in the PRC, 4 were located in Korea and 4 were based in the United States.

We have never had a work stoppage, and none of our employees are represented by a labor organization or subject to any collective bargaining arrangements. We consider our employee relations to be good.

Facilities

We have occupied our current corporate headquarters in Fremont, California, since February 2008, under a lease that, as amended in March 2017, extends through March 2018. We conduct our research and development and manufacturing and service support operations in a facility of approximately 60,000 square feet, of which 36,000 square feet is dedicated to manufacturing, located in the Zhangjiang Hi-Tech Park in Shanghai, PRC; we have leased this facility since 2007, and our lease, as amended in September 2016, expires in December 2017. In addition, we provide sales support and customer service operations from leased office space in Jiangying, PRC, Wuxi, PRC, and Icheon, Korea.

We believe we can extend or replace our existing lease agreements for our Fremont, California, and Shanghai, PRC, facilities, in each case on acceptable, commercially reasonable terms. We intend to expand our existing facilities as we grow our business and add resources, and we believe that we will be able to obtain, on acceptable, commercially reasonably terms, additional space to accommodate the foreseeable expansion of our operations.

Legal Proceedings

From time to time we may become involved in legal proceedings or may be subject to claims arising in the ordinary course of our business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business, operating results, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

MANAGEMENT

Executive Officers, Key Employees and Directors

Our executive officers, key employees and directors, and their ages and positions as of September 11, 2017, are set forth below:

Name	Age	Position
Executive officers:		
David H. Wang	55	Chief Executive Officer, President and Director
Min Xu	43	Chief Financial Officer and Treasurer
Fufa Chen	56	Vice President, Sales of ACM Shanghai
Jian Wang	52	Vice President, Research and Development of ACM Shanghai
Sotheara Cheav	65	Vice President, Manufacturing of ACM Shanghai
Non-employee directors:		
Haiping Dun(1)	67	Director
Chenming Hu	70	Director
Tracy Liu(1)	52	Director

(1) Member of Compensation Committee.

Each executive officer serves at the discretion of the board of directors and holds office until his successor is duly elected and qualified or until his earlier resignation or removal. Jian Wang, the Vice President, Research and Development of ACM Shanghai is the brother of David H. Wang, our Chief Executive Officer and President and one of our directors.

Executive Officers

David H. Wang is our founder and has served as Chief Executive Officer, President and one of our directors since 1998. Dr. Wang received a Ph.D. and a Master of Engineering from Osaka University in precision engineering and a Bachelor of Science in precision instruments from Tsinghua University. We believe Dr. Wang is qualified to serve as a director due to his extensive experience with semiconductor equipment and manufacturing processes, including as the result of his studies and work at Osaka University, Cincinnati University and CNS Technology, and his extensive knowledge of our company and markets based on his founding and leadership of our company since 1998.

Min Xu has served as our Chief Financial Officer and Treasurer since November 2016. From August 2014 to November 2016 Mr. Xu served as the Chief Financial Officer of UTStarcom Holding Corp., a global telecom infrastructure provider. From April 2014 to June 2014, Mr. Xu was a senior equity research analyst at Roth Capital Partners, LLC. Roth Capital Partners, LLC is the representative of the several underwriters of this offering. From February 2013 to April 2014, Mr. Xu was an equity research analyst with Wedbush Securities and from 2010 to 2012, Mr. Xu was an equity research analyst with Jeffries & Co. Mr. Xu received a Master of Business Administration from The Fuqua School of Business at Duke University, a Master of Science in electrical engineering from Purdue University, a Master of Science in physics from Colorado State University and a Bachelor of Science in physics from Peking University.

Fufa Chen has served as the Vice President, Sales of ACM Shanghai since 2007. Dr. Chen received a Ph.D. in electrical engineering from the State University of New York, Stony Brook.

Jian Wang has served as the Vice President, Research and Development of ACM Shanghai since January 2015. From January 2011 to January 2015, Mr. Wang was the Director of Research and Development of ACM

Shanghai, focusing on the research and development of SFP and ECP technologies. Mr. Wang received a Master of Science in computer science from Northwestern Polytechnic University, a Master of Science in marine engineering from Kobe University and a Bachelor of Science in mechanical engineering from Southeast University.

Sotheara Cheav has served as the Vice President, Manufacturing of ACM Shanghai since January 2015. From 2011 to December 2014, Mr. Cheav served as the Director of Manufacturing of ACM Shanghai. Mr. Cheav received a Bachelor of Science in science and technology from the University of Cambodia and an Associate of Science in electronics from Bay Valley Technical Institute.

Non-employee Directors

Haiping Dun has served as one of our directors since 2003. Dr. Dun retired as a Senior Director from Intel Corporation in 2004, where he had been employed since 1983. In April 2016, Dr. Dun was appointed as the President of Champion Microelectronic Corp, a public company in Taiwan. Dr. Dun has served as a member of the executive board of directors of Champion Microelectronic Corp. since 2004. Dr. Dun received his Ph.D. in material science and engineering from Stanford University, a Master of Science in physics from the University of Washington and a Bachelor of Science in physics from National Taiwan University. We believe Dr. Dun is qualified to serve as a director due to his extensive experience with technology companies, his deep knowledge of our company, and his academic background in physics and material science.

Chenming C. Hu has served as one of our directors since January 2017. Dr. Hu has also served as a member of the board of advisors since May 2016. Since 1976, Dr. Hu has been a professor in electrical engineering and computer sciences at the University of California, Berkeley, where he has been the Taiwan Semiconductor Manufacturing Company Distinguished Chair Professor Emeritus and Professor of the Graduate School since 2010. Dr. Hu also serves on the board of directors of Ambrella, Inc., developer of semiconductor processing solutions for video, and Inphi Corporation, a fabless semiconductor company. Dr. Hu is a member of the U.S. National Academy of Engineering and the Chinese Academy of Sciences, and Taiwan's Academia Sinica. Dr. Hu received his Master of Science degree and Ph.D. from the University of California, Berkeley and his Bachelor of Science degree from National Taiwan University, all in electrical engineering. We believe Dr. Hu is qualified to serve as a director due to his experience and expertise in semiconductors and related technologies (including FinFET, which he developed in 1999), his experience as the Chief Technology Officer of Taiwan Semiconductor Manufacturing Company Ltd. from 2001 to 2007, and his current and past directorships at other public companies.

Tracy Liu has served as one of our directors since September 2016. Ms. Liu has been the founder and owner of H&M Financial Consulting since 2006, where she provides international accounting and tax solutions to high-technology companies. Ms. Liu has a Bachelor of Science from Nankai University and a Master of Accounting and Tax from Golden Gate University. Ms. Liu is a Certified Public Accountant and is a member of the American Institute of Certified Public Accountants. We believe Ms. Liu is qualified to serve as a director of our company due to her accounting expertise and her extensive experience with our company, including our accounting and finance operations.

Advisory Board

Our Advisory Board provides management with advice on strategy, industrial trends, organization policies, fundraising, technologies and its related applications.

Stephen Chiao has served as a member of our Advisory Board since December 2016. Since 2009, Dr. Chiao has served as Managing Partner at Sycamore Ventures Inc. Dr. Chiao has a Bachelor of Science degree from the National Cheng Kung University, a Masters in Science from the University of Southern California and a Ph.D. in Materials Science and Engineering from Stanford University.

Chenming C. Hu has served as a member of our Advisory Board since May 2016. For biographical information regarding Dr. Hu, see "—Non-employee Directors" above.

Srini Raghavan has served as a member of our Advisory Board since May 2016. Since 1988 Dr. Raghavan has been a Professor of Materials Science and Engineering at the University of Arizona, Tucson. Also at the University of Arizona, Tucson, Dr. Raghavan has been a Professor of Chemical and Environmental Engineering since 2006 and a Professor of Pharmacy Practice and Science since August 2015. Dr. Raghavan was a member of the Visiting Faculty at the Research and Development Lab of Micron Technology in Boise, Idaho. Dr. Raghavan was a Visiting Professor in the International College of Semiconductor Technology at the National Chiao-Tung University in Hsinchu, Taiwan in August 2015. In July 2014 Dr. Raghavan was an Honorary Professor at the Hebei University of Technology in Tianjin, PRC. Since January 2013 Dr. Raghavan has been a member of the Technical Advisory Board at Product Systems, Inc., specializing in Megasonic Technology for Cleaning and Stripping. Dr. Raghavan received a Bachelor of Science degree in chemistry for the University of Madras, a Bachelor of Education degree in Metallurgy at the Indian Institute of Science in Bangalore, a Master of Science degree in Materials Science and Mineral Engineering from the University of California, Berkeley and a Ph.D. from the University of California, Berkeley.

Lip-Bu Tan has served as a member of our Advisory Board since January 2017. Since 1987 Mr. Tan has served as the founder and Chairman of Walden International, an international venture capital firm. He has also served as President and Chief Executive Officer of Cadence Design Systems, Inc., an electronic design automation software and engineering services company, since 2009. Mr. Tan currently serves on the boards of directors of Cadence Design Systems, Inc., Hewlett Packard Enterprise Company, an information technology enterprise company, Semiconductor Manufacturing International Corporation, a semiconductor manufacturer, and Quantenna Communications, Inc., a wireless communication designer, developer and manufacturer. Mr. Tan holds a B.S. in physics from Nanyang University in Singapore, an M.S. in nuclear engineering from the Massachusetts Institute of Technology, and an M.B.A. from the University of San Francisco.

Chiang Yang has served as a member of our Advisory Board since August 2017, after having served as Senior Strategic Adviser to the President since January 2015. Dr. Yang has worked in the semiconductor industry for 32 years and has significant experience in semiconductor equipment, process development, manufacturing, fab operation, technology transfer and general management. Dr. Yang retired as the General Manager of Intel Mask Operation and Vice President of Technology & Manufacturing Group of Intel Corporation in 2014, where he had been employed since 1984. Dr. Yang's prior experience included semiconductor equipment development at Applied Materials, Inc. and research on energy storage devices at Brookhaven National Laboratory. He received a Ph.D. in materials science from Massachusetts Institute of Technology, a Master of Science in physics from Northwestern University, and a Bachelor of Science in physics from the National Taiwan University.

Board of Directors

Our business and affairs are managed under the direction of the board of directors, which is currently composed of four members. Our current directors will continue to serve as directors until their resignations or until their successors are duly elected by the holders of common stock.

Director Nomination Rights

In connection with our sale and issuance of capital stock as described in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Acquisition of Outstanding Minority Interests in Our Operating Company," we expect to enter into a voting agreement with SSTVC and David H. Wang, our Chief Executive Officer, which voting agreement will remain in effect after the completion of this offering. Pursuant to the voting agreement, SSTVC will have the right to designate one individual for nomination and election to our board of directors. The rights and obligations of the parties under the voting agreement will be in effect as long as SSTVC continues to hold at least (a) 90% of the 1,666,170

shares of Class A common stock issued to SSTVC and (b) 5% of the voting power of our outstanding capital stock, voting collectively as a single class.

Independent Directors

We have applied to list Class A common stock on the NASDAQ Global Market. Under NASDAQ rules, independent directors must comprise a majority of a listed company's board of directors within twelve months from the date of listing. In addition, NASDAQ rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent within twelve months from the date of listing. Audit committee members must also satisfy additional independence criteria, including those set forth in Rule 10A-3 under the Securities Exchange Act, and compensation committee members must also satisfy additional independence criteria, including those set forth in Rule 10C-1 of the Securities Exchange Act. Under NASDAQ rules, a director will qualify as an "independent director" only if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 under the Securities Exchange Act, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors or any other board committee: (a) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries, other than compensation for board service; or (b) be an affiliated person of the listed company or any of its subsidiaries. In order to be considered independent for purposes of Rule 10C-1 under the Securities Exchange Act, each member of the compensation committee must be a member of the board of directors of the listed company, and must otherwise be independent. In determining independence requirements for members of compensation committees, the national securities exchanges and national securities associations shall consider relevant factors, including: (x) the source of compensation of a member of the board of a listed company, including any consulting, advisory or other compensatory fee paid by the listed company to such member of the board; and (y) whether a member of the board of a listed company is affiliated with the listed company, a subsidiary of the listed company or an affiliate of a subsidiary of the listed company.

In 2017 the board undertook a review of its composition and that of its committees, as well as the independence of each director that will serve following the consummation of this offering. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, the board has determined that each of Chenming Hu, Haiping Dun and Tracy Liu qualify as independent directors in accordance with the rules of NASDAQ and Rules 10C-1 and 10A-3 under the Securities Exchange Act. The independent members of the board will hold separate regularly scheduled executive session meetings at which only independent directors are present.

Board of Directors

So long as the outstanding shares of Class B common stock represent a majority of the combined voting power of common stock, we will not have a classified board of directors, and all directors will be elected for annual terms. If outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock at any time, we thereafter would have a classified board consisting of three classes of approximately equal size, each serving staggered three-year terms. Our directors would be assigned by the then-current board of directors to a class.

If and when the board is classified, upon expiration of the term of a class of directors, directors for that class would be elected for three-year terms at the annual meeting of stockholders in the year in which that term expires. As a result, only one class of directors would be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Each director's term would continue until the election and qualification of his or her successor or his or her earlier death, resignation, or removal. Our restated charter provides that our directors may be removed with or without cause only by the

affirmative vote of the holders of at least two-thirds of the votes that all of the stockholders would be entitled to cast in any annual election of directors.

So long as the board is classified, only the board could fill vacancies on the board. Any additional directorships resulting from an increase in the number of directors would be distributed among the three classes so that, as nearly as possible, each class would consist of one-third of the total number of directors.

The classification of the board might have the effect of delaying or preventing changes in our control or management. See "Description of Capital Stock—Anti-Takeover Provisions—Restated Charter and Bylaw Provisions."

Board Leadership Structure

The board of directors recognizes that it is important to determine an optimal board leadership structure to ensure the independent oversight of management as the company continues to grow. We separate the roles of chief executive officer and chairman of the board in recognition of the differences between the two roles. The chief executive officer is responsible for setting the strategic direction for the company and the day-to-day leadership and performance of the company, while the chairman of the board provides guidance to the chief executive officer and presides over meetings of the full board. We believe that this separation of responsibilities provides a balanced approach to managing the board and overseeing the company.

The board has concluded that our current leadership structure is appropriate at this time. However, the board will continue to periodically review our leadership structure and may make such changes in the future as it deems appropriate.

Board Oversight of Risk

The board of directors has responsibility for the oversight of our risk management processes and, either as a whole or through its committees, regularly discusses with management our major risk exposures, their potential impact on our business and the steps we take to manage them. The risk oversight process includes receiving regular reports from board committees and members of senior management to enable the board to understand our risk identification, risk management and risk mitigation strategies with respect to areas of potential material risk, including operations, finance, legal, regulatory, strategic and reputational risk.

The audit committee of the board reviews information regarding liquidity and operations, and oversees our management of financial risks. Periodically, the audit committee reviews our policies with respect to risk assessment, risk management, loss prevention and regulatory compliance. Oversight by the audit committee includes direct communication with our external auditors, and discussions with management regarding significant risk exposures and the actions management has taken to limit, monitor or control such exposures. The compensation committee is responsible for assessing whether any of our compensation policies or programs has the potential to encourage excessive risk-taking. The nominating and corporate governance committee of the board manages risks associated with the independence of the board, corporate disclosure practices and potential conflicts of interest. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire board is regularly informed through committee reports about such risks. Matters of significant strategic risk are considered by the board as a whole.

Code of Business Conduct

The board of directors adopted a code of business conduct that applies to each of our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller and persons performing similar functions. The code addresses various topics, including:

- compliance with applicable laws, rules and regulations;

- conflicts of interest;
- public disclosure of information;
- insider trading;
- corporate opportunities;
- competition and fair dealing;
- gifts;
- discrimination, harassment and retaliation;
- health and safety;
- record-keeping;
- confidentiality;
- protection and proper use of company assets;
- payments to government personnel; and
- reporting illegal and unethical behavior.

Prior to the completion of this offering, the code of business conduct will be posted on the Investor Relations section of our website, which is located at www.acmrcsh.com. Any waiver of the code of business conduct for an executive officer or director may be granted only by the board or a committee thereof and must be timely disclosed as required by applicable law. We intend to disclose future amendments to certain provisions of our code of business conduct, or waivers of those provisions, applicable to any principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions on our website, www.acmrcsh.com.

We have implemented whistleblower procedures, which establish format protocols for receiving and handling complaints from employees. Any concerns regarding accounting or auditing matters reported under these procedures will be communicated promptly to the audit committee.

Board Committees

We have established an audit committee, a compensation committee and a nominating and corporate governance committee. Prior to the completion of this offering, the composition of these committees will meet the criteria for independence under, and the functioning of these committees will comply with the applicable requirements of the rules of NASDAQ and SEC rules and regulations. We intend to comply with future requirements as they become applicable to us.

Each committee operates under a charter that has been approved by the board of directors. Prior to the completion of this offering, copies of each committee's charter will be posted on the Investor Relations section of our website, which is located at www.acmrcsh.com. Each committee has the composition and responsibilities described below. The board may from time to time establish other committees.

Audit Committee

The members of the audit committee are , and , each of whom is a non-employee member of the board of directors. serves as the chair of the audit committee. The audit committee's main function is to oversee our accounting and financial reporting processes, internal systems of control, independent

registered public accounting firm relationships and the audits of our consolidated financial statements. Pursuant to the audit committee charter, the functions of the committee include, among other things:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting and our disclosure controls and procedures;
- meeting independently with our registered public accounting firm and management;
- furnishing the audit committee report required by SEC rules;
- reviewing and approving or ratifying any related person transactions; and
- overseeing our risk assessment and risk management policies.

All members of the audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. The board has determined that of is an "audit committee financial expert" as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable NASDAQ rules and regulations.

The board has determined that each of and of is independent under the applicable rules and regulations of NASDAQ, is a "non-employee director" as defined in Rule 16b-3 promulgated under the Securities Exchange Act and is an "outside director" as that term is defined in Internal Revenue Code Section 162(m).

Compensation Committee

The members of the compensation committee are Haiping Dun and Tracy Liu. The compensation committee reviews and recommends policies relating to compensation and benefits of our officers and employees. Pursuant to the compensation committee charter, the functions of this committee include, among other things:

- evaluating the performance of our chief executive officer and determining the chief executive officer's salary and contingent compensation based on his or her performance and other relevant criteria;
- identifying the corporate and individual objectives governing the chief executive officer's compensation;
- approving the compensation of our other executive officers;
- making recommendations to the board of directors with respect to director compensation;
- reviewing and approving the terms of material agreements between us and our executive officers;
- overseeing and administering our equity incentive plans and employee benefit plans;
- reviewing and approving policies and procedures relating to the perquisites and expense accounts of our executive officers;
- preparing the annual compensation committee report required by SEC rules; and
- conducting a review of executive officer succession planning, as necessary, reporting its findings and recommendations to the board, and working with the board in evaluating potential successors to executive officer positions.

In accordance with NASDAQ listing standards, the board has granted the compensation committee the authority and responsibility required under Rules 10C-1(b)(2), (3) and (4) of the Securities Exchange Act, relating to the authority to retain or obtain the advice of compensation consultants, legal counsel and other compensation advisers, the authority to fund such advisers, and the responsibility to consider the independence factors specified under Rules 10C-1(b)(4)(i) through (vi) and any additional factors the compensation committee deems relevant.

The board has determined that each of Haiping Dun and Tracy Liu is independent under the applicable rules and regulations of NASDAQ, is a "non-employee director" as defined in Rule 16b-3 promulgated under the Securities Exchange Act and is an "outside director" as that term is defined in Internal Revenue Code Section 162(m).

Nominating and Corporate Governance Committee

The members of the nominating and corporate governance committee are , and . serves as the chair of the nominating and corporate governance committee. Pursuant to the nominating and corporate governance committee charter, the functions of this committee include, among other things:

- identifying, evaluating, and making recommendations to the board of directors and our stockholders concerning nominees for election to the board, to each of the board's committees and as committee chairs;
- annually reviewing the performance and effectiveness of the board and developing and overseeing a performance evaluation process;
- annually evaluating the performance of management, the board and each board committee against their duties and responsibilities relating to corporate governance;
- annually evaluating adequacy of our corporate governance structure, policies and procedures; and
- providing reports to the board regarding the committee's nominations for election to the board and its committees.

Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee is or has in the past served as an officer or employee of our company. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on the board of directors or compensation committee.

Limitations on Liability and Indemnification Matters

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or controlling persons, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

DIRECTOR COMPENSATION

Fiscal Year 2016 Director Compensation

We do not have any established policy with regard to cash or equity-based compensation of non-employee members of the board of directors. Under our 2016 Omnibus Incentive Plan, or the 2016 Plan, pursuant to which we intend to issue awards beginning with the effective date of this offering, the maximum number of shares subject to equity awards, and the maximum size of performance cash awards, that may be granted or paid to participants in any calendar year is limited, as set forth in more detail under “Executive Compensation—Equity Plans” below.

During 2016, our non-employee directors did not receive any cash compensation or stock awards for their service on the board or committees of the board, except that Tracy Liu was granted the option to purchase 50,000 shares of the Class A common stock in December 2016. The following table presents certain information with respect to the compensation of our non-employee directors in 2016:

Name	Option Awards($)(1)	Total($)(1)
Haiping Dun	$ —	$ —
Tracy Liu	114,000	114,000

(1) Amounts represent the aggregate grant date fair value of option awards granted during the year ended December 31, 2016, computed in accordance with FASB ASC Topic 718. See note 2 to our consolidated financial statements included at the end of this prospectus for a discussion of the assumptions made by us in determining the grant date fair value of our equity awards.

David H. Wang, our sole executive officer who served as a member of the board during 2016, did not receive any additional compensation for such service as a director.

We have a policy of reimbursing our directors for their reasonable out-of-pocket expenses incurred in attending board and committee meetings.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table provides information concerning the compensation paid for 2016 and 2015 to our "named executive officers," who consist of our Chief Executive Officer and President, our Treasurer and Chief Financial Officer, and our other most highly compensated executive officer during 2016.

Name and Principal Position	Year	Salary ($)(1)	Bonus ($)(1)	Option Awards ($)(2)	All Other Compensation ($)(1)(3)	Total ($)
David H. Wang	2016	$171,364(4)	$ 7,837	$760,000	$ 10,840	$950,041
Chief Executive Officer and President	2015	176,008(5)	51,974	600,000	7,707	835,689
Min Xu(6)	2016	19,696	—	228,000	13,555	261,251
Chief Financial Officer and Treasurer	2015	—	—	—	—	—
Fufa Chen	2016	153,600(7)	7,516	—	10,840	171,956
Vice President, Sales of ACM Shanghai	2015	160,339(8)	25,530	50,000	7,707	243,276

(1) Except as otherwise indicated, compensation amounts were paid in RMB and have been converted to U.S. dollars for purposes of the table. The RMB per U.S. dollar exchange rate used for such conversion reflects the average exchange rate during 2016 and 2015, as appropriate.
(2) Represents the aggregate grant date fair value of option awards granted during 2016 and 2015, computed in accordance with FASB ASC Topic 718, *Compensation—Stock Compensation*. See note 2 to our consolidated financial statements included at the end of this prospectus for a discussion of the assumptions we made in determining the grant date fair value of our equity awards.
(3) Amounts reflect a housing subsidy paid by us.
(4) Reflects a base salary of 1,138,248 RMB.
(5) Reflects a base salary of 1,096,248 RMB.
(6) Mr. Xu was appointed effective November 14, 2016.
(7) Reflects a base salary of 1,020,252 RMB.
(8) Reflects a base salary of 998,652 RMB.

Narrative Explanation of Certain Aspects of the Summary Compensation Table

The compensation paid to our named executive officers consists of the following components:

- base salary;
- performance-based cash bonuses;
- long-term incentive compensation in the form of stock options; and
- benefits consisting of housing subsidies paid by us.

Base Salaries

Annual base salaries of our named executive officers in 2017 were as follows: David Wang, $169,192 (1,156,260 RMB); Fufa Chen, $151,879 (1,038,264 RMB); and Min Xu, $150,000. Annual base salaries of our named executive officers in 2016 were as follows: David Wang, $171,364 (1,138,248 RMB); Fufa Chen, $153,600 (1,020,252 RMB); and Min Xu, $115,000. For 2015, the annual base salaries for our named executive officers were as follows: David Wang, $176,008 (1,096,248 RMB); and Fufa Chen, $160,339 (998,652 RMB).

Performance-Based Bonuses

We do not have any established policy with regard cash incentive bonuses for our executive officers. The compensation committee may decide to pay cash incentive bonuses to compensate executive officers for the achievement of specific business objectives, profitability, and individual performance and objectives established by the compensation committee.

Stock Options

We offer stock options to our employees, including our named executive officers, as the long-term incentive component of our compensation program. Our stock options allow our employees to purchase shares of the Class A common stock at a price equal to the fair market value of the Class A common stock on the date of grant. Our stock options granted to newly hired employees generally vest as to 25% of the total number of option shares on the first anniversary of the award and in equal monthly installments over the following 36 months.

For information regarding the vesting acceleration provisions applicable to the options held by our named executive officers, please see "—Severance Benefits" and "—Change in Control Benefits" below.

Grants of Plan-Based Awards

The following table sets forth information regarding grants of compensation in the form of plan-based awards made during 2016 to our named executive officers who were granted plan-based awards in 2016:

Name	Grant Date	All Other Option Awards: Number of Securities Underlying Options(#)	Exercise or Base Price of Option Awards ($/share)	Grant Date Fair Value of Option Awards($)
David H. Wang	12/28/2016	333,334	$ 3.00	$ 2.28
Min Xu	12/28/2016	100,000	3.00	2.28

Outstanding Equity Awards at 2016 Fiscal Year-End

The following table sets forth information regarding each unexercised option held by each of our named executive officers as of December 31, 2016:

	Option Awards			
	Number of Securities Underlying Unexercised Options		Option	
Name	Exercisable(#)	Unexercisable(#)	Exercise Price($)	Expiration Date
David H. Wang	166,667	—	$ 0.75	09/21/2017
	166,667	—	0.75	05/01/2021
	133,334	—	0.75	05/01/2021
	158,333	241,667	1.50	05/01/2025
	—	333,334	3.00	12/27/2026
Min Xu	100,000	—	3.00	11/14/2026
Fufa Chen	33,334	—	0.75	05/01/2021
	13,195	20,139	1.50	05/01/2025

For information regarding the vesting acceleration provisions applicable to the options held by our named executive officers, please see "—Severance Benefits" and "—Change in Control Benefits" below.

Employee Benefits and Perquisites

Our named executive officers are eligible to participate in our health and welfare plans to the same extent as all full-time employees would be eligible generally. We do not provide our named executive officers with perquisites or other personal benefits.

Executive Retention Agreement

We entered into an executive retention agreement with Min Xu upon his hiring in November 2016. The executive retention agreement generally provides that if we terminate Mr. Xu's employment without cause or if he terminates his employment for good reason, he will be entitled to receive, within thirty days after the date of termination, a cash payment equal to the sum of:

- accrued base salary, commission and vacation pay; and
- an amount equal to his then-current annual base salary.

The executive retention agreement provides that Mr. Xu will be entitled to continue to receive specified benefits for 12 months after the termination date.

The executive retention agreement contains provisions applicable in the event payments due under the agreement would result in tax penalties under Sections 280G and 4999 of the U.S. Internal Revenue Code. Those sections may impose tax penalties on our company or Mr. Xu if the amount of severance payments due to him following a Change in Ownership or Control (as defined in the Internal Revenue Code) exceeds certain limits. Under the provisions of the executive retention agreement, the amount of the benefits that Mr. Xu will be entitled to receive under the executive retention agreement will be reduced by an amount necessary to avoid triggering any penalty taxes if, and only if, the reduction would result in greater net after-tax benefits to Mr. Xu.

Equity Plans

2016 Omnibus Incentive Plan

The board of directors adopted the 2016 Plan on December 28, 2016, and we expect our stockholders to approve the 2016 Plan prior to the completion of this offering. The 2016 Plan became effective immediately on adoption.

Share Reserve. Initially a total of 2,333,334 shares of Class A common stock were available for issuance under the 2016 Plan. As of September 11, 2017, options exercisable for an aggregate of 1,606,064 shares of Class A common stock had been granted under the 2016 Plan and were outstanding, 21,887 shares of Class A common stock had been issued upon exercises of options granted under the 2016 Plan, and 705,383 shares of Class A common stock remained available for issuance under the 2016 Plan. The number of shares of Class A common stock reserved for issuance under the 2016 Plan will be increased automatically on the first business day of each of our fiscal years during the term of the plan, commencing in 2018, by a number equal to the smallest of:

- 4% of the number of shares of Class A and Class B common stock outstanding on December 31 of the prior year; and
- the number of shares Class A common stock determined by the board.

In general, to the extent that any awards under the 2016 Plan are settled in cash or are forfeited, terminate, expire or lapse without the issuance of shares, or if we repurchase the shares subject to awards granted under the 2016 Plan, those shares will again become available for issuance under the 2016 Plan, as will shares applied to pay the exercise or purchase price of an award or to satisfy tax withholding obligations related to any award. All share numbers described in this summary of the 2016 Plan will automatically adjust in the event of a stock split, a stock dividend or a reverse stock split.

Administration. The 2016 Plan may be administered by the board or its compensation committee. The compensation committee, in its discretion, selects the individuals to whom awards may be granted, the time or times at which such awards are granted, and the terms of such awards.

Eligibility. Awards may be granted under the 2016 Plan to officers, employees, consultants and advisors of our company and our affiliates and to non-employee directors of our company. Incentive stock options may be granted only to employees of our company or our subsidiaries.

Adjustments. We will equitably adjust the number and kind of securities for which stock options and other stock-based awards may be made under the 2016 Plan, including any individual award limits under the 2016 Plan, if certain changes in Class A common stock occur by reason of any recapitalization, reclassification, stock split, reverse split, combination of shares, exchange of shares, stock dividend or other distribution payable in stock, or other increase or decrease in the common stock without receipt of consideration by us, or if there occurs any spin-off, split-up, extraordinary cash dividend or other distribution of our assets. In addition, we will equitably adjust the number and kind of securities subject to any outstanding awards and the exercise price of any outstanding stock options or SARs if there occurs any spin-off, split-up, extraordinary cash dividend or other distribution of our assets.

Types of Awards. The 2016 Plan permits the granting of any or all of the following types of awards:

- *Stock Options*. Stock options entitle the holder to purchase a specified number of shares of Class A common stock at a specified price (the exercise price), subject to the terms and conditions of the stock option grant. The compensation committee may grant either incentive stock options, which must comply with Internal Revenue Code Section 422, or nonqualified stock options. The compensation committee sets exercise prices and terms, except that stock options must be granted with an exercise price not less than 100% of the fair market value of the common stock on the date of grant (excluding stock options granted in connection with assuming or substituting stock options in acquisition transactions). Unless the compensation committee determines otherwise, fair market value means, as of a given date, the closing price of the Class A common stock on that date. At the time of grant, the compensation committee determines the terms and conditions of stock options, including the quantity, exercise price, vesting periods, term (which cannot exceed ten years) and other conditions on exercise.
- *Stock Appreciation Rights*. The compensation committee may grant SARs, as a right in tandem with the number of shares underlying stock options granted under the 2016 Plan or as a freestanding award. Upon exercise, SARs entitle the holder to receive payment per share in stock or cash, or in a combination of stock and cash, equal to the excess of the share's fair market value on the date of exercise over the grant price of the SAR. The grant price of a tandem SAR is equal to the exercise price of the related stock option and the grant price for a freestanding SAR is determined by the compensation committee in accordance with the procedures described above for stock options. Exercise of a SAR issued in tandem with a stock option will reduce the number of shares underlying the related stock option to the extent of the SAR exercised. The term of a freestanding SAR cannot exceed ten years, and the term of a tandem SAR cannot exceed the term of the related stock option.
- *Restricted Stock, RSUs and Other Stock-Based Awards*. The compensation committee may grant awards of restricted stock, which are shares of Class A common stock subject to specified restrictions, and RSUs, which represent the right to receive shares of the Class A common stock in the future. These awards may be made subject to repurchase, forfeiture or vesting restrictions at the compensation committee's discretion. The restrictions may be based on continuous service with our company or the attainment of specified performance goals, as determined by the compensation committee. RSUs may be paid in stock, cash, or a combination of stock and cash, as determined by the compensation committee. The compensation committee may also grant other types of equity or equity-based awards subject to the terms of the 2016 Plan and any other terms and conditions determined by the compensation committee.

Performance Awards. The compensation committee may grant performance awards, which entitle participants to receive a payment from us, the amount of which is based on the attainment of performance goals established by the compensation committee over a specified award period. Performance awards may be denominated in shares of Class A common stock or in cash, and may be paid in stock, cash, or a combination of stock and cash, as determined by the compensation committee. Cash-based performance awards include annual incentive awards.

Clawback. All cash and equity awards granted under the 2016 Plan will be subject to the requirements of all applicable laws and any company policy regarding the recovery of erroneously awarded compensation, including under Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and the implementing rules and regulations under such Act. Awards granted under the 2016 Plan may also be subject to forfeiture or repayment if a recipient breaches a non-competition, non-solicitation, non-disclosure, non-disparagement or other restrictive covenant set forth in an award agreement or any other agreement, between the recipient and our company.

Performance-Based Compensation Under Section 162(m). Under Internal Revenue Code Section 162(m), we generally are prohibited from deducting compensation paid to our principal executive officer and our three other most highly compensated executive officers (other than our principal financial officer) in excess of $1 million per person in any year. However, compensation that qualifies as "performance-based" is not subject to the $1 million limit.

- If the compensation committee intends to qualify an award under the 2016 Plan as "performance-based" compensation under Internal Revenue Code Section 162(m), the performance goals selected by the compensation committee may be based on the attainment of specified levels of one, or any combination, of the following performance criteria: (a) cash flow; (b) earnings per share, as adjusted for any stock split, stock dividend or other recapitalization; (c) earnings measures; (d) return on equity; (e) total stockholder return; (f) share price performance, as adjusted for any stock split, stock dividend or other recapitalization; (g) return on capital; (h) revenue; (i) income; (j) profit margin; (k) return on operating revenue; (l) brand recognition or acceptance; (m) customer satisfaction; (n) productivity; (o) expense targets; (p) market share; (q) cost control measures; (r) balance sheet metrics; (s) strategic initiatives; (t) implementation, completion or attainment of measurable objectives with respect to recruitment or retention of personnel or employee satisfaction; or (u) any other business criteria established by the board. The compensation committee can also select any derivations of these business criteria (for example, income may include pre-tax income, net income or operating income).

- Performance goals may, in the discretion of the compensation committee, be established on a company-wide basis, or with respect to one or more business units, divisions, subsidiaries or business segments, as applicable. Performance goals may be absolute or relative to the performance of one or more comparable companies or indices or based on year-over-year growth.

- The compensation committee may determine at the time that the performance goals are established the extent to which measurement of performance goals may exclude the impact of charges for restructuring, discontinued operations and other extraordinary, unusual or non-recurring items, and the cumulative effects of tax or accounting changes.

- In addition, compensation realized from the exercise of options and SARs granted under the 2016 Plan is intended to meet the requirements of the performance-based compensation exception under Internal Revenue Code Section 162(m). These awards must have an exercise price equal at least to fair market value at the date of grant and be granted to covered individuals by a compensation committee consisting of at least two outside directors, and the 2016 Plan must (and does) limit the number of shares that may be the subject of awards granted to any individual during any calendar year.

Transferability. Awards are not transferable other than by will or the laws of descent and distribution, except that in certain instances transfers may be made to or for the benefit of designated family members of the participant for no value.

Changes in Control. Under the 2016 Plan, in the event of a change in control, except as provided for in an individual award agreement, the board of directors may provide for any one or more of the following actions, which may not be the same for all participants:

- The board may provide for the acceleration of the exercisability, vesting and/or settlement of each or any outstanding award or portion thereof upon such terms and conditions as determined by the board, including a participant's termination of employment in connection with or following a change in control.
- The surviving, continuing, successor or purchasing corporation may either assume or continue our company's rights and obligations under each or any award or substitute for each or any such outstanding award. The board may cancel any award that is neither assumed or continued by the acquiror in connection with the change in control nor exercised or settled as of the time of consummation of the change in control.
- The board may provide that each or any outstanding award shall be canceled in exchange for a payment with respect to each vested share subject to such canceled award in (a) cash, (b) stock of our company or of a corporation or other business entity a party to the change in control or (c) other property. The payment shall be in an amount having a fair market value equal to the fair market value of the consideration to be paid per share in the change in control, reduced by the exercise or purchase price per share, if any, under such award.

"Change in control" is defined under the 2016 Plan and requires consummation of the applicable transaction.

Term, Termination and Amendment of 2016 Plan. Unless terminated earlier by the board of directors, the 2016 Plan will terminate, and no further awards may be granted, ten years after the date on which it is approved by our stockholders. The board may amend, suspend or terminate the 2016 Plan at any time, except that, if required by applicable law, regulation or stock exchange rule, stockholder approval will be required for any amendment. The amendment, suspension or termination of the 2016 Plan or the amendment of an outstanding award generally may not, without a participant's consent, materially impair the participant's rights under an outstanding award.

Non-Qualified Stock Option Agreements

The board of directors or its compensation committee issued stock options pursuant to non-qualified stock option agreements between 2007 and 2015.

Shares Issued. As of September 11, 2017, options to purchase 1,636,676 shares of Class A common stock were outstanding pursuant to such non-qualified stock option agreements.

Administration. The board of directors or its compensation committee selected the individuals to whom options pursuant to such non-qualified stock option agreements were granted, the time or times at which such options were granted, and the terms of such options.

Eligibility. Officers, employees, consultants and advisors of our company and our affiliates and to non-employee directors of our company were eligible to receive stock option grants pursuant to such non-qualified stock option agreements.

Adjustments. We will equitably adjust the number and kind of securities for which options may be made under pursuant to such non-qualified stock option agreements if certain changes in the common stock occur by reason of any merger, consolidation, reorganization, recapitalization, stock dividend, non-cash dividend, stock split, liquidating dividend, combination of shares, exchange or shares, or other change in corporate structure.

Types of Awards. The board of directors or its compensation committee set the terms of such non-qualified stock option agreements, including the quantity, exercise price, vesting periods, term (which does not exceed ten years) and other conditions on exercise.

Transferability. Nonqualified stock options may be transferred pursuant to a qualified domestic relations order.

Corporate Transaction. In the event of a corporate transaction (such as a merger, consolidation, or a sale or transfer of all or substantially all of our assets), the surviving company must assume or substitute new awards for any outstanding options. If the surviving company refuses to do so, outstanding options shall terminate if not exercised before the corporate transaction.

Amendment. The amendment of an outstanding non-qualified stock option generally may not, without a participant's consent, alter or impair the participant's rights under an outstanding option.

1998 Stock Option Plan

The board of directors adopted our 1998 Stock Option Plan, or the 1998 Plan, in April 1998. The 1998 Plan was amended by the board in May 1999, December 2001 and March 2004, and those amendments were approved by our stockholders. The 1998 Plan expired by its terms in March 2014. No additional options may be granted pursuant to the 1998 Plan, but the 1998 Plan will continue to govern the terms and conditions of the outstanding options previously granted thereunder.

Share Reserve. At the time of the 1998 Plan's expiration, a total of 766,667 shares of common stock had been authorized. As of September 11, 2017, options to purchase 200,003 shares of Class A common stock remained outstanding under the 1998 Plan.

Administration. The 1998 Plan may be administered by the board of directors or its compensation committee (the plan administrator). The plan administrator, in its discretion, selected the individuals to whom options may be granted, the time or times at which such options are granted, and the terms of such options.

Eligibility. Officers, employees, consultants and advisors of our company and our affiliates and to non-employee directors of our company were eligible to receive stock option grants under the 1998 Plan.

Adjustments. We will equitably adjust the number and kind of securities for which options may be made under the 1998 Plan if certain changes in the common stock occur by reason of any merger, consolidation, reorganization, recapitalization, stock dividend, non-cash dividend, stock split, liquidating dividend, combination of shares, exchange or shares, or other change in corporate structure.

Types of Awards. The 1998 Plan permits the granting of stock options, which entitle the holder to purchase a specified number of shares of common stock at a specified price (the exercise price), subject to the terms and conditions of the stock option grant. The plan administrator sets exercise prices and terms. At the time of grant, the plan administrator determines the terms and conditions of stock options, including the quantity, exercise price, vesting periods, term (which cannot exceed ten years) and other conditions on exercise.

Transferability. Incentive stock options are not transferable other than by will or the laws of descent and distribution. Nonqualified stock options may be transferred pursuant to a qualified domestic relations order.

Corporate Transaction. Under the 1998 Plan, in the event of a corporate transaction (such as a merger, consolidation, or a sale or transfer of all or substantially all of our assets), the surviving company must assume or substitute new awards for any outstanding options. If the surviving company refuses to do so, outstanding options shall terminate if not exercised before the corporate transaction.

Term, Termination and Amendment. By its terms, the 1998 Plan terminated in March 2014, and no further options have been granted under the 1998 Plan since that time. The 1998 Plan will continue to govern the terms and conditions of the outstanding options previously granted thereunder. The amendment of an outstanding option generally may not, without a participant's consent, alter or impair the participant's rights under an outstanding option.

RELATED-PARTY TRANSACTIONS

The following is a description of transactions since January 1, 2014 to which we have been a party, in which the amount involved exceeded or will exceed $120,000, and in which any of our directors, executive officers or beneficial owners of more than 5% of any series or class of our preferred or common stock, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest, other than compensation, termination and change-in-control arrangements.

All of the transactions set forth below were approved by a majority of the board of directors, including a majority of the independent and disinterested members of the board. We believe we have executed all of the transactions set forth below on terms no less favorable to us than we could have obtained from unaffiliated third parties. It is our intention to ensure that all future transactions between us and our officers, directors and principal stockholders and their affiliates are approved by the audit committee and a majority of the members of the board, including a majority of the independent and disinterested members of the board, and are on terms no less favorable to us than those that we could obtain from unaffiliated third parties.

Issuance of Warrant

In December 2016 Shengxin (Shanghai) Management Consulting Limited Partnership, or SMC, paid 20,123,500 RMB (approximately $3.0 million as of the date of funding) to ACM Shanghai for potential investment pursuant to terms to be subsequently negotiated. SMC is a PRC limited partnership owned by Jian Wang, our Vice President, Research and Development and the brother of our Chief Executive Officer and President, David H. Wang, and other employees of ACM Shanghai. Jian Wang is also the general partner of SMC. In March 2017 we issued to SMC a warrant exercisable to purchase 397,502 shares of Class A common stock at a price of $7.50 per share, for a total exercise price of approximately $3.0 million. The warrant may be exercised for cash or on a cashless basis, at the option of SMC, at any time on or before May 17, 2023 to acquire all, but not less than all, of the shares of Class A common stock subject to the warrant. For more information, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Issuance of Warrant,” “Principal Stockholders,” and “Description of Capital Stock—Warrant.”

Loans and Stock Issuances

In December 2016 we issued (a) 285,221 shares of Class A common stock to David H. Wang, who is our Chief Executive Officer and President, one of our directors, and a 5% stockholder, as well as certain immediate family members of Dr. Wang and certain trusts of which Dr. Wang is a trustee, pursuant to the conversion of convertible promissory notes with an aggregate value of $417,722 issued to such parties in 2003, 2004, 2005 and 2006 and (b) 419,728 shares of Class A common stock to H.L. Hsieh, a 5% stockholder, pursuant to the conversion of convertible promissory notes with an aggregate value of $574,735 issued to Mr. Hsieh in 2004, 2005 and 2006.

Director and Executive Compensation

Please see “Director Compensation” and “Executive Compensation” for a discussion regarding the compensation of our non-employee directors and our executive officers.

Indemnification Agreements

In April 2017 we entered enter into indemnification agreements with our directors and executive officers. Under these agreements, we agree to indemnify, to the fullest extent permitted by Delaware law (subject to certain limitations), each of our directors and executive officers against any and all expenses incurred by the director or officer in connection with proceedings because of his or her status as one of our directors or executive officers. In addition, these indemnification agreements provide that, to the fullest extent permitted by Delaware law, we will pay for all expenses incurred by our directors and executive officers in connection with a legal proceeding arising out of their service to us.

Policies and Procedures for Related-Party Transactions

In December 2016 the board of directors adopted a related-party transaction policy under which our directors and executive officers, including their immediate family members and affiliates, are not permitted to enter into a related-party transaction with us without the prior consent of the audit committee or another independent committee of the board of directors where it is inappropriate for the audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, or any of such persons' immediate family members or affiliates, in which the amount involved exceeds $120,000 must first be presented to the audit committee for review, consideration and approval. All of our directors and executive officers are required to report to the audit committee any such related-party transaction. In approving or rejecting the proposed agreement, the audit committee shall consider the relevant facts and circumstances available and deemed relevant to the audit committee, including costs, and benefits to us, the terms of the transaction, the availability of other sources for comparable services or products and, if applicable, the impact on a director's independence. The audit committee shall approve only those agreements that, in light of known circumstances, are not inconsistent with our best interests, as the audit committee determines in the good faith exercise of its discretion.

PRINCIPAL STOCKHOLDERS

The following table provides information concerning beneficial ownership of our capital stock as of September 11, 2017, and as adjusted to reflect the sale of the Class A common stock being sold in this offering, by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than five percent of the outstanding Class A common stock (on an as-converted basis) or the outstanding Class B common stock;
- each of our named executive officers;
- each of our directors; and
- all of our current directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC, and thus it represents sole or shared voting or investment power with respect to our securities. Shares of common stock subject to options currently exercisable or exercisable by November 10, 2017 (sixty days after September 11, 2017) are deemed outstanding and beneficially owned by the person holding such options for purposes of computing the number of shares and percentage beneficially owned by such person, but are not deemed outstanding for purposes of computing the percentage beneficially owned by any other person. Except as indicated in the footnotes to the below table, and subject to applicable community property laws, the persons or entities named have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them.

The following table lists the percentage of shares beneficially owned before this offering based on 9,168,772 shares of Class A common stock outstanding, which includes (a) 4,627,138 shares of Class A common stock issuable upon the automatic conversion of all shares of convertible preferred stock upon completion of this offering, as if the conversion had occurred as of September 11, 2017, and (b) 2,409,738 shares of Class B common stock outstanding as of September 11, 2017.

The table also lists the percentage of shares beneficially owned after this offering based on shares of Class A common stock outstanding immediately after the completion of this offering, assuming no exercise of the underwriters' over-allotment option to purchase up to an additional shares of Class A common stock.

Unless otherwise indicated, the principal address of each of the stockholders below is c/o ACM Research, Inc., 42307 Osgood Road, Suite I, Fremont, California 94539.

	Shares Beneficially Owned Before the Offering					Shares Beneficially Owned After the Offering				
	Class A		Class B		% Total Voting Power(1)	Class A		Class B		% Total Voting Power(1)
Name of Beneficial Owner	Shares	%	Shares	%		Shares	%	Shares	%	
Named Executive Officers and Directors										
David H. Wang(2)	2,410,951	21.6	1,422,270	59.0	50.8	2,410,951		1,422,270	59.0	
Haiping Dun(3)	517,857	5.5	100,000	4.1	4.2	517,857		100,000	4.1	
Fufa Chen(4)	127,501	1.4	—	—	*	127,501		—	—	
Chenming Hu(5)	39,584	*	—	—	*	39,584		—	—	
Tracy Liu(6)	27,053	*	—	—	*	27,053		—	—	
Min Xu	—	—	—	—	—	—		—	—	
All executive officers and directors as a group (8 persons)(7)	3,763,169	31.3	1,597,938	66.3	58.2	3,763,169		1,597,938	66.3	
Other 5% Stockholders										
Shanghai Science and Technology Venture Capital Co., Ltd.(8)	1,666,170	18.2	—	—	2.9	1,666,170		—	—	
Pudong Science and Technology (Cayman) Co., Ltd.(9)	1,119,576	12.2	—	—	2.0	1,119,576		—	—	
H. L. Hsieh(10)	1,019,211	10.9	133,334	5.5	6.2	1,019,211		133,334	5.5	
Zhangjiang AJ Company Limited(11)	787,098	8.6	—	—	1.4	787,098		—	—	
Jian Wang(12)	552,722	5.7	50,001	2.1	2.6	552,722		50,001	2.1	

[footnotes appear on following page]

* Less than 1%.

(1) Percentage of total voting power represents voting power with respect to all shares of Class A and Class B common stock, voting as a single class. Holders are entitled to one vote per share of Class A common stock and twenty votes per share of Class B common stock. For more information about the voting rights of Class A and Class B common stock, see "Description of Capital Stock—Common Stock."

(2) Includes (a) 206,667 shares of Class A common stock held by Dr. Wang and Jing Chen, as Trustees for the Wang-Chen Family Living Trust; (b) 60,000 shares of Class A common stock held by Dr. Wang and Jing Chen, as Trustees for The David Hui Wang and Jing Chen Family Irrevocable Trust for Wang Children; (c) 1,422,270 shares of Class A common stock issuable upon conversion of Class B common stock, of which shares of Class B common stock a total of 117,334 are held by Dr. Wang's son, Brian Wang, 117,334 are held by Dr. Wang s daughter, Sophia Wang, 33,334 are held by Dr. Wang's spouse, Jing Chen, and 7,334 are held by Dr. Wang and Jing Chen, as Trustees for The David Hui Wang and Jing Chen Family Irrevocable Trust for Wang Children; and (d) 555,347 shares of Class A common stock issuable upon the exercise of options exercisable by November 10, 2017, including 4,964 shares of Class A common stock issuable upon the exercise of an option issued to Dr. Wang's daughter, Sophia Wang.

(3) Includes 100,000 shares of Class A common stock issuable upon conversion of Class B common stock and 104,166 shares of Class A common stock issuable under options exercisable by November 10, 2017.

(4) Includes 54,167 shares of Class A common stock issuable under options exercisable by November 10, 2017.

(5) Consists of shares issuable under options exercisable by November 10, 2017.

(6) Includes 24,653 shares of Class A common stock issuable under options exercisable by November 10, 2017.

(7) Includes (a) 1,597,938 shares of Class A common stock issuable upon conversion of Class B common stock, (b) 852,917 shares of Class A common stock issuable under options exercisable by November 10, 2017, and (c) 397,502 shares of Class A common stock issuable upon the exercise of an outstanding warrant. See notes (2) through (8).

(8) Shanghai Science and Technology Venture Co., Ltd., or SSTVC, has, but has not yet exercised, a right to designate one individual for nomination and election to the board of directors, as described under "Management—Board of Directors—Director Nomination Rights." Weiguo Shen is the Chairman and General Manager of SSTVC and may be deemed to beneficially own the shares held by SSTVC. The address of SSTVC and Mr. Shen is 1643 Huaihai Road, Shanghai, PRC.

(9) Pudong Science and Technology (Cayman) Co., Ltd., or PST, is a wholly owned subsidiary of Shanghai Pudong High-Tech Investment Co., Ltd. Long Ji is the Corporate Representative of Shanghai Pudong High-Tech Investment Co., Ltd. and may be deemed to beneficially own the shares held by PST. The address of PST, its parent and Mr. Ji is 1158 Zhangdong Road, Building 3, 8th Floor, Zhangjiang Hi-tech Park, Pudong District, Shanghai, PRC.

(10) Includes 133,334 shares of Class A common stock issuable upon conversion of Class B common stock and 66,667 shares of Class A common stock issuable under options exercisable by November 10, 2017.

(11) Zhangjiang AJ Company Limited is a wholly owned subsidiary of Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. Weiwei Chen is the Chairman, General Manager and Corporate Representative of Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. and may be deemed to beneficially own the shares held by Zhangjiang AJ Company Limited. The address of Zhangjiang AJ Company Limited and its parent and Ms. Chen is 1387 Zhangdong Road, Building 16, Room C305, Zhangjiang Hi-tech Park, Shanghai, PRC.

(12) Includes (a) 50,001 shares of Class A common stock issuable upon conversion of Class B common stock, (b) 20,833 shares of Class A common stock issuable under options exercisable by November 10, 2017 and (c) 397,502 shares of Class A common stock issuable upon the exercise of an outstanding warrant held by Shengxin (Shanghai) Management Consulting Limited Partnership, or SMC. Mr. Wang is the general partner of SMC and may be deemed to beneficially own the warrant and any shares of Class A common stock acquired by SMC upon exercise of the warrant. Mr. Wang is our Vice President, Research and Development and the brother of David H. Wang, our Chief Executive Officer and President and one of our directors.

DESCRIPTION OF CAPITAL STOCK

General

Following completion of this offering, our authorized capital stock will consist of shares of Class A common stock, $0.0001 par value per share, shares of Class B common stock, $0.0001 par value per share, and shares of preferred stock, $0.0001 par value per share. The following description summarizes some of the terms of our restated charter and restated bylaws that will be in effect upon completion of this offering. This description does not purport to be complete and is qualified in its entirety by the provisions of our restated charter and restated bylaws, copies of which have been filed as exhibits to the registration statement of which this prospectus is a part.

As of September 11, 2017, assuming conversion of all outstanding shares of preferred stock into shares of Class A common stock immediately prior to completion of this offering there were outstanding:

- 9,302,983 shares of Class A common stock outstanding, held of record by 136 stockholders;
- 2,409,738 shares of Class B common stock outstanding, held of record by 62 stockholders;
- 397,502 shares of Class A common stock issuable upon exercise of an outstanding warrant; and
- 3,442,743 shares of Class A common stock issuable upon exercise of outstanding stock options.

Common Stock

Voting Rights. Except as otherwise required by Delaware law, at every annual or special meeting of stockholders, holders of Class B common stock are entitled to twenty votes per share and holders of Class A common stock are entitled to one vote per share. The holders of Class A common stock and Class B common stock vote together as a single class, unless otherwise required by law. Delaware law could require either holders of Class A common stock or Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend our charter to increase the authorized number of shares of a class of stock, or to increase or decrease the per share par value of a class of stock, then that class would be required to vote separately to approve the proposed amendment;
- if we were to seek to amend our charter in a manner that alters or changes the powers, preferences or special rights of a class of stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment; and
- if we were to seek to declare a dividend or distribution that would be disparate as between the two classes.

Stockholders do not have the ability to cumulate votes for the election of directors. Our restated charter and restated bylaws that will be in effect upon completion of this offering will provide for a classified board of directors consisting of three classes of approximately equal size, each serving staggered three-year terms, when the outstanding shares of Class B common stock represent less than a majority of the combined voting power of the common stock. Our directors will be assigned by the then-current board to a class when the outstanding shares of Class B common stock represent less than a majority of the combined voting power of the common stock.

Dividends. Subject to preferences that may be applicable to any then outstanding preferred stock, the holders of our outstanding shares of common stock are entitled to receive dividends, if any, as may be declared from time to time by the board of directors out of legally available funds. The holders of Class A common stock and Class B common stock will be entitled to share equally, identically and ratably, on a per share basis, with respect to any dividend or distribution unless different treatment of the shares of each such class is approved by the

affirmative vote of the holders of a majority of the outstanding shares of Class A common stock and Class B common stock, each voting separately as a class. At present, we have no plans to issue dividends. See “Dividend Policy.”

Liquidation. In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Conversion. Each outstanding share of Class B common stock is convertible into one share of Class A common stock (a) at any time, at the option of the holder, or (b) upon any transfer of such share of Class B common stock, whether or not for value, except for certain transfers described in our restated charter, including transfers to family members, trusts solely for the benefit of the stockholder or their family members, and partnerships, corporations, and other entities exclusively owned by the stockholder or their family members. In addition, on or after the date of this prospectus, all outstanding shares of Class B common stock will convert automatically into shares of Class A common stock, on a one for one basis, upon (a) the election of the holders of a majority of the then outstanding shares of Class B common stock or (b) on the first December 31 that occurs more than five years after the date of this prospectus if the October Market Cap with respect to the month of October immediately preceding such December 31 exceeds $1.0 billion, provided that the conversion provided by this clause (b) shall not apply and no automatic conversion of Class B common stock into Class A common stock will ever occur pursuant to this clause (b) if the October Market Cap for the month of October immediately preceding a December 31 exceeds $1.0 billion prior to the fifth anniversary of the date of this prospectus. For purposes of this paragraph, “October Market Cap” means, with respect to any October throughout which Class A common stock is traded on a registered securities exchange, the product of the average of the daily volume weighted average trading prices of Class A common stock for each of the days in such month of October multiplied by the number of shares of common stock outstanding on the last trading day of such month of October.

Once converted or transferred and converted into Class A common stock, the Class B common stock will not be reissued.

Other Rights and Preferences. Other than as described above, holders of common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Fully Paid and Nonassessable. All of our outstanding shares of common stock are, and the shares of Class A common stock to be issued in this offering will be, fully paid and nonassessable.

Preferred Stock

Upon completion of this offering, we will have no shares of preferred stock outstanding. Our shares of preferred stock outstanding immediately prior to the completion of this offering will convert automatically into 4,628,015 shares of Class A common stock.

Under the terms of our restated charter, the board of directors is authorized to issue preferred stock in one or more series, to establish the number of shares to be included in each such series and to fix the designation, powers, preferences and rights of such shares and any qualifications, limitations or restrictions thereof. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of our company without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock. The issuance of preferred stock with voting and conversion rights may adversely affect

the voting power of the holders of common stock, including the loss of voting control to others. At present, we have no plans to issue any preferred stock.

Options

As of September 11, 2017, options to purchase 1,606,064 shares of Class A common stock were outstanding pursuant under the 2016 Plan at a weighted-average exercise price of $3.61 per share, of which 288,758 were vested and exercisable.

As of September 11, 2017, options to purchase 200,003 shares of Class A common stock were outstanding under our 1998 Plan at an exercise price of $0.75 per share, all of which were vested and exercisable.

As of September 11, 2017, options to purchase 1,636,676 shares of Class A common stock were outstanding pursuant to certain stand-alone option agreements at a weighted-average exercise price of $1.21 per share, of which 1,162,013 were vested and exercisable.

In total, as of September 11, 2017, options to purchase 3,442,743 shares of Class A common stock were outstanding at a weighted-average exercise price of $2.31 per share, of which 1,162,013 were vested and exercisable at a weighted-average exercise price of $1.42 per share.

Warrant

In December 2016, Shengxin (Shanghai) Management Consulting Limited Partnership, or SMC, delivered to our subsidiary ACM Shanghai 20,123,500 RMB (approximately $3.0 million as of the date of funding) in cash, which we refer to as the SMC Investment, for potential investment pursuant to terms to be subsequently negotiated. In March 2017, we, ACM Shanghai and SMC entered into a securities purchase agreement pursuant to which, in exchange for the SMC Investment, we issued to SMC a warrant exercisable, for cash or on a cashless basis, to purchase, at any time on or before May 17, 2023, all, but not less than all, of 397,502 shares of Class A common stock at a price of $2.50 per share, for a total exercise price of approximately $3.0 million. Under the securities purchase agreement, if SMC does not exercise the warrant by May 17, 2023, ACM Shanghai will be obligated, subject to approval of governmental authorities and ACM Shanghai's equity holders, to deliver an equity interest of 3.6394% (subject to dilution) in satisfaction of the SMC Investment. If SMC exercises the warrant or if SMC does not exercise the warrant and the issuance of the equity interest in ACM Shanghai is not completed by August 17, 2023 due to the inability of the parties to obtain required governmental or equity holder approvals, then ACM Shanghai will be obligated to pay to SMC, in satisfaction of the SMC Investment, an amount equal to approximately $3.0 million. We have granted SMC certain registration rights with respect to Class A common stock issued upon exercise of the warrant, as described under "—Registration Rights" below.

Registration Rights

We entered into a registration rights agreement with SMC in connection with the warrant described in "—Warrant" above and Zhangjiang AJ Company Limited in connection with its purchase of Class A common stock described in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions —Acquisition of Outstanding Minority Interests in Our Operating Company." Pursuant to the agreement, those investors have the right, under specified circumstances, to require us to register under the Securities Act a total of 1,184,600 shares of Class A common stock. In addition, we intend for the following holders to become parties to the registration rights agreement prior to completion of this offering:

- Ninebell Co., Ltd. in connection with its purchase of 133,334 shares of Class A common stock described in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Equity Transactions—Strategic Investment in Key Supplier";
- Shanghai Science and Technology Venture Capital Co., Ltd. and Shanghai Pudong High-Tech Investment Co., Ltd. in connection with the agreements described in "Management's Discussion and

Analysis of Financial Condition and Results of Operations—Recent Equity Transactions —Acquisition of Outstanding Minority Interests in Our Operating Company"; and

- holders of convertible preferred stock, convertible into 4,628,015 shares of Class A common stock.

In total, all of the intended parties to the registration rights agreement would have the right, under specified circumstances, to require us to register from time to time under the Securities Act up to 6,668,023 shares of Class A common stock.

The following description of the terms of the registration rights agreement is intended as a summary only and is qualified in its entirety by reference to the registration rights agreement filed as an exhibit to the registration statement of which this prospectus forms a part.

Under the registration rights agreement, if we propose to register shares of Class A common stock under the Securities Act on a form that may be used for the registration of eligible shares, the holders may request that we register all or a portion of the eligible shares they held by them.

In the event that any registration in which the holders of eligible shares participate pursuant to the registration rights agreement is an underwritten public offering, the number of eligible shares to be included may, in specified circumstances, be limited due to market conditions. If the underwriter determines that less than all of the eligible shares proposed to be sold can be included in such offering, then eligible shares held by executive officers shall only be included in such offering if all the holders that are not executive officers are able to register all of the eligible shares proposed to be sold in such registration.

Under the registration rights agreement, we generally are required to pay all registration expenses other than underwriting discounts and selling commissions and we are required to indemnify each participating holder with respect to each registration of eligible shares that is effected.

Anti-Takeover Provision

So long as the outstanding shares of Class B common stock represent a majority of the combined voting power of common stock, the holders of Class B common stock will effectively control all matters submitted to our stockholders for a vote, as well as the overall management and direction of our company, which will have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

After such time as the shares of Class B common stock no longer represent a majority of the combined voting power of common stock, the provisions of Delaware law, our restated charter and our restated bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

Delaware Law

Section 203 of the Delaware General Corporation Law prevents some Delaware corporations from engaging, under some circumstances, in a business combination, which includes a merger or sale of at least 10% of the corporation's assets with any interested stockholder, meaning a stockholder who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation's outstanding voting stock, unless:

- the transaction is approved by the board of directors prior to the time that the interested stockholder became an interested stockholder;
- upon consummation of the transaction, which resulted in the stockholder's becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation

outstanding at the time the transaction commenced, excluding stock owned by directors who are also officers of the corporation; or

- subsequent to such time that the stockholder became an interested stockholder the business combination is approved by the board and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original charter or an express provision in its charter or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Restated Charter and Bylaw Provisions

Our restated charter and our restated bylaws will include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control of our company, even after such time as the shares of Class B common stock no longer represent a majority of the combined voting power of common stock, including the following:

- *Separate Class B Vote for Certain Transactions.* Until the first date on which the outstanding shares of Class B common stock represent less than 35% of the combined voting power of common stock, any transaction that would result in a change in control of our company will require the approval of a majority of our outstanding Class B common stock voting as a separate class. This provision could delay or prevent the approval of a change in control that might otherwise be approved by a majority of outstanding shares of Class A and Class B common stock voting together on a combined basis.
- *Dual Class Stock.* As described above in "—Common Stock—Voting Rights," our restated charter provides for a dual class common stock structure, which provides certain members of our senior management with the ability to control the outcome of matters requiring stockholder approval, even if they collectively own significantly less than a majority of the shares of our outstanding Class A and Class B common stock, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets.
- *Supermajority Approvals*. Our restated charter and restated bylaws do not provide that amendments to our restated charter or restated bylaws by stockholders will require the approval of two-thirds of the combined vote of then-outstanding shares of Class A and Class B common stock. However, when the outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock, certain amendments to our restated charter or restated bylaws by stockholders will require the approval of two-thirds of the combined vote of our then-outstanding shares of Class A and Class B common stock. This will have the effect of making it more difficult to amend our charter or bylaws to remove or modify certain provisions.
- *Board of Directors Vacancies.* Our restated charter and restated bylaws provide that stockholders may fill vacant directorships. When the outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock, our restated charter and restated bylaws authorize only the board of directors to fill vacant directorships. In addition, the number of directors constituting the board is set only by resolution adopted by a majority vote of our entire board. These provisions restricting the filling of vacancies will prevent a stockholder from increasing the size of the board and gaining control of the board by filling the resulting vacancies with its own nominees. Our restated charter provides that directors may be removed with or without cause only by the affirmative vote of the holders of at least two-thirds of the votes that all of the stockholders would be entitled to cast in any annual election of directors.
- *Classified Board*. The board of directors will not initially be classified. Our restated charter and restated bylaws provide that when the outstanding shares of Class B common stock represent less than

a majority of the combined voting power of common stock, the board will be classified into three classes of directors each of which will hold office for a three-year term. In addition, thereafter, directors may be removed from the board with our without cause only by the affirmative vote of the holders of at least two-thirds of the voting power of the then outstanding shares of Class A and Class B common stock. The existence of a classified board could delay a successful tender offeror from obtaining majority control of the board, and the prospect of that delay might deter a potential offeror.

- *Stockholder Action; Special Meeting of Stockholders.* Our restated charter provides that stockholders will be able to take action by written consent. When the outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock, our stockholders will no longer be able to take action by written consent, and will only be able to take action at annual or special meetings of our stockholders. Stockholders will not be permitted to cumulate their votes for the election of directors. The absence of cumulative voting may make it more difficult for stockholders who own less than a majority in voting power to elect any directors to the board of directors. Our restated bylaws further provide that special meetings of our stockholders may be called only by the board, the chairman of the board or our chief executive officer. A stockholder may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority in voting power of our capital stock to take any action, including the removal of director.
- *Advance Notice Requirements for Stockholder Proposals and Director Nominations.* Our restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at any meeting of stockholders. Our restated bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our meetings of stockholders.
- *Issuance of Undesignated Preferred Stock.* The board of directors has the authority, without further action by the stockholders, to issue shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by the board. The existence of authorized but unissued shares of preferred stock enables the board to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

Choice of Forum

Our restated charter provides that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our restated charter or our restated bylaws; any action to interpret, apply, enforce, or determine the validity of our restated charter or restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for the Class A common stock will be .

NASDAQ Global Market

We have applied to list the Class A common stock on the NASDAQ Global Market under the symbol "ACMR."

SHARES ELIGIBLE FOR FUTURE SALE

Before this offering, there has not been a public market for shares of Class A common stock. Future sales of substantial numbers of shares of common stock, including shares issued upon the exercise of outstanding options, in the public market after this offering, or the possibility of these sales occurring, could cause the prevailing market price for the common stock to fall or impair our ability to raise equity capital in the future.

After this offering, we will have outstanding shares of Class A common stock and shares of Class B common stock, based on the number of shares outstanding as of September 11, 2017. This includes shares of Class A common stock that we are selling in this offering, which shares may be resold in the public market immediately following this offering, and assumes no additional exercise of outstanding options. Shares of Class B common stock are convertible into an equivalent number of shares of Class A common stock and generally convert into shares of Class A common stock upon transfer.

The shares of common stock that were not offered and sold in this offering will be upon issuance, "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which are summarized below.

As a result of the contractual 180-day lock-up period described below and the provisions of Rules 144 and 701, these shares will be available for sale in the public market as follows:

- no restricted shares will be eligible for sale in the public market immediately upon completion of this offering; and
- shares will be eligible for sale in the public market beginning 180 days from the date of this prospectus (subject, in some cases, to volume limitations), upon the expiration of the 180-day lock-up and market standoff agreements entered into prior to this offering and the lapse of our right of repurchase with respect to any unvested shares, if applicable.

Lock-up Agreements

We, all of our directors and officers and substantially all of our other stockholders have agreed not to sell or otherwise transfer or dispose of any of our securities for a period of 180 days from the date of this prospectus, subject to certain exceptions. Roth Capital Partners, as representative of the several underwriters, may permit early releases of shares subject to the lock-up agreements. See "Underwriting" for a description of the lock-up provisions.

Rule 144

In general, a person who has beneficially owned our restricted common shares for at least six months would be entitled to sell their securities subject only to the availability of current public information about us and subject to the lock-up agreements described above, provided that (a) such person is not deemed to have been one of our affiliates at the time of, or at any time during the ninety days preceding, a sale, and (b) we are subject to the Securities Exchange Act periodic reporting requirements for at least ninety days before the sale. In addition, under Rule 144, any person who is not an affiliate of ours and has beneficially owned their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell such shares immediately upon completion of this offering without regard to whether current public information about us is available. Persons who have beneficially owned restricted common shares for at least six months but who are our affiliates at the time of, or any time during the ninety days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell, upon expiration of the lock-up agreements

described above, within any three-month period only a number of shares that does not exceed the greater of either of the following:

- one percent of the number of common shares then outstanding, which will equal approximately shares immediately after this offering assuming no exercise of the underwriters' option to purchase additional shares, based on the number of common shares outstanding as of September 11, 2017; or
- the average weekly trading volume of common shares during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we are subject to the Securities Exchange Act periodic reporting requirements for at least ninety days before the sale. Such sales both by affiliates and by a person selling shares on behalf of our affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Rule 701

In general, Rule 701 permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions, including the holding period requirement, of Rule 144. Any employee, officer or director of or consultant to us who purchased shares under a written compensatory plan or contract before the date of this prospectus may be entitled to rely on the resale provisions of Rule 701. Rule 701 permits affiliates to sell their shares acquired pursuant to Rule 701 under Rule 144 without complying with the holding period requirements of Rule 144. Rule 701 further provides that non-affiliates may sell such shares in reliance on Rule 144 without having to comply with the holding period, public information, volume limitation or notice provisions of Rule 144. All holders of shares issued under Rule 701 are required to wait until ninety days after the date of this prospectus before selling such shares. All Rule 701 shares are, however, subject to lock-up agreements and will only become eligible for sale upon the expiration of the lock-up agreements.

Registration Rights

Upon completion of this offering, certain holders of shares of Class A common stock (including shares of Class A common stock issuable upon conversion of Class B common stock) will be entitled to incidental, or piggyback, rights with respect to the registration of the sale of these shares under the Securities Act. Registration of the sale of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See "Description of Capital Stock—Registration Rights" for additional information.

Equity Plan

We intend to file with the SEC one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock subject to outstanding stock options and common stock issued or issuable under our stock plan. We expect to file the registration statement covering shares offered pursuant to our stock plan shortly after the date of this prospectus, permitting the resale of such shares by non-affiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market subject to compliance with the resale provisions of Rule 144.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of the material U.S. federal income tax consequences of the ownership and disposition of Class A common stock to non-U.S. holders, as defined below, but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Internal Revenue Code, Treasury regulations promulgated thereunder, administrative rulings, and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance the IRS will agree with such statements and conclusions. This discussion assumes that the non-U.S. holder holds Class A common stock as a "capital asset" within the meaning of Internal Revenue Code Section 1221 (generally, property held for investment).

This summary also does not address the tax considerations arising under the laws of any foreign, state or local jurisdiction or any U.S. federal non-income tax laws other than U.S. federal estate tax laws to the limited extent described below. In addition, this discussion does not address tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules, including:

- banks, insurance companies, or other financial institutions;
- persons subject to the alternative minimum or net investment income tax;
- tax-exempt organizations;
- controlled foreign corporations, passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax;
- dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than five percent of the common stock (except to the extent specifically set forth below);
- certain former citizens or long-term residents of the U.S.;
- persons who hold Class A common stock as a position in a "hedging transaction," "straddle" "conversion transaction" or other risk reduction transaction;
- persons who do not hold Class A common stock as a capital asset within the meaning of Internal Revenue Code Section 1221; or
- persons deemed to sell Class A common stock under the constructive sale provisions of the Internal Revenue Code.

In addition, if a partnership or entity classified as a partnership for U.S. federal income tax purposes holds Class A common stock, the tax treatment of a partner generally will depend on the status of the partner and upon the activities of the partnership. Accordingly, partnerships that hold Class A common stock, and partners in such partnerships, should consult their tax advisors.

YOU ARE URGED TO CONSULT YOUR TAX ADVISOR WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO YOUR PARTICULAR SITUATION, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF CLASS A COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX RULES OR UNDER THE LAWS OF ANY STATE, LOCAL, FOREIGN OR OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

Non-U.S. Holder Defined

For purposes of this discussion, you are a non-U.S. holder if you are a holder other than a partnership or other entity classified as such for U.S. federal income tax purposes that, for U.S. federal income tax purposes, is not a U.S. person. For purposes of this discussion, you are a U.S. person if you are:

- an individual citizen or resident of the U.S.;
- a corporation or other entity taxable as a corporation created or organized in the U.S. or under the laws of the U.S. or any political subdivision thereof or otherwise treated as such for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (a) whose administration is subject to the primary supervision of a U.S. court and that has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (b) that has made an election to continue to be treated as a U.S. person.

Distributions

We do not plan to make any distributions on Class A common stock in the foreseeable future. If we do make future distributions on Class A common stock (other than certain pro rata distributions of Class A common stock), however, those payments will constitute dividends for U.S. tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, they will constitute a return of capital and will first reduce your basis in Class A common stock, but not below zero, and then will be treated as gain from the sale of stock.

Any dividend paid to you generally will be subject to U.S. withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty. In order to receive a reduced treaty rate, you must provide us with an IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate version of IRS Form W-8 certifying qualification for the reduced rate.

Dividends received by you that are effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, that are attributable to a permanent establishment (or, if you are an individual, a fixed base) maintained by you in the U.S.) are exempt from such withholding tax. In order to obtain this exemption, you must provide us with an IRS Form W-8ECI or other applicable IRS Form W-8 properly certifying such exemption. Such effectively connected dividends, although not subject to withholding tax, are taxed at the same graduated rates applicable to U.S. persons, net of certain deductions and credits. In addition, if you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty.

If you are eligible for a reduced rate of withholding tax pursuant to a tax treaty, you may generally obtain a refund of any excess amounts currently withheld if you timely file an appropriate claim for refund with the IRS. If you hold stock through a financial institution or other agent acting on your behalf, you will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through other intermediaries.

Dispositions

You generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of Class A common stock unless:

- the gain is effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, the gain is attributable to a permanent establishment (or, if you are an individual, a fixed base) maintained by you in the U.S.);

- you are an individual who is present in the U.S. for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met; or
- Class A common stock constitutes a U.S. real property interest by reason of our status as a U.S. real property holding corporation, or a USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or your holding period for Class A common stock.

We believe that we are not currently and will not become a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of our other business assets, however, there can be no assurance we will not become a USRPHC if we acquire real property in the future. Even if we become a USRPHC, however, as long as Class A common stock is regularly traded on an established securities market, Class A common stock will be treated as U.S. real property interests only if you actually or constructively hold more than five percent of such regularly traded common stock. Even if we become a USRPHC, however, as long as Class A common stock is regularly traded on an established securities market, Class A common stock will be treated as U.S. real property interests only if you actually or constructively hold more than five percent of such regularly traded Class A common stock.

If you are a non-U.S. holder described in the first bullet above, you will be required to pay tax on the net gain derived from the sale under regular graduated U.S. federal income tax rates, and corporate non-U.S. holders described in the first bullet above may also be subject to the branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. If you are an individual non-U.S. holder described in the second bullet above, you will be required to pay a flat 30% tax (or such lower rate specified by an applicable tax treaty) on the gain derived from the sale, which tax may be offset by U.S. source capital losses (even though you are not considered a resident of the U.S.). You should consult any applicable income tax treaties that may provide for different rules.

Backup Withholding and Information Reporting

Generally, we must report annually to the IRS the amount of dividends paid to you, your name and address, and the amount of tax withheld, if any, regardless of whether withholding was required. A similar report is sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence. Payments of dividends or of proceeds on the disposition of stock made to you may be subject to information reporting and backup withholding unless you establish an exemption, for example by properly certifying your non-U.S. status on an IRS Form W-8BEN or another appropriate version of IRS Form W-8. Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that you are a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

U.S. Federal Estate Taxes

Class A common stock owned or treated as owned by an individual who is a non-U.S. person (as specifically defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes and may be subject to U.S. federal estate tax, unless an applicable estate tax treaty provides otherwise.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Internal Revenue Code Sections 1471 to 1474, which are commonly referred to as the Foreign Account Tax Compliance Act or FATCA, on certain types of payments

made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a thirty-percent withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, Class A common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Internal Revenue Code), unless (a) the foreign financial institution undertakes certain diligence and reporting obligations, (b) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Internal Revenue Code) or furnishes identifying information regarding each substantial United States owner, or (c) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. Such certification or exemption must typically be evidenced by a non-U.S. holder's delivery of a properly executed IRS Form W-8BEN-E. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (a) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Internal Revenue Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on Class A common stock and will apply to payments of gross proceeds from the sale or other disposition of Class A common stock on or after January 1, 2019.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in Class A common stock.

Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and foreign tax consequences of purchasing, holding and disposing of Class A common stock, including the consequences of any proposed change in applicable laws.

UNDERWRITING

We have entered into an underwriting agreement with Roth Capital Partners, LLC, acting as the representative of the several underwriters named below, with respect to the shares of Class A common stock subject to this offering. Subject to certain conditions, we have agreed to sell to the underwriters, and the underwriters have severally agreed to purchase, the number of shares of Class A common stock provided below opposite their respective names.

Underwriter	Number of Shares
Roth Capital Partners, LLC	
Craig-Hallum Capital Group LLC	
The Benchmark Company, LLC	
Total	

The underwriters are offering the shares subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below.

Over-Allotment Option

We have granted the underwriters an option, exercisable for thirty days from the date of this prospectus, to purchase up to an aggregate of additional shares of Class A common stock to cover over-allotments, if any, at the public offering price set forth on the cover page of this prospectus, less the underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares offered by this prospectus. If the underwriters exercise this option, each underwriter will be obligated, subject to certain conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above for which the option has been exercised.

Discounts, Commissions and Expenses

The underwriters have advised us that they propose to offer the shares of Class A common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of $ per share. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of $ per share to certain brokers and dealers. After this offering, the initial public offering price, concession and reallowance to dealers may be changed by the representative. No such change shall change the amount of proceeds to be received by us as set forth on the cover page of this prospectus. The shares are offered by the underwriters as stated herein, subject to receipt and acceptance by them and subject to their right to reject any order in whole or in part. The underwriters have informed us that they do not intend to confirm sales to any accounts over which they exercise discretionary authority.

The following table shows the underwriting discounts and commissions payable to the underwriters by us in connection with this offering (assuming both the exercise and non-exercise of the over-allotment option that we have granted to the underwriters):

	Per Share	Total Without Exercise of Over-Allotment Option	Total With Exercise of Over-Allotment Option
Public offering price	$	$	$
Underwriting discounts and commissions(1)	$	$	$

(1) Does not include (a) the warrants to purchase shares of Class A common stock equal to 4.0% of the number of shares sold in the offering, excluding any shares purchased by PRC-based investors identified by us, to be issued to the underwriters at the closing, or (b) certain out-of-pocket expenses of the underwriters to be reimbursed by us.

We estimate that expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $. We have agreed to reimburse the underwriters at closing for (a) all reasonable attorneys' fees and expenses not to exceed $100,000 and (b) all other reasonable out-of-pocket fees and expenses.

In addition, we have agreed to issue warrants to the underwriters to purchase a number of shares of Class A common stock equal to 4.0% of the number of shares sold in this offering, excluding any shares purchased by PRC-based investors identified by us. These warrants will be exercisable upon issuance, will have an exercise price of $ and will terminate on the fifth anniversary of the effective date of the registration statement of which this prospectus is a part. The warrants and the underlying shares of Class A common stock have been deemed compensation by the Financial Industry Regulatory Authority, Inc., or FINRA, and are therefore subject to FINRA Rule 5110(g)(1). In accordance with FINRA Rule 5110(g)(1), neither the underwriter warrants nor any of our shares issued upon exercise of the underwriter warrants may be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such securities by any person, for a period of 180 days immediately following the date of effectiveness or commencement of sales of the offering pursuant to which the underwriter warrants are being issued, subject to certain exceptions.

We have also agreed to give Roth Capital Partners, LLC a right of first refusal to act as our lead underwriter or lead financial advisor or placement agent in any subsequent equity or equity-related financing for six months following the date of this prospectus.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act and liabilities arising from breaches of representations and warranties contained in the underwriting agreement, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

Lock-Up Agreements

We, our officers and directors and holders of substantially all of our capital stock have agreed, subject to certain exceptions, for a period of 180 days after the date of the underwriting agreement, not to offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of, directly or indirectly any shares of common stock or any option, warrant, right or other security exercisable or exchangeable for, convertible into or otherwise giving the holder thereof the right to obtain shares of common stock, except with the prior written consent of the representative. This agreement does not apply to any existing employee benefit plans.

Price Stabilization, Short Positions and Penalty Bids

In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act:

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of shares of Class A common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which it may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Penalty bids permit the representative to reclaim a selling concession from a syndicate member when the shares of Class A common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of the Class A common stock or preventing or retarding a decline in the market price of the Class A common stock. As a result, the price of the Class A common stock may be higher than the price that might otherwise exist in the open market. Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the Class A common stock. In addition, neither we nor the underwriters make any representations that the underwriters will engage in these stabilizing transactions or that any transaction, once commenced, will not be discontinued without notice.

Passive Market Making

In connection with this offering, the underwriters and any selling group members may engage in passive market making transactions in the Class A common stock on The NASDAQ Stock Market in accordance with Rule 103 of Regulation M under the Securities Exchange Act, during a period before the commencement of offers or sales of Class A common stock and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker’s bid that bid must then be lowered when specified purchase limits are exceeded.

Listing

We have applied to list the Class A common stock on the Nasdaq Global Market under the symbol “ACMR.”

Selling Restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Outside of the United States, persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions imposed by any applicable laws and regulations outside of the United States relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

European Economic Area

This prospectus does not constitute an approved prospectus under the Prospectus Directive and no such prospectus is intended to be prepared and approved in connection with this offering. Accordingly, in relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), an offer to the public of any shares of common stock which are the subject of the offering contemplated by this prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any shares of Class A common stock may be made at any time under the following exemptions under the Prospectus Directive, if and to the extent that they have been implemented in that Relevant Member State:

- to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representative of the underwriters for any such offer; or
- in any other circumstances which do not require any person to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of Class A common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of Class A common stock to be offered so as to enable an investor to decide to purchase any shares of Class A common stock, as the expression may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, and the expression "Prospectus Directive" means Directive 2003/71/EC (and any amendments thereto including the 2010 PD Amending Directive to the extent implemented in each Relevant Member State) and includes any relevant implementing measure in each Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, and has not been filed with, or approved by, the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, investors listed in the first addendum (the "Addendum") to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters purchasing for their own account, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum, as it may be amended from time to time. These investors may be required to submit written confirmation that they fall within the scope of the Addendum.

United Kingdom

This prospectus is not an approved prospectus for purposes of the UK Prospectus Rules, as implemented under the Prospectus Directive, and has not been approved under section 21 of the UK Financial Services and Markets Act 2000, as amended, or FSMA, by a person authorized under FSMA. The financial promotions contained in this prospectus are directed at, and this prospectus is only being distributed to, (a) persons who receive this prospectus outside of the United Kingdom, (b) persons in the United Kingdom who fall within the exemptions under articles 19 (investment professionals) and 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"), and (c) persons in the United Kingdom who fall within the exemption under article 49(2)(e) of the Order to whom this prospectus may otherwise be lawfully distributed (all such persons together being referred to as "Relevant Persons"). This prospectus must not be acted upon or relied upon by any person who is not a Relevant Person. Any investment or investment activity to which this prospectus relates is available only to Relevant Persons and will be engaged in only with Relevant Persons. This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other person that is not a Relevant Person.

Each underwriter has represented, warranted and agreed that:

- it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) in connection with the issue or sale of any of the shares of Class A common stock in circumstances in which section 21(1) of FSMA does not apply; and
- it has complied with and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the shares of Class A common stock in, from or otherwise involving the United Kingdom.

Hong Kong

The underwriters and each of their affiliates have not (1) offered or sold, and will not offer or sell, in Hong Kong, by means of any document, any shares of Class A common stock other than (a) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance; and (2) issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere any advertisement, invitation or document relating to the shares of Class A common stock which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the shares of Class A common stock which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance and any rules made under that Ordinance. The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

The People's Republic of China

This prospectus may not be circulated or distributed in China and the Class A common stock may not be offered or sold, and will not offer or sell to any person for re-offering or resale directly or indirectly to any resident of China except pursuant to applicable laws, rules and regulations of China. For the purpose of this paragraph only, China does not include Taiwan and the special administrative regions of Hong Kong and Macau.

Electronic Distribution

This prospectus in electronic format may be made available on websites or through other online services maintained by one or more of the underwriters, or by their affiliates. Other than this prospectus in electronic format, the information on any underwriter's website and any information contained in any other website maintained by an underwriter is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

Other

From time to time, certain of the underwriters and/or their affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received and, may in the future receive, customary fees. In the course of their businesses, the underwriters and their affiliates may actively trade our securities or loans for their own account or for the accounts of customers, and, accordingly, the underwriters and their affiliates may at any time hold long or short positions in such securities or loans. Except for services provided in connection with this offering, no underwriter has provided any investment banking or other financial services to us during the 180-day period preceding the date of this prospectus and we do not expect to retain any underwriter to perform any investment banking or other financial services for at least 90 days after the date of this prospectus.

LEGAL MATTERS

The validity of the Class A common stock being offered will be passed upon for us by K&L Gates LLP, Boston, Massachusetts. Certain legal matters in connection with this offering will be passed upon for the underwriters by Goodwin Procter LLP, New York, New York.

EXPERTS

BDO China Shu Lun Pan Certified Public Accountants LLP, our independent registered public accounting firm in the PRC, has audited our consolidated financial statements at, and for the years ended, December 31, 2016 and 2015, as set forth in their report included elsewhere herein. We have included our consolidated financial statements in this prospectus and the registration statement in reliance on said firm's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the Class A common stock we are offering. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and Class A common stock, we refer you to the registration statement, including the exhibits and the consolidated financial statements and notes filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The exhibits to the registration statement should be reviewed for the complete contents of these contracts and documents.

A copy of the registration statement, including the exhibits and the consolidated financial statements and notes filed as a part of the registration statement, may be inspected without charge at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549, and copies of all or any part of the registration statement may be obtained from the SEC upon the payment of fees prescribed by it. You may call the SEC at 1-800-SEC-0330 for more information on the operation of the public reference facilities. The SEC maintains a website at http://www.sec.gov that contains reports, proxy and information statements and other information regarding companies, including ACM, that file electronically with it.

Upon completion of this offering, we will be subject to the information reporting requirements of the Securities Act and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We also maintain a website at www.acmrcsh.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus or in deciding whether to purchase shares of Class A common stock.

ACM RESEARCH, INC.

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of
ACM Research, Inc.

We have audited the accompanying consolidated balance sheets of ACM Research, Inc. and its subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive income, changes in redeemable convertible preferred stock and stockholders' equity (deficit), and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company at December 31, 2016 and 2015, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO China Shu Lun Pan Certified Public Accountants LLP

Shenzhen, the People's Republic of China
September 13, 2017

ACM RESEARCH, INC.
Consolidated Balance Sheets

	June 30, 2017	December 31, 2016	December 31, 2015	Pro Forma June 30, 2017
	(unaudited)	(in thousands, except share and per share data)		(unaudited)
Assets				
Current assets:				
Cash and cash equivalents	$ 13,206	$10,119	$ 4,401	$ 13,206
Accounts receivable, less allowance for doubtful accounts of $0 (unaudited), $0 and $116 as of June 30, 2017 and December 31, 2016 and 2015, respectively (note 3)	12,310	16,026	12,070	12,310
Other receivables	2,220	1,763	1,224	2,220
Inventory (note 4)	14,106	11,666	9,146	14,106
Prepaid expenses	1,382	720	1,100	1,382
Other current assets	816	53	7	816
Total current assets	44,040	40,347	27,948	44,040
Property, plant and equipment, net (note 5)	2,233	2,262	1,770	2,233
Intangible assets, net	41	17	1	41
Deferred tax assets (note 17)	1,123	1,841	2,432	1,123
Total assets	$ 47,437	$44,467	$ 32,151	$ 47,437
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)				
Current liabilities:				
Short-term borrowings (note 6)	$ 4,584	$ 4,761	$ 6,854	$ 4,584
Notes payable (including related-party notes of $4 (unaudited), $4 and $768 as of June 30, 2017 and December 31, 2016 and 2015, respectively (note 12)) (note 8)	11	11	2,837	11
Investors' deposits (note 9)	—	2,902	—	—
Warrant liability (note 10)	2,970	—	—	2,970
Accounts payable	8,225	5,173	2,094	8,225
Advances from customers	—	215	4,635	—
Income taxes payable	44	44	44	44
Other payables and accrued expenses (including amounts due to a related-party of $1,982 (unaudited), $1,883 and $2,070 as of June 30, 2017 and December 31, 2016 and 2015, respectively (note 12)) (note 7)	4,773	3,963	4,103	4,773
Total current liabilities	20,607	17,069	20,567	20,607
Other long-term liabilities (note 11)	7,276	6,879	7,187	7,276
Total liabilities	27,883	23,948	27,754	27,883
Commitments and contingencies (Note 18)				
Redeemable convertible preferred stock, with par value $0.0001 as of June 30, 2017 and December 31, 2016 and without par value as of December 31, 2015:				
Series A: 385,000 shares authorized, issued and outstanding as of June 30, 2017 (unaudited) and December 31, 2016 and 2015 (liquidation value of $308 at June 30, 2017 (unaudited) and December 31, 2016 and 2015); and no shares authorized, issued or outstanding pro forma as of June 30, 2017 (unaudited)	288	288	288	—
Series B: 1,572,000 shares authorized, issued and outstanding as of June 30, 2017 (unaudited) and December 31, 2016 and 2015 (liquidation value of $1,572 at June 30, 2017 (unaudited) and December 31, 2016 and 2015) and no shares authorized, issued or outstanding pro forma as of June 30, 2017 (unaudited)	1,572	1,572	1,572	—
Series C: 1,360,962 shares authorized, issued and outstanding as of June 30, 2017 (unaudited) and December 31, 2016 (liquidation value of $2,041 at June 30, 2017 (unaudited) and December 31, 2016); 1,400,000 shares authorized and 1,360,962 shares issued and outstanding as of December 31, 2015 (liquidation value of $2,041); and no shares authorized, issued or outstanding, pro forma as of June 30, 2017 (unaudited)	2,041	2,041	2,041	—
Series D: 2,659,975 shares authorized and 1,326,642 shares issued and outstanding as of June 30, 2017 (unaudited) and December 31, 2016 (liquidation value of $4,975 at June 30, 2017 (unaudited) and December 31, 2016); 4,800,000 shares authorized and 1,326,642 shares issued and outstanding as of December 31, 2015 (liquidation value of $4,975); and no shares authorized, issued or outstanding, pro forma as of June 30, 2017 (unaudited)	4,975	4,975	4,975	—
Series E: 10,718,530 shares authorized and no shares issued or outstanding as of June 30, 2017 (unaudited) and December 31, 2016; and no shares authorized, issued or outstanding as of December 31, 2015 and pro forma as of June 30, 2017 (unaudited)	—	—	—	—
Series F: 6,000,000 shares authorized and 3,663,254 shares issued and outstanding as of June 30, 2017 (unaudited) and December 31, 2016 (liquidation value of $9,158 at June 30, 2017 (unaudited) and December 31, 2016); and no shares authorized, issued or outstanding as of December 31, 2015 and pro forma as of June 30, 2017 (unaudited)	9,158	9,158	—	—
Total redeemable convertible preferred stock (note 15)	18,034	18,034	8,876	—
Stockholders' equity (deficit):				
Common stock (before redomestication), without par value: no shares authorized, issued or outstanding as of June 30, 2017 (unaudited) and December 31, 2016; 100,000,000 shares authorized and 2,047,403 shares issued and outstanding as of December 31, 2015; and no shares authorized, issued or outstanding pro forma as of June 30, 2017 (unaudited) (note 14)	—	—	280	—
Common stock – Class A (after redomestication), with par value $0.0001: 100,000,000 shares authorized and 2,627,293 shares issued and outstanding as of June 30, 2017 (unaudited); 100,000,000 shares authorized and 2,228,740 shares issued and outstanding as of December 31, 2016; no shares authorized, issued or outstanding as of December 31, 2015; 100,000,000 shares authorized and 5,595,928 shares issued and outstanding pro forma as of June 30, 2017 (unaudited) (note 14)	1	1	—	1
Common stock – Class B (after redomestication), with par value $0.0001: 7,303,533 shares authorized and 2,409,738 shares issued and outstanding as of June 30, 2017 (unaudited) and December 31, 2016; no shares authorized, issued or outstanding as of December 31, 2015; and 7,303,533 shares authorized and 2,409,738 shares issued and outstanding pro forma as of June 30, 2017 (unaudited) (note 14)	1	1	—	1
Additional paid in capital	9,346	7,620	2,243	27,380
Accumulated deficit	(12,390)	(9,643)	(10,675)	(12,390)
Accumulated other comprehensive loss	(247)	(413)	(84)	(247)
Total ACM Research, Inc. stockholders' (deficit) equity	(3,289)	(2,434)	(8,236)	14,745
Non-controlling interests	4,809	4,919	3,757	4,809
Total stockholders' equity (deficit)	1,520	2,485	(4,479)	19,554
Total liabilities, redeemable convertible preferred stock and stockholders' equity	$ 47,437	$44,467	$ 32,151	$ 47,437

The accompanying notes are an integral part of these consolidated financial statements.

ACM RESEARCH, INC.
Consolidated Statements of Operations and Comprehensive Income (Loss)

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(unaudited)		*(in thousands, except share and per share data)*	
Revenue	$ 14,423	$ 8,122	$ 27,371	$ 31,206
Cost of revenue	8,570	5,292	14,042	17,085
Gross profit	5,853	2,830	13,329	14,121
Operating expenses:				
Sales and marketing	2,583	1,818	3,907	4,213
Research and development	1,867	1,486	3,259	2,942
General and administrative	3,158	1,089	2,673	2,103
Total operating expenses, net	7,608	4,393	9,839	9,258
Income (loss) from operations	(1,755)	(1,563)	3,490	4,863
Interest income	5	6	16	17
Interest expense	(164)	(51)	(181)	(122)
Other income (expense), net	(292)	506	(343)	632
Income (loss) before income taxes	(2,206)	(1,102)	2,982	5,390
Income tax (expense) benefit (note 17)	(749)	73	(595)	2,525
Net income (loss)	(2,955)	(1,029)	2,387	7,915
Less: Net income (loss) attributable to non-controlling interests	(208)	(476)	1,356	2,535
Net income (loss) attributable to ACM Research, Inc.	$ (2,747)	$ (553)	$ 1,031	$ 5,380
Comprehensive income (loss):				
Net income (loss)	$ (2,955)	$ (1,029)	$ 2,387	$ 7,915
Foreign currency translation adjustment	264	(133)	(522)	(283)
Comprehensive income (loss)	(2,691)	(1,162)	1,865	7,632
Less: Comprehensive income (loss) attributable to non-controlling interests	(110)	(526)	1,161	2,430
Total comprehensive income (loss) attributable to ACM Research, Inc. (note 2)	$ (2,581)	$ (636)	$ 704	$ 5,202
Net income (loss) per common share (note 2):				
Basic	$ (0.56)	$ (0.27)	$ 0.30	$ 1.50
Diluted	$ (0.56)	$ (0.27)	$ 0.18	$ 0.97
Weighted-average common shares outstanding used in computing per share amounts (note 2):				
Basic	4,927,973	2,061,339	2,176,315	2,047,383
Diluted	4,927,973	2,061,339	3,792,137	3,144,120
Pro forma net income (loss) per common share (note 2):				
Basic	$ (0.35)		$ 0.20	
Diluted	$ (0.35)		$ 0.15	
Pro forma weighted-average common shares outstanding used in computing per share amounts (note 2):				
Basic	7,889,818		5,137,211	
Diluted	7,889,818		6,753,033	

The accompanying notes are an integral part of these consolidated financial statements.

ACM RESEARCH, INC.
Consolidated Statement of Changes in Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)

	Redeemable Convertible Preferred Stock											Common Stock		Common Stock Class A		Common Stock Class B		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Non-controlling Interest	Total Stockholders' Deficit
	Series A		Series B		Series C		Series D		Series F		Total											
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Amount	Shares	Amount	Shares	Amount	Shares	Amount					
	(in thousands, except share data)																					
Balance at January 1, 2015	385,000	$ 288	1,572,000	$ 1,572	1,360,962	$ 2,041	1,326,642	$ 4,975	—	$ —	$ 8,876	2,047,403	$ 280	—	$ —	—	$ —	$ 1,820	$ (16,055)	$ 94	$ 1,327	$ (12,534)
Net income	—	—	—	—	—	—	—	—	—	—	—			—	—	—	—	—	5,380	—	2,535	7,915
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(178)	(105)	(283)
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	423	—	—	—	423
Balance at December 31, 2015	385,000	288	1,572,000	1,572	1,360,962	2,041	1,326,642	4,975	—	—	8,876	2,047,403	280	—	—	—	—	2,243	(10,675)	(84)	3,757	(4,479)
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	—	1,356	2,387
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(329)	(193)	(522)
Redomestication	—	—	—	—	—	—	—	—	—	—	—	(2,047,403)	(280)	—	—	2,047,403	1	279	—	—	—	—
Issuance of stock	—	—	—	—	—	—	—	—	3,615,800	9,039	9,039	—	—	—	—	—	—	—	—	—	—	—
Debt conversion	—	—	—	—	—	—	—	—	47,454	119	119	—	—	1,812,069	1	—	—	4,131	—	—	—	4,132
Exercise of stock option	—	—	—	—	—	—	—	—	—	—	—	—	—	416,671	—	362,335	—	584	—	—	—	584
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	383	—	—	—	383
Balance at December 31, 2016	385,000	$ 288	1,572,000	$ 1,572	1,360,962	$ 2,041	1,326,642	$ 4,975	3,663,254	$ 9,158	$ 18,034	—	$ —	2,228,740	$ 1	2,409,738	$ 1	$ 7,620	$ (9,643)	$ (413)	$ 4,919	$ 2,485
Net loss (unaudited)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(2,747)	—	(208)	(2,955)
Foreign currency translation adjustment (unaudited)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	166	98	264
Exercise of stock option (unaudited)	—	—	—	—	—	—	—	—	—	—	—	—	—	398,553	0	—	—	378	—	—	—	378
Stock-based compensation (unaudited)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,348	—	—	—	1,348
Balance at June 30, 2017 (unaudited)	385,000	$ 288	1,572,000	$ 1,572	1,360,962	$ 2,041	1,326,642	$ 4,975	3,663,254	$ 9,158	$ 18,034	—	—	2,627,293	$ 1	2,409,738	$ 1	$ 9,346	$ (12,390)	$ (247)	$ 4,809	$ 1,520

The accompanying notes are an integral part of these consolidated financial statements.

ACM RESEARCH, INC.
Consolidated Statements of Cash Flows

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
	(unaudited)		*(in thousands)*	
Cash flows from operating activities:				
Net income (loss)	$ (2,955)	$ (1,029)	$ 2,387	$ 7,915
Adjustments to reconcile net income (loss) from operations to net cash provided by operating activities:				
Depreciation and amortization	118	88	187	160
Loss on disposals of fixed assets, intangible assets and other long-term assets	—	3	3	—
Net loss from debt conversion and interest waiver	—	—	1,608	—
Deferred income taxes	747	(74)	436	(2,432)
Stock-based compensation	1,348	193	383	423
Net changes in operating assets and liabilities:				
Accounts receivable	4,095	11,441	(4,724)	(7,429)
Other receivables	(413)	(181)	(621)	365
Inventory	(2,189)	(1,771)	(3,055)	(2,097)
Prepaid expenses	(631)	339	219	(530)
Other current assets	(762)	(5)	(47)	(35)
Accounts payable	2,921	970	3,177	(2,618)
Advances from customers	(236)	(4,521)	(4,078)	4,599
Income taxes payable	—	—	—	44
Other payables and accrued expenses	704	(432)	276	1,110
Other long-term liabilities	236	(282)	147	3,227
Net cash provided by operating activities	2,983	4,739	(3,702)	2,702
Cash flows from investing activities:				
Purchase of property and equipment	(26)	(102)	(795)	(1,371)
Purchase of intangible assets	(36)	(9)	(22)	—
Proceed from disposal of property and equipment	—	7	7	—
Net cash used in investing activities	(62)	(104)	(810)	(1,371)
Cash flows from financing activities:				
Proceeds from short-term borrowings	4,584	739	5,918	11,879
Repayments of short-term borrowings	(4,861)	(3,770)	(7,575)	(9,605)
Investors' deposit	—	—	2,902	—
Proceeds from potential future investment from related party	—	3,318	—	—
Proceeds from stock option exercise to common stock	378	28	410	—
Proceeds from issuance of Series F convertible preferred stock	—	—	9,040	—
Repayments of notes payable	—	—	(141)	—
Net cash provided by financing activities	101	315	10,554	2,274
Effect of exchange rate changes on cash and cash equivalents	65	238	(324)	(378)
Net increase in cash and cash equivalents	3,087	5,188	5,718	3,227
Cash and cash equivalents at beginning of period	10,119	4,401	4,401	1,174
Cash and cash equivalents at end of period	$13,206	$ 9,589	$10,119	$ 4,401
Supplemental disclosure of cash flow information:				
Interest paid	$ 164	$ 111	$ 181	$ 290
Income taxes refund	$ —	$ —	$ —	$ 33
Non-cash financing activities:				
Debt conversion to Class A common stock	—	—	$ 1,486	$ —
Debt conversion to Series F convertible preferred stock	$ —	$ —	$ 119	$ —
Exercise of stock option in lieu of the cash repayment of notes payable	—	—	$ 174	$ —

The accompanying notes are an integral part of these consolidated financial statements.

ACM RESEARCH, INC.
Notes to Consolidated Financial Statements
(Information as of June 30, 2017 and for the six months ended June 30, 2017 and 2016 is unaudited)
(in thousands, except share and per share data)

NOTE 1 – DESCRIPTION OF BUSINESS

ACM Research, Inc. ("ACM") and its subsidiaries (ACM and such subsidiaries collectively, the "Company") develop, manufacture and sell single-wafer wet cleaning equipment used to improve the manufacturing process and yield for advanced integrated chips. The Company markets and sells, under the brand name "Ultra C," lines of equipment based on the Company's proprietary Space Alternated Phase Shift ("SAPS") and Timely Energized Bubble Oscillation ("TEBO") technologies. These tools are designed to remove random defects from a wafer surface efficiently, without damaging the wafer or its features, even at increasingly advanced process nodes.

ACM was incorporated in California in 1998, and it initially focused on developing tools for manufacturing process steps involving the integration of ultra low-K materials and copper. The Company's early efforts focused on stress-free copper-polishing technology, and it sold tools based on that technology in the early 2000s.

In 2006, the Company established its operational center in Shanghai in the People's Republic of China (the "PRC"), where it operates through ACM's subsidiary ACM Research (Shanghai), Inc. ("ACM Shanghai"). The establishment of ACM Shanghai was made to help the Company establish and build relationships with integrated circuit manufacturers in the PRC, and the Company financed its Shanghai operations in part through sales of a non-controlling equity interest in ACM Shanghai.

In 2007, the Company began to focus its development efforts on single-wafer wet-cleaning solutions for the front-end chip fabrication process. The Company introduced its SAPS megasonic technology, which can be applied in wet wafer cleaning at numerous steps during the chip fabrication process, in 2009. It introduced its TEBO technology, which can be applied at numerous steps during the fabrication of small node two-dimensional conventional and three-dimensional patterned wafers, in March 2016.

In 2011, ACM Shanghai formed a wholly owned subsidiary in the PRC, ACM Research (Wuxi), Inc. ("ACM Wuxi"), to manage sales and service operations.

In November 2016, ACM redomesticated from California to Delaware pursuant to a merger (the "Merger") in which ACM Research, Inc., a California corporation, was merged into a newly formed, wholly owned Delaware subsidiary, also named ACM Research, Inc.

In June 2017, ACM Research, Inc. formed a wholly owned subsidiary in Hong Kong, CleanChip Technologies Limited ("CleanChip"), to act on the Company's behalf in Asian markets outside the PRC by, for example, serving as a trading partner between ACM Shanghai and its customers, procuring raw materials and components, performing sales and marketing activities, and making strategic investments.

The Company has designed its equipment models for SAPS and TEBO solutions using a modular configuration that enables it to create a wet-cleaning tool meeting the specific requirements of a customer, while using pre-existing designs for chamber, electrical, chemical delivery and other modules. The Company also offers a range of custom-made equipment, including cleaners, coaters and developers, to back-end wafer assembly and packaging factories, principally in the PRC.

As of June 30, 2017 and December 31, 2016 and 2015, ACM owned 62.9% of the outstanding equity interests of ACM Shanghai. As a result, ACM, indirectly through ACM Shanghai, owned 62.9% of the outstanding equity interests of ACM Wuxi as of June 30, 2017 and December 31, 2016 and 2015.

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NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). Significant accounting policies followed by the Company in the preparation of the accompanying consolidated financial statements are summarized below.

Principles of Consolidation

The consolidated financial statements include the financial statements of ACM and its subsidiaries, ACM Shanghai, ACM Wuxi and CleanChip. Subsidiaries are those entities in which ACM, directly and indirectly, controls more than one half of the voting power. All significant intercompany transactions and balances have been eliminated upon consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date and the reported revenues and expenses during the reported period in the consolidated financial statements and accompanying notes. The Company's significant accounting estimates and assumptions include, but are not limited to, those used for the valuation and recognition of stock-based compensation arrangements and warrant liability, realization of deferred tax assets, assessment for impairment of long-lived assets, allowance for doubtful accounts, inventory valuation for excess and obsolete inventories, lower of cost and market value or net realizable value of inventories, depreciable lives of property and equipment, and useful life of intangible assets.

Management evaluates these estimates and assumptions on a regular basis. Actual results could differ from those estimates and assumptions.

Unaudited Interim Consolidated Financial Statements

The unaudited interim consolidated financial statements consist of an unaudited consolidated balance sheet as of June 30, 2017, unaudited consolidated statements of operations and comprehensive loss and cash flows for the six months ended June 30, 2017 and 2016, unaudited consolidated statement of changes in redeemable convertible preferred stock and stockholders' equity for the six months ended June 30, 2017, and the related unaudited footnote disclosures. The unaudited interim consolidated financial statements have been prepared on the same basis as the annual consolidated financial statements and, in the opinion of management, contain all adjustments, consisting only of normal recurring adjustments, necessary to present fairly the financial position, operating results and cash flows of the Company for each of the periods presented. It does not include all the information and footnotes required by GAAP for complete financial statements. The balance sheet as of June 30, 2017 and the operating results for the six months ended June 30, 2017 are not necessarily indicative of the results of operations that may be expected for the year ending December 31, 2017 or any other future period.

Reverse Stock Split

On September 13, 2017, ACM effected a 1-for-3 reverse stock split (the "Reverse Split") of Class A and Class B common stock (note 20). Unless otherwise indicated, all share numbers, per share amount, share prices,

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exercise prices and conversion rates set forth in those notes and the accompanying consolidated financial statements have been adjusted retrospectively to reflect the Reverse Split.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, bank deposits that are unrestricted as to withdrawal and use, and highly liquid investments with an original maturity date of three months or less at the date of purchase. At times, cash deposits may exceed government-insured limits.

Accounts Receivable

Accounts receivable are presented net of an allowance for doubtful accounts. The Company reviews its accounts receivable on a periodic basis and makes general and specific allowances when there is doubt as to the collectability of individual balances. In evaluating the collectability of individual receivable balances, the Company considers many factors, including the age of the balance, a customer's historical payment history and credit worthiness, and current economic trends. Accounts are written off after all collection efforts have been exhausted. At June 30, 2017 and December 31, 2016 and 2015, the Company had established, based on a review of its outstanding balances, an allowance for doubtful accounts in the amounts of $0, $0 and $116, respectively.

Inventory

Inventory consists of raw materials and related goods, work-in-progress, finished goods, and other consumable materials such as spare parts. Finished goods typically are shipped from the Company's warehouse within one month of completion.

Inventory was recorded at the lower of cost or net realizable value at June 30, 2017 and at the lower of cost or market value at December 31, 2016 and 2015.

- The cost of a general inventory item is determined using the weighted moving average method. Under the weighted moving average method, the Company calculates the new average price of all items of a particular inventory stock each time one or more items of that stock are purchased. The then-current average price of the stock is used for purposes of determining cost of inventory or cost of revenue. The cost of an inventory item purchased specifically for a customized product is determined using the specific identification method. Low-cost consumable materials and packaging materials are expensed as incurred.
- Market value is determined as the lower of replacement cost or net realizable value.
- Net realizable value is the estimated selling price, in the ordinary course of business, less estimated costs to complete or dispose.

The Company assesses the recoverability of all inventories quarterly to determine if any adjustments are required. Potential excess or obsolete inventory is written off based on management's analysis of inventory levels and estimates of future 12-month demand and market conditions.

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Deferred Initial Public Offering ("IPO") Costs

Direct costs incurred by the Company attributable to its proposed IPO of Class A common stock in the United States have been deferred and recorded in other current assets and will be offset against the gross proceeds received from the IPO. At June 30, 2017 and December 30, 2016 and 2015, deferred IPO costs were $797, $41 and $0, respectively.

Property, Plant and Equipment, Net

Property, plant and equipment are recorded at cost less accumulated depreciation and any provision for impairment in value. Depreciation begins when the asset is placed in service and is calculated by using the straight-line method over the estimated useful life of an asset (or, if shorter, over the lease term). Betterments or renewals are capitalized when incurred. Plant, property and equipment is reviewed each year to determine whether any events or circumstances indicate that the carrying amount of the assets may not be recoverable.

Estimated useful lives of assets in the United States are as follows:

Computer and office equipment	3 to 5 years
Furniture and fixtures	5 years
Leasehold improvements	shorter of lease term or estimated useful life

ACM's subsidiaries follow regulations for depreciation of fixed assets implemented under the PRC's Enterprise Income Tax Law, which state that the minimum useful lives used for calculating depreciation for fixed assets are as follows:

Manufacturing equipment	for small to medium-sized equipment, 5 years; for large equipment, estimated by purchasing department at time of acceptance
Furniture and fixtures	5 years
Transportation equipment	4 to 5 years
Electronic equipment	3 years
Leasehold improvements	remaining lease term for improvements on leased fixed assets or, for large improvements, estimated useful life; not less than 3 years for non-fixed asset repairs

Expenditures for maintenance and repairs that neither materially add to the value of the property nor appreciably prolong the life of the property are charged to expense as incurred. Upon retirement or sale of an asset, the cost of the asset and the related accumulated depreciation are eliminated from the accounts and any resulting gain or loss is credited or charged to income.

Intangible Assets, Net

Intangible assets consist of software used for finance, manufacturing, and research and development purposes. Assets are valued at cost at the time of acquisition and are amortized over their beneficial periods. If a contract specifies a beneficial period, then the intangible asset is amortized over a term not exceeding the beneficial period. If the contract does not specify a beneficial period, then the intangible asset is amortized over a term not exceeding the valid period specified by local law. If neither the contract nor local law specifies a beneficial period, then the intangible asset is amortized over a period of up to 10 years. Currently, the software that the Company uses is amortized over a two-year period in accordance with the policy described above.

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Valuation of Long-Lived Assets

Long-lived assets are evaluated for impairment whenever events or changes in circumstance indicate that the carrying value of the assets may not be fully recoverable or that the useful life of the assets is shorter than the Company had originally estimated. When these events or changes occur, the Company evaluates the impairment of the long-lived assets by comparing the carrying value of the assets to an estimate of future undiscounted cash flows expected to be generated from the use of the assets and their eventual disposition. If the sum of the expected future undiscounted cash flow is less than the carrying value of the assets, the Company recognizes an impairment loss based on the excess of the carrying value over the fair value. No impairment charge was recognized for either of the periods presented.

Leases

Each lease is classified at the inception date as either a capital lease or an operating lease. For the lessee, a lease is a capital lease if any of the following conditions exist: (a) ownership is transferred to the lessee by the end of the lease term; (b) there is a bargain purchase option; (c) the lease term is at least 75% of the property's estimated remaining economic life; or (d) the present value of the minimum lease payments at the beginning of the lease term is 90% or more of the fair value of the leased property to the leasor at the inception date. A capital lease is accounted for as if there was an acquisition of an asset and an incurrence of an obligation at the inception of the lease. All other leases are accounted for as operating leases. Payments made under operating leases are charged to the consolidated statements of operations and comprehensive income on a straight-line basis over the terms of underlying lease. The Company had no capital lease for either of the periods presented.

Redeemable Convertible Preferred Stock

The Company recorded each series of convertible preferred stock at fair value on the date of issuance, net of issuance costs. The convertible preferred stock is recorded outside of stockholders' equity (deficit) because, in the event of certain deemed liquidation events considered not solely within the Company's control (such as a merger, acquisition, or sale of all or substantially all of the Company's assets), the convertible preferred stock will become redeemable at the option of the holders. The Company has not adjusted the carrying value of any series of convertible preferred stock to the liquidation preference of such series because it is uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of convertible preferred stock. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a liquidation event will occur.

Revenue Recognition

The Company recognizes revenue when all the following conditions are met:

- there is persuasive evidence of an arrangement;
- the product delivery has occurred and the Company has transferred major risks and remunerations over the ownership of the product to the buyer or a service has been fully rendered and completed;
- the collection of the receivable is probable; and
- the amount of the payment is fixed or determinable.

The Company derives revenue principally from sales of semiconductor capital equipment. In general, the Company recognizes revenue when the product has been demonstrated to meet the predetermined specifications

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and is accepted by the customer. If terms of the sale provide for a lapsing customer acceptance period, the Company recognizes revenue upon the earlier of the expiration of the lapsing acceptance period and customer acceptance. In the following circumstances, however, the Company recognizes revenue upon shipment or delivery, when the legal title of the product is passed to a customer:

- when the customer has previously accepted the same tool with the same specifications and when the Company can objectively demonstrate that the tool meets all of the required acceptance criteria;
- when the sales contract or purchase order contains no acceptance agreement or no lapsing acceptance provision and when the Company can objectively demonstrate that the tool meets all of the required acceptance criteria;
- when the customer withholds acceptance due to issues unrelated to product performance, in which case revenue is recognized when the system is performing as intended and meets predetermined specifications; or
- the Company's sales arrangements do not include a general right of return.

Customization, production, installation and delivery are essential elements of the functionality of a delivered machine; the services offered, principally the warranty, are not essential to the functionality of the machine. The Company treats the customization, production, installation and delivery of machines, together with the provision of related warranty and other services, as a single unit of accounting in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Subtopic 605-25, *Revenue Recognition – Multiple-Element Arrangements*. All of the Company's products were sold in stand-alone arrangements during the six months ended June 30, 2017 and the years ended December 31, 2016 and 2015.

After the warranty period has expired, the Company will also provide customers with post-warranty services, which mainly include the installation and replacement of parts and small-scale modifications to the existing products. The related revenue and costs are recognized as revenue and cost of revenue, respectively, when the parts have been delivered and installed, risk of loss has passed to the customer, and collection of the resulting receivable is probable.

Cost of Revenue

Cost of revenue primarily consists of: direct materials, comprised principally of parts used in assembling equipment, together with crating and shipping costs; direct labor, including salaries and other labor related expenses attributable to the Company's manufacturing department; and allocated overhead cost, such as personnel cost, depreciation expense, and allocated administrative costs associated with supply chain management and quality assurance activities, as well as shipping insurance premiums.

Research and Development Costs

Research and development costs relating to the development of new products and processes, including significant improvements and refinements to existing products or to the process of supporting customer evaluations of tools, including the development of new tools for evaluation by customers during the product demonstration process, are expensed as incurred.

Shipping and Handling Costs

Shipping and handling costs, which relate to transportation of products to customer locations, are charged to selling and marketing expense. For the six months ended June 30, 2017 and 2016 and the years ended

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December 31, 2016 and 2015, shipping and handling costs included in sales and marketing expense were $48, $16, $75 and $15, respectively.

Borrowing Costs

Borrowing costs attributable directly to the acquisition, construction or production of qualifying assets that require a substantial period of time to be ready for their intended use or sale are capitalized as part of the cost of those assets. Income earned on temporary investments of specific borrowings pending their expenditure on those assets is deducted from borrowing costs capitalized. All other borrowing costs are recognized in interest expenses in the consolidated statements of operations and comprehensive income in the period in which they are incurred. No borrowing costs were capitalized for the six months ended June 30, 2017 or the years ended December 31, 2016 and 2015.

Warranty

For each of its products, the Company generally provides a warranty ranging from 12 to 36 months and covering replacement of the product during the warranty period. The Company accounts for the estimated warranty costs as sales and marketing expenses at the time revenue is recognized. Warranty obligations are affected by historical failure rates and associated replacement costs. Utilizing historical warranty cost records, the Company calculates a rate of warranty expenses to revenue to determine the estimated warranty charge. The Company updates these estimated charges on a regular basis. The following table shows changes in the Company's warranty obligations for the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015.

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
Balance at beginning of period	$ 290	$ 459	$ 459	$ 141
Additions	283	161	544	595
Utilized	(154)	(260)	(713)	(277)
Balance at end of period	$ 419	$ 360	$ 290	$ 459

Government Subsidies

ACM Shanghai has been awarded three subsidies from local and central governmental authorities in the PRC. The first subsidy, which was awarded in October 2008, relates to the development and commercialization of 65-45 nanometer Stress Free Polishing technology. The second subsidy was awarded in April 2009 to fund interest expenses for short-term borrowings. The third subsidy was awarded in January 2014 and relates to the development of Electro Copper Plating technology. The PRC governmental authorities will provide the majority of the funding, although ACM Shanghai is also required to invest certain amounts in the projects.

The government subsidies contain certain operating conditions and therefore are recorded as long-term liabilities upon receipt. The grant amounts are recognized in the statements of operations and comprehensive income:

- Government subsidies relating to current expenses are recorded as reductions of those expenses in the periods in which the current expenses are recorded. For the six months ended June 30, 2017 and 2016

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and the years ended December 31, 2016 and 2015, related government subsidies recognized as reductions of relevant expenses in the consolidated statements of operations and comprehensive income were $2,090, $1,976, $6,244 and $3,799, respectively.

- Government subsidies for short-term borrowings' interest expenses are reported as reductions of interest expenses in the period the interest is accrued, which were $0, $101, $99 and $303, respectively, for the six months ended June 30, 2017 and 2016 and years ended December 31, 2016 and 2015.
- Government subsidies related to depreciable
- assets are credited to income over the useful lives of the related assets for which the grant was received. For the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, related government subsidies recognized as other income in the consolidated statements of operations and comprehensive income were $65, $63, $127 and $105, respectively.

Unearned government subsidies received are deferred for recognition and recorded as other long-term liabilities (note 11) in the balance sheet until the criteria for such recognition are satisfied.

Stock-based Compensation

ACM grants stock options to employees and non-employee consultants and directors and accounts for those stock-based awards in accordance with FASB ASC Topic 718, *Compensation – Stock Compensation*, and FASB ASC Subtopic 505-50, *Equity-Based Payments to Non-Employees*.

Stock-based awards granted to employees are measured at the fair value of the awards on the grant date and are recognized as expenses either (a) immediately on grant, if no vesting conditions are required or (b) using the graded vesting method, net of estimated forfeitures, over the requisite service period. The fair value of stock options is determined using the Black-Scholes valuation model. Stock-based compensation expense, when recognized, is charged to the category of operating expense corresponding to the employee's service function.

Stock-based awards granted to non-employees are accounted for at the fair value of the awards at the earlier of (a) the date at which a commitment for performance by the non-employee to earn the awards is reached and (b) the date at which the non-employee's performance is complete. The fair value of such non-employee awards is re-measured at each reporting date using the fair value at each period end until the vesting date. Changes in fair value between the reporting dates are recognized by the graded vesting method.

Operating and Financial Risks

Concentration of Credit Risk

Financial instruments that potentially subject to credit risk consist principally of cash and cash equivalents and accounts receivable. The Company deposits and invests its cash with financial institutions that management believes are creditworthy.

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The Company is potentially subject to concentrations of credit risks in its accounts receivable. Four customers individually accounted for greater than ten percent of the Company's revenue for the year ended 2016 and two of those customers individually accounted for greater than ten percent of the Company's revenue in 2015:

	Year Ended December 31	
	2016	2015
Customer A	33.7%	*
Customer B	25.0	*
Customer C	24.0	86.0%
Customer D	16.6	10.1

* Customer accounted for less than 10% of revenue in the period.

Interest Rate Risk

As of June 30, 2017 and December 31, 2016 and 2015, the balance of bank borrowings (note 6) and notes payable (note 8) were short-term in nature, matured at various dates within the following year and did not expose the Company to interest rate risk.

Liquidity Risk

The Company's working capital at June 30, 2017 and December 31, 2016 was sufficient to meet its then-current requirements. The Company may, however, require additional cash due to changing business conditions or other future developments, including any investments or acquisitions the Company decides to pursue. In the long run, the Company intends to rely primarily on cash flows from operations and additional borrowings from financial institutions in order to meet its cash needs. If those sources are insufficient to meet cash requirements, the Company may seek to issue additional debt or equity.

Country Risk

The Company has significant investments in the PRC. The operating results of the Company may be adversely affected by changes in the political and social conditions in the PRC and by changes in Chinese government policies with respect to laws and regulations, anti-inflationary measures, currency conversion and remittance abroad, and rates and methods of taxation, among other things.

Foreign Currency Risk and Translation

The Company's consolidated financial statements are presented in U.S. dollars, which is the Company's reporting currency, while the functional currency of ACM's subsidiaries is the Chinese Renminbi ("RMB"). Changes in the relative values of U.S. dollars and Chinese RMB affect the Company's reported levels of revenues and profitability as the results of its operations are translated from RMB into U.S. dollars for reporting purposes. Because the Company has not engaged in any hedging activities, it cannot predict the impact of future exchange rate fluctuations on the results of its operations and it may experience economic losses as a result of foreign currency exchange rate fluctuations.

Transactions of ACM's subsidiaries involving foreign currencies are recorded in functional currency according to the rate of exchange prevailing on the date when the transaction occurs. The ending balances of the

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Company's foreign currency accounts are converted into functional currency using the rate of exchange prevailing at the end of each reporting period. Net gains and losses resulting from foreign exchange transactions are included in the consolidated statements of operations and comprehensive income. Total exchange gain was, respectively, $408 and $383 for the six months ended June 30, 2017 and 2016 and $746 and $659 for the years ended December 31, 2016 and 2015.

In accordance with FASB ASC Topic 830, *Foreign Currency Matters*, the Company translates assets and liabilities into U.S. dollars from RMB using the rate of exchange prevailing at the applicable balance sheet date and the consolidated statements of operations and comprehensive income and consolidated statements of cash flows are translated at an average rate during the reporting period. Adjustments resulting from the translation are recorded in stockholders' (deficit) equity as part of accumulated other comprehensive income (loss). Any differences between the initially recorded amount and the settlement amount are recorded as a gain or loss on foreign currency transaction in the consolidated statements of operations and comprehensive income.

Translations of amounts from RMB into U.S. dollars were made at the following exchange rates for the respective dates and periods:

Consolidated balance sheets:	
At June 30, 2017	RMB 6.7751 to $1.00
At December 31, 2016	RMB 6.9348 to $1.00
At December 31, 2015	RMB 6.4936 to $1.00
Consolidated statements of operations and comprehensive income:	
Six months ended June 30, 2017	RMB 6.8681 to $1.00
Six months ended June 30, 2016	RMB 6.5317 to $1.00
Year ended December 31, 2016	RMB 6.6401 to $1.00
Year ended December 31, 2015	RMB 6.2284 to $1.00

Income Taxes

The Company accounts for income taxes using the liability method whereby deferred tax asset and liability account balances are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company provides a valuation allowance, if necessary, to reduce deferred tax assets to their estimated realizable values.

In evaluating the ability to recover its deferred income tax assets, the Company considers all available positive and negative evidence, including its operating results, ongoing tax planning and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. In the event the Company determines that it would be able to realize its deferred income tax assets in the future in excess of their net recorded amount, it would make an adjustment to the valuation allowance that would reduce the provision for income taxes. Conversely, in the event that all or part of the net deferred tax assets are determined not to be realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period such determination is made.

Tax benefits related to uncertain tax positions are recognized when it is more likely than not that a tax position will be sustained during an audit. Interest and penalties related to unrecognized tax benefits are included within the provision for income tax.

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Basic and Diluted Net Income (Loss) per Common Share

Basic and diluted net income (loss) per common share are calculated as follows:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
Numerator:				
Net income (loss)	$ (2,955)	$ (1,029)	$ 2,387	$ 7,915
Net income (loss) attributable to non-controlling interest	(208)	(476)	1,356	2,535
Net income allocated to participating securities	—	—	386	2,317
Net income (loss) available to common stockholders, basic and diluted	$ (2,747)	$ (553)	$ 645	$ 3,063
Denominator:				
Weighted average shares outstanding, basic	4,927,973	2,061,339	2,176,315	2,047,383
Effect of dilutive securities: Stock options	—	—	1,615,822	1,096,737
Weighted average shares outstanding, diluted	4,927,973	2,061,339	3,792,137	3,144,120
Net income (loss) per common share:				
Basic	$ (0.56)	$ (0.27)	$ 0.30	$ 1.50
Diluted	$ (0.56)	$ (0.27)	$ 0.18	$ 0.97

Basic and diluted net income (loss) per common share is presented using the two-class method, which allocates undistributed earnings to common stock and any participating securities according to dividend rights and participation rights on a proportionate basis. Under the two-class method, basic net income (loss) per common share is computed by dividing the sum of distributed and undistributed earnings attributable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Shares of ACM's Series A, B, C, D and F convertible preferred stock are participating securities, as the holders are entitled to participate in and receive the same dividends as may be declared for common stockholders on a pro-rata, if-converted basis.

ACM has been authorized to issue Class A and Class B common stock since redomesticating in Delaware in November 2016. The two classes of common stock are substantially identical in all material respects, except for voting rights. Since ACM did not declare any dividends for the six months ended June 30, 2017 or the year ended December 31, 2016, the net income (loss) per common share attributable to each class is the same under the "two-class" method. As such, the two classes of common stock have been presented on a combined basis in the consolidated statements of operations and comprehensive (loss) income and in the above computation of net income (loss) per common share.

Diluted net income (loss) per common share reflects the potential dilution from securities that could share in ACM's earnings. All potential dilutive securities, including potentially dilutive convertible preferred stocks and stock options, if any, were excluded from the computation of dilutive net loss per common share for the six

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months ended June 30, 2017 and 2016, as their effects are antidilutive due to our net loss for those periods. The potentially dilutive securities that were not included in the calculation of diluted net income per share in the periods presented where their inclusion would be anti-dilutive are as follows:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
Series A convertible preferred stock	128,334	128,334	128,334	128,334
Series B convertible preferred stock	524,003	524,003	524,003	524,003
Series C convertible preferred stock	482,288	482,288	482,288	453,666
Series D convertible preferred stock	605,244	605,244	605,244	442,226
Series F convertible preferred stock	1,221,099	—	1,221,099	—
Stock options	3,489,959	2,996,686	1,424,596	—
Warrant	397,502	—	—	—
	6,848,429	4,736,555	4,385,564	1,548,229

Comprehensive Income (Loss) Attributable to the Company

The Company applies FASB ASC Topic 220, *Comprehensive Income*, which establishes standards for the reporting and display of comprehensive income or loss, requiring its components to be reported in a financial statement with the same prominence as other financial statements. The comprehensive income (loss) attributable to the Company was $(2,581), $(636), $704 and $5,202 for the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, respectively.

Appropriated Retained Earnings

The income of ACM's PRC subsidiaries is distributable to their shareholders after transfers to reserves as required under relevant PRC laws and regulations and the subsidiaries' Articles of Association. As stipulated by the relevant laws and regulations in the PRC, the PRC subsidiaries are required to maintain reserves, including reserves for statutory surpluses and public welfare funds that are not distributable to shareholders. A PRC subsidiary's appropriations to the reserves are approved by its board of directors. At least 10% of annual statutory after-tax profits, as determined in accordance with PRC accounting standards and regulations, is required to be allocated to the statutory surplus reserves. If the cumulative total of the statutory surplus reserves reaches 50% of a PRC subsidiary's registered capital, any further appropriation is optional.

Statutory surplus reserves may be used to offset accumulated losses or to increase the registered capital of a PRC subsidiary, subject to approval from the relevant PRC authorities, and are not available for dividend distribution to the subsidiary's shareholders. The PRC subsidiaries are prohibited from distributing dividends unless any losses from prior years have been offset. Except for offsetting prior years' losses, however, statutory surplus reserves must be maintained at a minimum of 25% of share capital after such usage. No retained earnings of either PRC subsidiary had been appropriated to statutory surplus reserves as the PRC subsidiaries recorded accumulated losses as of June 30, 2017 and December 31, 2016 and 2015.

Unaudited Pro Forma Balance Sheet and Basic and Diluted Net Income (Loss) per Common Share

The unaudited pro forma consolidated balance sheet as of June 30, 2017 gives effect to the automatic conversion of all of the Company's outstanding redeemable convertible preferred stock into shares of Class A

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common stock, which will occur upon completion of an IPO of common stock with aggregate proceeds of at least $20,000 and a per share price of at least $15.00. The unaudited pro forma consolidated balance sheet was prepared as though the completion of the IPO had occurred on June 30, 2017.

Pro forma net income per share applicable to common stockholders is computed using the weighted-average number of common shares outstanding after giving effect to the conversion of all the outstanding convertible redeemable preferred stock into shares of Class A common stock as if such conversion had occurred at the beginning of the period presented, or the date of original issuance, if later.

Fair Value of Financial Instruments

Under the FASB's authoritative guidance on fair value measurements, fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In determining the fair value, the Company uses various methods including market, income and cost approaches. Based on these approaches, the Company often utilizes certain assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated or generally unobservable inputs. The Company uses valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. Based on observability of the inputs used in the valuation techniques, the Company is required to provide the following information according to the fair value hierarchy. The fair value hierarchy ranks the quality and reliability of the information used to determine fair values. Financial assets and liabilities carried at fair value are classified and disclosed in one of the following three categories:

Level 1: Valuations for assets and liabilities traded in active exchange markets. Valuations are obtained from readily available pricing sources for market transactions involving identical assets or liabilities.

Level 2: Valuations for assets and liabilities traded in less active dealer or broker markets. Valuations are obtained from third party pricing services for identical or similar assets or liabilities.

Level 3: Valuations for assets and liabilities that are derived from other valuation methodologies, including option pricing models, discounted cash flow models and similar techniques, and not based on market exchange, dealer or broker traded transactions. Level 3 valuations incorporate certain unobservable assumptions and projections in determining the fair value assigned to such assets.

All transfers between fair value hierarchy levels are recognized by the Company at the end of each reporting period. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, an investment's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement in its entirety requires judgment, and considers factors specific to the investment. The inputs or methodology used for valuing financial instruments are not necessarily an indication of the risks associated with investment in those instruments.

Fair Value Measured or Disclosed on a Recurring Basis

Short-term borrowings—Interest rates under the borrowing agreements with the lending parties were determined based on the prevailing interest rates in the market. The Company classifies the valuation techniques that use these inputs as Level 2 fair value measurement.

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Warrant liability—The fair value of the warrant liability derives from the Black-Scholes valuation model which incorporates certain unobservable assumptions (note 10). The Company classifies the valuation techniques that use these inputs as Level 3 fair value measurement.

Other financial items for disclosure purpose—The fair value of other financial items of the Company for disclosure purpose, including cash and cash equivalents, accounts receivable, other receivables, prepaid expenses, other current assets, notes payable, investors' deposits, accounts payable, advances from customers, income taxes payable, and other payables and accrued expenses, approximate their carrying value due to their short-term nature.

As of June 30, 2017 and December 31, 2016 and 2015, information about inputs into the fair value measurement of the Company's liabilities that are measured and recorded at fair value on a recurring basis in periods subsequent to their initial recognition is as follows:

	Fair Value Measurement at Reporting Date Using			
	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
		(in thousands)		
As of June 30, 2017 (unaudited):				
Liabilities:				
Short-term borrowings (unaudited)	$ —	$ 4,584	$ —	$4,584
Warrant liability (unaudited)	—	—	2,970	2,970
	—	4,584	2,970	7,554
As of December 31, 2016:				
Liabilities:				
Short-term borrowings	$ —	$ 4,761	$ —	$4,761
As of December 31, 2015:				
Liabilities:				
Short-term borrowings	$ —	$ 6,854	$ —	$6,854

Fair Value Measured on a Non-Recurring Basis

The Company reviews long-lived assets for impairment annually or more frequently if events or changes in circumstances indicate the possibility of impairment. Long-lived assets are measured at fair value on a nonrecurring basis when there is an indicator of impairment, and they are recorded at fair value only when impairment is recognized. In determining the fair value, the Company used projections of cash flows directly associated with, and which are expected to arise as a direct result of, the use and eventual disposition of the assets. This approach required significant judgments including the Company's projected net cash flows, which were derived using the most recent available estimate for the reporting unit containing the assets tested. Several key assumptions included periods of operation, projections of product pricing, production levels, product costs, market supply and demand, and inflation.

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Reclassification of Accounts

Certain prior year's amounts have been reclassified to conform to current year presentations. There was no change to previously reported stockholders' deficit or net income.

Recent Accounting Pronouncements

Accounting Pronouncements Recently Adopted in the Consolidated Financial Statements for the Six Months Ended June 30, 2017

In April 2016, the FASB issued Accounting Standards Update ("ASU") No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which simplifies several aspects of the accounting for employee stock-based payment transactions. The areas for simplification in ASU No. 2016-09 include the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in this ASU were effective for annual periods beginning after December 15, 2016 and interim periods within those annual periods. The adoption of ASU No. 2016-09 did not have a material impact on the Company's consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*. Topic 740, *Income Taxes*, requires an entity to separate deferred income tax liabilities and assets into current and noncurrent amounts in a classified statement of financial position. Deferred tax liabilities and assets are classified as current or noncurrent based on the classification of the related asset or liability for financial reporting. Deferred tax liabilities and assets that are not related to an asset or liability for financial reporting are classified according to the expected reversal date of the temporary difference. To simplify the presentation of deferred income taxes, the amendments in ASU No. 2015-17 require that deferred income tax liabilities and assets be classified as noncurrent in a classified statement of financial position. For public business entities, the amendments in this update are effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods. The adoption of ASU No. 2015-17 did not have a material impact on the Company's consolidated financial statements.

In July 2015, the FASB issued ASU No. 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory*. The amendments in this update require an entity to measure inventory within the scope of ASU No. 2015-11 (the amendments in ASU No. 2015-11 do not apply to inventory that is measured using last-in, first-out or the retail inventory method. The amendments apply to all other inventory, which includes inventory that is measured using first-in, first-out or average cost) at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Subsequent measurement is uncharged for inventory measured using last-in, first-out or the retail inventory method. The amendments in ASU No. 2015-11 more closely align the measurement of inventory in GAAP with the measurement of inventory in International Financial Reporting Standards. ASU No. 2015-11 is effective for public business entities for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The amendments in ASU No. 2015-11 should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The adoption of ASU No. 2015-11 did not have a material impact on the Company's consolidated financial statements. The relevant descriptions have been included in the inventory accounting policy.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements—Going Concern*. The amendments in this update require management to evaluate whether there are conditions and

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events that raise substantial doubt about an entity's ability to continue as a going concern for both annual and interim reporting. The guidance is effective for the Company for the annual period ended after December 15, 2016 and interim periods thereafter. Management performed an evaluation of the Company's ability to fund operations and to continue as a going concern according to ASC Topic 205-40, *Presentation of Financial Statements—Going Concern*. The adoption of ASU No. 2014-15 did not have a material impact on the Company's consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

In July 2017, the FASB issued ASU No. 2017-11, *Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*, which addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. For public business entities, the amendments in Part I of this Update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. For all other entities, the amendments in Part I of this Update are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. The Company is currently evaluating the impact of the adoption of ASU No. 2017-11 on its consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting*, which provides guidance on determining which changes to the terms and conditions of share-based payment awards require an entity to apply modification accounting under Topic 718. The amendments in this ASU are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period, for (1) public business entities for reporting periods for which financial statements have not yet been issued and (2) all other entities for reporting periods for which financial statements have not yet been made available for issuance. The amendments in this ASU should be applied prospectively to an award modified on or after the adoption date. The Company does not expect the adoption of ASU No. 2017-09 to have a material impact on its consolidated financial statements.

In February 2017, the FASB issued ASU No. 2017-05, *Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets*, which clarifies the scope of nonfinancial asset guidance in Subtopic 610-20. This ASU also clarifies that derecognition of all businesses and nonprofit activities (except those related to conveyances of oil and gas mineral rights or contracts with customers) should be accounted for in accordance with the derecognition and deconsolidation guidance in Subtopic 810-10. The amendments in this ASU also provide guidance on the accounting for so-called "partial sales" of nonfinancial assets within the scope of Subtopic 610-20 and contributions of nonfinancial assets to a joint venture or other noncontrolled investee. The amendments in this ASU are effective for annual reporting reports beginning after December 15, 2017, including interim reporting periods within that reporting period. The Company does not expect the adoption of ASU No. 2017-05 to have a material impact on its consolidated financial statements.

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In January 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which removes Step 2 from the goodwill impairment test. An entity will apply a one-step quantitative test and record the amount of goodwill impairment as the excess of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit. The new guidance does not amend the optional qualitative assessment of goodwill impairment. A business entity that is a U.S. Securities and Exchange Commission filer must adopt the amendments in this ASU for its annual or any interim goodwill impairment test in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is currently evaluating the impact of the adoption of ASU 2017-04 on its consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments in this ASU do not provide a definition of restricted cash or restricted cash equivalents. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. The Company does not expect the adoption of ASU No. 2016-18 to have a material impact on its consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which addresses the following cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and are effective for all other entities for fiscal years beginning after December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. The Company is currently evaluating the impact of the adoption of ASU No. 2016-15 on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The amendments in this update create Topic 842, *Leases*, and supersede the leases requirements in Topic 840, *Leases*. Topic 842 specifies the accounting for leases. The objective of Topic 842 is to establish the principles that lessees and lessors shall apply to report useful information to users of financial statements about the amount, timing, and uncertainty of cash flows arising from a lease. The main difference between Topic 842 and Topic 840 is the recognition of lease assets and lease liabilities for those leases classified as operating leases under Topic 840. Topic 842 retains a distinction between finance leases and operating leases. The classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital leases and operating leases in the previous leases guidance. The result of retaining a distinction

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between finance leases and operating leases is that under the lessee accounting model in Topic 842, the effect of leases in the statement of comprehensive income and the statement of cash flows is largely unchanged from previous GAAP. The amendments in ASU No. 2016-02 are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years for public business entities. Early application of the amendments in ASU No. 2016-02 is permitted. The Company is currently in the process of evaluating the impact of the adoption of ASU No. 2016-02 on its consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. ASU No. 2014-09 supersedes the revenue recognition requirements in "*Revenue Recognition (Topic 605)*", and requires entities to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. The FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date* in August 2015. The amendments in ASU No. 2015-14 defer the effective date of ASU No. 2014-09. Public business entities, certain not-for-profit entities, and certain employee benefit plans should apply the guidance in ASU No. 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. Earlier adoption is permitted only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. Further to ASU No. 2014-09 and ASU No. 2015-14, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)* in March 2016, ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing* in April 2016, ASU No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*, and ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, respectively. The amendments in ASU No. 2016-08 clarify the implementation guidance on principal versus agent considerations, including indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to the customers. ASU No. 2016-10 clarifies guideline related to identifying performance obligations and licensing implementation guidance contained in the new revenue recognition standard. The updates in ASU No. 2016-10 include targeted improvements based on input the FASB received from the Transition Resource Group for Revenue Recognition and other stakeholders. It seeks to proactively address areas in which diversity in practice potentially could arise, as well as to reduce the cost and complexity of applying certain aspects of the guidance both at implementation and on an ongoing basis. ASU No. 2016-12 addresses narrow-scope improvements to the guidance on collectability, non-cash consideration, and completed contracts at transition. Additionally, the amendments in this ASU provide a practical expedient for contract modifications at transition and an accounting policy election related to the presentation of sales taxes and other similar taxes collected from customers. The amendments in ASU No. 2016-20 represents changes to make minor corrections or minor improvements to the Codification that are not expected to have a significant effect on current accounting practice or create a significant administrative cost to most entities. The effective date and transition requirements for ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12 and ASU No. 2016-20 are the same as ASU No. 2014-09. The Company will adopt ASU No. 2014-09, ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12 and ASU No. 2016-20 at January 1, 2018 if the IPO is completed by December 31, 2017. The Company is currently in the process of assessing the potential effects of these ASUs on its consolidated financial statements, business processes, systems and controls. While the assessment process is ongoing, the Company anticipates adopting ASC Topic 606, *Revenue from Contracts with Customers*, using the modified retrospective transition approach. Under this approach, ASC Topic 606 would apply to all new contracts initiated on or after January 1, 2018. For existing contracts that have remaining obligations as of January 1, 2018, any difference between the recognition criteria in these ASUs and the Company's current revenue recognition

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practices would be recognized using a cumulative effect adjustment to the opening balance of accumulated deficit. The Company does not expect the adoption of these ASUs to have a material impact on its consolidated financial statements.

NOTE 3 – ACCOUNTS RECEIVABLE

At June 30, 2017 and December 31, 2016 and 2015, accounts receivable consisted of the following:

	June 30, 2017	December 31, 2016	December 31, 2015
Accounts receivable	$12,310	$16,026	$12,186
Less: Allowance for doubtful accounts	—	—	(116)
Total	$12,310	$16,026	$12,070

The Company reviews accounts receivable on a periodic basis and makes general and specific allowances when there is doubt as to the collectability of individual balances. The movements of allowance for doubtful accounts for the six months ended June 30, 2017 and the years ended December 31, 2016 and 2015 are as follows:

	Six Months Ended June 30,		Year Ended December 31,	
	2017	2016	2016	2015
Balance at beginning of period	$ —	$ 116	$ 116	$116
Additions	—	—	—	—
Write-off	—	—	(116)	—
Balance at end of period	$ —	$ 116	$ —	$116

As of December 31, 2015, the Company had pledged its accounts receivable of $6,670 as security under a short-term bank loan, which was paid during the year ended December 31, 2016 (note 6). As of June 30, 2017 and December 31, 2016, no accounts receivable were pledged as collateral for borrowings from financial institutions.

NOTE 4 – INVENTORY

At June 30, 2017 and December 31, 2016 and 2015, inventory consisted of the following:

	June 30, 2017	December 31, 2016	December 31, 2015
Raw materials	$ 7,662	$ 7,698	$4,454
Work in process	3,307	1,260	878
Finished goods	3,137	2,708	3,814
Total inventory, gross	14,106	11,666	9,146
Inventory reserve	—	—	—
Total inventory, net	$14,106	$11,666	$9,146

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The Company did not set up any inventory reserve as of June 30, 2017 or December 31, 2016 or 2015. As of June 30, 2017 and December 31, 2016 and 2015, no inventory was pledged as collateral for borrowings from financial institutions.

NOTE 5 – PROPERTY, PLANT AND EQUIPMENT, NET

At June 30, 2017 and December 31, 2016 and 2015, property, plant and equipment consisted of the following:

	June 30, 2017	December 31, 2016	December 31, 2015
Manufacturing equipment	$ 8,768	$ 8,566	$ 9,810
Office equipment	439	410	549
Transportation equipment	196	191	181
Leasehold improvement	235	224	79
Total cost	9,638	9,391	10,619
Less: Total accumulated depreciation	(7,849)	(7,562)	(8,857)
Construction in progress	444	433	8
Total property, plant and equipment, net	$ 2,233	$ 2,262	$ 1,770

Depreciation expense was $107, $88, $180 and $140 for the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, respectively.

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NOTE 6 – SHORT-TERM BORROWINGS

At June 30, 2017 and December 31, 2016 and 2015, short-term borrowings consisted of the following:

	June 30, 2017	December 31, 2016	December 31, 2015
Line of credit up to $3,850 from Bank of Shanghai Pudong Branch, due on August 6, 2016 with annual interest rate of 5.35%, guaranteed by David H. Wang, the chief executive officer and a director of ACM ("Wang") and fully repaid on February 3, 2016	$ —	$ —	$3,850
Borrowings from Shanghai Rural Commercial Bank Co., Ltd., due on September 14, 2016 with annual interest rate of 5.52%, guaranteed by Wang and secured by the Company's accounts receivable of $6,760 and fully repaid on September 12, 2016	—	—	3,004
Borrowings from Bank of China, due on February 10, 2017 with annual interest rate of 4.8%, secured by certain of the Company's intellectual property and fully repaid on February 13, 2017	—	1,222	—
Borrowings from Bank of Shanghai Pudong Branch, due on June 24, 2017 with an annual interest rate of 5.66%, guaranteed by Wang and fully repaid on June 25, 2017	—	281	—
Line of credit up to $3,605 from Bank of Shanghai Pudong Branch, due on July 3, 2017 with an annual interest rate of 5.66%, guaranteed by Wang and fully repaid on May 18, 2017	—	1,455	—
Line of credit up to $3,670 from Bank of Shanghai Pudong Branch, due on July 3, 2017 with an annual interest rate of 3.2%, guaranteed by Wang and fully repaid on June 7, 2017	—	1,803	—
Borrowings from Bank of China, due on July 2, 2017 with annual interest rate of 4.8%, secured by the Company's intellectual property and fully repaid on July 3, 2017	3,173	—	—
Line of credit up to RMB 25,000 or equivalent US dollars from Bank of Shanghai Pudong Branch, due on September 19, 2017 with an annual interest rate of 5.66%, guaranteed by Wang	714	—	—
Line of credit up to RMB 25,000 or equivalent US dollars from Bank of Shanghai Pudong Branch, due on October 5, 2017 with an annual interest rate of 5.66%, guaranteed by Wang	697	—	—
Total	$4,584	$4,761	$6,854

For the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, interest expense related to short-term borrowings amounted to $164, $111, $179 and $316, respectively.

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NOTE 7 – OTHER PAYABLE AND ACCRUED EXPENSES

At June 30, 2017 and December 31, 2016 and 2015, other payable and accrued expenses consisted of the following:

	June 30, 2017	December 31, 2016	December 31, 2015
Lease expenses and payable for leasehold improvement due to a related party (note 12)	$1,982	$1,883	$2,070
Commissions	766	757	737
Accrued warranty	419	290	459
Accrued payroll	—	398	398
Accrued professional fees	752	46	—
Others	854	589	439
Total	$4,773	$3,963	$4,103

NOTE 8 – NOTES PAYABLE

Notes payable consists of convertible promissory notes and term loans. As of June 30, 2017 and December 31, 2016 and 2015, the outstanding principal and accrued interest with respect to the convertible promissory notes and the term notes consisted of the following:

	June 30, 2017	December 31, 2016	December 31, 2015
Convertible promissory notes:			
Issued in 2003 and due on October 10, 2008	$ —	$—	$ 780
Issued in 2004 and due on June 10, 2009	—	—	498
Issued in 2006 and due on November 8, 2011	11	11	1,291
Total principal and accrued interest of convertible promissory notes	11	11	2,569
Term notes:			
Issued in 2004 and due on March 31, 2004	—	—	92
Issued in 2013 and due on March 26, 2014	—	—	112
Issued in 2014 and due in March 2015	—	—	64
Total principal and accrued interest of term notes	—	—	268
Total	$ 11	$ 11	$2,837

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Of the outstanding promissory notes described in the preceding table, the following amounts of principal and accrued interest pertain to notes held by related parties of the Company:

	June 30, 2017	December 31, 2016	2015
Convertible promissory notes:			
Issued in 2003 and due on October 10, 2008	$ —	$—	$158
Issued in 2004 and due on June 10, 2009	—	—	80
Issued in 2006 and due on November 8, 2011	4	4	262
Total principal and accrued interest of convertible promissory notes	4	4	500
Term notes:			
Issued in 2004 and due on March 31, 2004	—	—	92
Issued in 2013 and due on March 26, 2014	—	—	112
Issued in 2014 and due in March 2015	—	—	64
Total principal and accrued interest of term notes	—	—	268
Total	$ 4	$ 4	$768

During 2003, 2004 and 2006, ACM issued convertible promissory notes in the principal amount of $542, $401 and $1,084, respectively. The convertible promissory notes bare interest at the rate of 6% per annum computed on the basis of a 360-day year and the actual number of days elapsed until maturity, which is five years after issuance. Upon ACM's issuance and sale of a new series of preferred stock, principal and accrued interest on the notes were to automatically convert into shares of the new series of preferred stock at a conversion price equal to the price per share of the new preferred stock to new investors.

In conjunction with the convertible promissory notes, each convertible promissory noteholder was granted, for every dollar of principal amount of convertible promissory notes, one warrant to purchase two to four shares of common stock at an exercise price of $0.72 to $ 0.75 per share. The warrants are exercisable until the earlier of (1) five years after the warrant issue date and (2) the occurrence of a merger or consolidation of ACM or ACM's sale, transfer or other disposition of all or substantially all of ACM's assets.

The Company accounted for the convertible promissory notes and warrants in accordance with FASB ASC paragraph 470-20-25, *Debt – Debt With Conversion and Other Options*. Proceeds from the issuance of promissory notes and warrants were allocated to the two elements based on the relative fair values of the convertible promissory notes without the warrants and of the warrants themselves at time of issuance. The Company did not identify any derivative liabilities and beneficial conversion features.

During 2004, 2005, 2013 and 2014, ACM issued term notes in the aggregate principal amounts of $53, $200, $100 and $60, respectively. All of such term notes were issued to Wang and one other director, except that $140 in principal amount of the term notes issued in 2005 were issued to third parties. The term notes bore interest at 6% per annum and became due three months after the note issuance date. The $200 in principal amount of term notes issued in 2005, together with $4 in accrued interest, were exchanged for convertible promissory notes in 2006.

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As of December 31, 2015, no convertible promissory notes had been converted into preferred stock as no new series of preferred stock had been issued and sold and all warrants expired as no warrant holder exercised the warrants.

During 2016, the Company modified the terms of the convertible promissory notes and provided the note holders with the option of converting the principal amount of their convertible promissory notes into Class A common stock at $0.75 or $1.50 per share on the condition that they agree to waive all accrued interest. For those holders who did not elect to convert their notes into Class A common stock, the principal of, and accrued interest on, their convertible promissory notes were converted into Series F convertible preferred stock at $2.50 per share. The convertible promissory notes converted into 1,812,069 shares of Class A common stock and 47,454 shares of Series F convertible preferred stock on December 30, 2016. Net loss due to extinguishment of debt from these conversions totaled $1,670 during 2016. The balance of $11 of notes payable at June 30, 2017 and December 31, 2016 represented accrued interest that ACM was liable to pay to convertible promissory note holders.

NOTE 9 – INVESTORS' DEPOSITS

On December 9, 2016, Shengxin (Shanghai) Management Consulting Limited Partnership ("SMC"), a related party (note 12), delivered RMB 20,124 (approximately $2,981 as of the close of business on such date) in cash (the "SMC Investment") to ACM Shanghai for potential investment pursuant to terms to be subsequently negotiated. On March 14, 2017, ACM, ACM Shanghai and SMC entered into a securities purchase agreement pursuant to which, in exchange for the SMC Investment, ACM issued to SMC a warrant exercisable to purchase 397,502 shares of ACM's Class A common stock at a price of $7.50 per share. (note 10).

NOTE 10 – WARRANT LIABILITY

On December 9, 2016, SMC delivered the SMC Investment to ACM Shanghai for potential investment pursuant to terms to be subsequently negotiated. As of December 31, 2016, the terms of the SMC Investment had not yet been negotiated and the SMC Investment was recorded as investors' deposit.

On March 14, 2017, ACM, ACM Shanghai and SMC entered into a securities purchase agreement (the "SMC Agreement") pursuant to which, in exchange for the SMC Investment, ACM issued to SMC a warrant exercisable, for cash or on a cashless basis, to purchase, at any time on or before May 17, 2023, all, but not less than all, of 397,502 shares of ACM's Class A common stock at a price of $7.50 per share. Under the SMC Agreement, if SMC does not exercise the warrant by May 17, 2023, ACM Shanghai will be obligated, subject to approval of governmental authorities and ACM Shanghai's equity holders, to deliver an equity interest of 3.6394% (subject to dilution) in satisfaction of the SMC Investment. If SMC exercises the warrant or if SMC does not exercise the warrant and the issuance of the equity interest in ACM Shanghai is not completed by August 17, 2023 due to the inability of the parties to obtain required governmental or equity holder approvals, then ACM Shanghai will be obligated to pay to SMC, in satisfaction of the SMC Investment, an amount equal to $2,981, converted into RMB at the lesser of 6.75 and the then-current RMB-to- US dollar exchange rate.

In accordance with FASB ASC 480, *Distinguishing Liabilities from Equity*, the warrant is classified as a liability as the warrant is conditional puttable. The fair value of the warrant is adjusted for changes in fair value at each reporting period but cannot be lower than the proceeds of the SMC Investment. The corresponding

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non-cash gain or loss of the changes in fair value is recorded in earnings. The methodology used to value the warrant was the Black-Scholes valuation model with the following assumptions:

	June 30, 2017
Fair value of common share (1)	$ 7.59
Expected term in years (2)	5.88
Volatility (3)	28.31%
Risk-free interest rate (4)	1.85%
Expected dividend (5)	0%

(1) As the common stock was not publicly traded, the Company used an independent third-party valuation firm to value the common stock for the six months ended June 30, 2017.
(2) Expected term of the warrant represents the period from the current balance sheet date to the warrant expiration date.
(3) Volatility is calculated based on the historical volatility of ACM's comparable companies in the period equal to the expected term of the warrant.
(4) Risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the warrant.
(5) Expected dividend is assumed to be 0% as ACM has no history or expectation of paying a dividend on its common stock.

NOTE 11 – OTHER LONG-TERM LIABILITIES

Other long-term liabilities represent government subsidies received from PRC governmental authorities for development and commercialization of certain technology but not yet recognized (note 2). As of June 30, 2017 and December 31, 2016 and 2015, other long-term liabilities consisted of the following unearned government subsidies:

	June 30, 2017	December 31, 2016	December 31, 2015
Subsidies to Stress Free Polishing project, commenced in 2008	$1,938	$1,958	$1,836
Subsidies to Electro Copper Plating project, commenced in 2014	5,338	4,921	5,250
Subsidies to short-term borrowings' interest expenses	—	—	101
Total	$7,276	$6,879	$7,187

NOTE 12 – RELATED PARTY BALANCES AND TRANSACTIONS

In 2007, ACM Shanghai entered into an operating lease agreement with Shanghai Zhangjiang Group Co., Ltd. ("Zhangjiang Group"), one of whose affiliates then held non-controlling interests in ACM Shanghai, to lease manufacturing and office space located in Shanghai, China. Pursuant to the lease agreement, Zhangjiang Group provided $771 to ACM Shanghai for leasehold improvements. In September 2016, the lease agreement was amended to modify payment terms and extend the lease through December 31, 2017. During the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, the Company incurred leasing expenses under the lease agreement of $321, $330, $640 and $692, respectively. As of June 30, 2017 and

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December 31, 2016 and 2015, payables to Zhangjiang Group for lease expenses and leasehold improvements recorded as other payables and accrued expenses, amounted to $1,982, $1,883 and $2,070, respectively (note 7).

Prior to 2015, the Company issued convertible promissory notes and term loans to Wang (note 8).

On December 9, 2016, ACM Shanghai received the SMC Investment from SMC for potential investment pursuant to terms to be subsequently negotiated (notes 9, 10 and 20). SMC is a limited partnership incorporated in the PRC, whose partners consist of employees of ACM Shanghai. As of June 30, 2017 and December 31, 2016 and 2015, investors' deposits from SMC amounted to $0, $2,902 and $0, respectively. On March 14, 2017, ACM, ACM Shanghai and SMC entered into a securities purchase agreement (the "SMC Agreement") pursuant to which, in exchange for the SMC Investment, ACM issued to SMC a warrant exercisable, for cash or on a cashless basis, to purchase, at any time on or before May 17, 2023, all, but not less than all, of 397,502 shares of ACM's Class A common stock at a price of $7.50 per share, for a total exercise price of $2,981. Under the SMC Agreement, if SMC does not exercise the warrant by May 17, 2023, ACM Shanghai will be obligated, subject to approval of governmental authorities and ACM Shanghai's equity holders, to deliver an equity interest of 3.6394% (subject to dilution) in satisfaction of the SMC Investment. If SMC exercises the warrant or if SMC does not exercise the warrant and the issuance of the equity interest in ACM Shanghai is not completed by August 17, 2023 due to the inability of the parties to obtain required governmental or equity holder approvals, then ACM Shanghai will be obligated to pay to SMC, in satisfaction of the SMC Investment, an amount equal to $2,981, converted into RMB at the lesser of 6.75 and the then-current RMB-to-US dollar exchange rate.

NOTE 13 – LEASES

ACM entered into a two-year lease agreement in March 2015 for office and warehouse space of approximately 3,000 square feet for its headquarters in Fremont, California, at a rate of $2 per month. On March 22, 2017, ACM amended the lease agreement to extend the lease term through March 31, 2018 and increase the base rent to $3 per month.

ACM Shanghai entered into an operating lease agreement with Zhangjiang Group (a related party, see note 12) in 2007 for manufacturing and office space of approximately 63,510 square feet in Shanghai, China. The lease agreement has been amended several times to modify payment terms and extend the lease term, most recently through December 31, 2017. Monthly rent is $58 during 2017 and 2016.

ACM Wuxi leases office space in Wuxi, China, at a rate of less than $1 per month.

Future minimum lease payments under non-cancelable lease agreements as of June 30, 2017 and December 31, 2016 were as follows:

	June 30, 2017	December 31, 2016
2017	$2,318	$ 2,538
2018	8	8
Total	$2,326	$ 2,546

Rent expense was $336, $342, $675 and $718 for the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, respectively.

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NOTE 14 – COMMON STOCK

Prior to the Merger in November 2016, ACM was authorized to issue 100,000,000 shares of common stock, without par value. Each share of common stock entitled the holder to one vote on all matters submitted to a vote by ACM's stockholders. Common stockholders were entitled to dividends when and if declared by the Board of Directors. At December 31, 2015, there were 2,047,403 shares issued and outstanding.

Upon the Merger, ACM became authorized to issue 100,000,000 shares of Class A common stock and 7,303,533 shares of Class B common stock, each with a par value of $0.0001. Each share of Class A common stock is entitled to one vote, and each share of Class B common stock is entitled to twenty votes and is convertible at any time into one share of Class A common stock. Shares of Class A common stock and Class B common stock are treated equally, identically and ratably with respect to any dividends if declared by the Board of Directors unless the Board of Directors declares different dividends to the Class A common stock and Class B common stock by getting approval from a majority of common stock holders. Each share of ACM's common stock outstanding immediately prior to the Merger was converted into one share of Class B common stock as a result of the Merger.

At June 30, 2017 and December 31, 2016, the number of shares of Class A common stock issued and outstanding was 2,627,293 and 2,228,740, respectively, of which 1,812,069 and 1,812,069 aggregated shares derived from conversion of convertible promissory notes, and 815,224 and 416,671 aggregated shares derived from exercises of stock options, respectively. At June 30, 2017 and December 31, 2016, the number of shares of Class B common stock issued and outstanding was 2,409,738, of which 2,047,403 aggregated shares derived from conversion of the original common stock upon the Merger and 362,335 aggregated shares derived from exercises of stock options.

NOTE 15 – REDEEMABLE CONVERTIBLE PREFERRED STOCK

As of December 31, 2015, ACM had 8,157,000 authorized shares of preferred stock, of which 385,000, 1,572,000, 1,400,000 and 4,800,000 shares were designated as Series A, Series B, Series C and Series D preferred stock, respectively. On August 1, 2016, the Company amended the Articles of Incorporation and was further authorized to issue 10,718,530 shares of Series E preferred stock and 6,000,000 shares of Series F preferred stock. Upon the Merger in November 2016, the numbers of authorized shares of Series C and Series D were reduced to 1,360,962 and 2,659,975, respectively. Each share of ACM's convertible preferred stock outstanding immediately prior to the Merger was converted into one share of the same series of convertible preferred stock as a result of the Merger. Accordingly, as of December 31, 2016 and June 30, 2017, ACM had 22,696,467 authorized shares of preferred stock, of which 385,000, 1,572,000, 1,360,962, 2,659,975, 10,718,530, and 6,000,000 shares were designated as Series A, Series B, Series C, Series D, Series E and Series F preferred stock, respectively.

During the six months ended June 30, 2017, no activities occurred with respect to convertible preferred stock. During 2016, ACM issued 3,663,254 shares of Series F preferred stock, consisting of 3,615,800 shares issued at $2.50 per share for cash totaling $9,040 and 47,454 shares issued upon conversion of convertible promissory notes.

The number of outstanding shares of Series A, Series B, Series C, Series D, Series E and Series F was 385,000, 1,572,000, 1,360,962, 1,326,642, 0 and 3,663,254, respectively, at June 30, 2017 and December 31, 2016 and 385,000, 1,572,000, 1,360,962, 1,326,642, 0 and 0, respectively, at December 31, 2015.

Shares of ACM's convertible preferred stock have rights, preferences and privileges as follows:

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Voting Rights

Each share of Series A through Series F convertible preferred stock is entitled to a number of votes equal to the number of whole shares of common stock into which such share can be converted.

Dividends

Holders of Series A through Series F convertible preferred stock have a non-cumulative right to participate in and receive the same dividends as may be declared for common stockholders, as and if declared by the Board of Directors, payable out of funds legally available.

Conversion

Each share of Series A through Series F convertible preferred stock is convertible at any time, at the option of the holder. At June 30, 2017, each share of Series A, B and F convertible preferred stock was convertible into one-third share of Class A common stock, each share of Series C convertible preferred stock was convertible into 0.3544 shares of Class A common stock, and each share of Series D convertible preferred stock was convertible into 0.4562 shares of Class A common stock. The Series A through Series F convertible preferred stock will convert automatically into Class A common stock upon the closing of an initial public offering of Class A common stock with aggregate proceeds of at least $20,000 and a per-share price of at least $15.00. At June 30, 2017 and 2016 and December 31, 2016, 2,960,968 shares of Class A common stock were reserved for issuance upon conversion of outstanding Series A through Series F convertible preferred stock.

Liquidation Preferences

Holders of Series A through Series F convertible preferred stock are entitled to receive specified liquidation amounts in the event of a liquidation, dissolution or winding-up of ACM or of certain deemed liquidation events. The deemed liquidation events generally include (a) a merger or stock sale after which new stockholders would own a majority of the voting stock of ACM and (b) a sale of all or substantially all of the assets of the Company.

In the event of a liquidation, dissolution or winding-up of ACM or a deemed liquidation, the holders of Series A through Series F convertible preferred stock shall be entitled to be paid, prior to and in preference to the holders of common stock, an amount equal to $0.80, $1.00, $1.50, $3.75, $1.00 and $2.50 per share of Series A through Series F convertible preferred stock, respectively, plus any accumulated and unpaid dividends as of the redemption date.

NOTE 16 – STOCK-BASED COMPENSATION

On April 29, 1998, ACM adopted the 1998 Stock Option Plan (the “1998 Plan”). The options issued under the Plan consisted of incentive stock options (“ISOs”) and nonstatutory stock options (“NSOs”) that should be determined at the time of grant. ISOs could be granted only to employees. NSOs could be granted to employees, directors and consultants. The option price of each ISO and each NSO could not be less than 100% or less than 85% of the fair market value of stock price at the time of grant, respectively. The vesting period was to be determined by the Board of Directors for each grant. The total number of shares of common stock reserved under the 1998 Plan, as amended, was 766,667. If any option granted under the 1998 Plan expires or otherwise terminates without having been exercised in full, the shares of common stock subject to that option would become available for re-grant. At March 3, 2014, the 1998 Plan terminated and no further grants under the 1998 Plan could be made thereunder, although certain previously granted options remained outstanding in accordance with their terms.

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On December 28, 2016, ACM adopted the 2016 Omnibus Incentive Plan (the "2016 Plan"). Under the 2016 Plan, the aggregate number of shares of Class A common stock that may be issued shall equal the sum of (a) 2,333,334 and (b) an annual increase on the first day of each year beginning in 2018 and ending in 2026 equal to the lesser of (i) 4% of the shares of Class A and Class B common stock outstanding (on an as-converted basis) on the last day of the immediately preceding year and (ii) such smaller number of shares as may be determined by the Board. A maximum of 2,333,334 shares is available for issuance as ISOs under the 2016 Plan. Besides the stock options, the 2016 Plan also authorizes issuance of stock appreciation rights, restricted stock, restricted stock units, and other share-based and cash awards. The 2016 Plan will terminate on December 27, 2026.

Employee Awards

The following table summarizes ACM's employee share option activities:

	Number of Option Shares	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at January 1, 2015	1,000,009	$ 0.39	$ 0.75	4.23
Granted	550,003	0.66	1.50	
Exercised	—	—	—	
Expired	(50,002)	0.54	0.75	
Forfeited	—	—	—	
Outstanding at December 31, 2015	1,500,010	0.48	1.02	5.60
Granted	1,009,371	0.54	3.00	
Exercised	(409,004)	0.42	0.75	
Expired	—	—	—	
Forfeited	—	—	—	
Outstanding at December 31, 2016	2,100,377	0.54	2.03	7.83
Granted	83,334	2.58	7.50	
Exercised	(166,667)	0.45	0.75	
Expired	—	—	—	
Forfeited	(7,099)	0.54	3.00	
Outstanding at June 30, 2017	2,009,945	0.63	2.36	7.99
Vested and exercisable at December 31, 2015	942,367			
Vested and exercisable at December 31, 2016	758,708			
Vested and exercisable at June 30, 2017	821,598			

During the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, ACM recognized employee stock-based compensation expense of $128, $46, $92 and $73, respectively. As of June 30, 2017 and December 31, 2016 and 2015, $788, $726 and $299, respectively, of total unrecognized employee stock-based compensation expense, net of estimated forfeitures, related to stock-based awards were expected to be recognized over a weighted-average period of 2.12 years, 2.25 years and 1.24 years, respectively. Total unrecognized compensation cost may be adjusted for future changes in estimated forfeitures.

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The fair value of each option granted to employee is estimated on the grant date using the Black-Scholes valuation model with the following assumptions. No options were granted to employees during the six months ended June 30, 2016.

	June 30, 2017	December 31, 2016	December 31, 2015
Fair value of common share(1)	$ 7.59	$ 2.28	$ 1.59
Expected term in years(2)	6.25	5.75-6.25	6.25
Volatility(3)	29.18%	29.93%	37.67%
Risk-free interest rate(4)	2.22%	2.02%-2.32%	1.87%
Expected dividend(5)	0%	0%	0%

(1) As the common stock was not publicly traded, the Company used an independent third-party valuation firm to value the common stock in 2014, 2015, 2016 and the six months ended June 30, 2017. The fair value of common stock issued prior to January 1, 2014 was determined to be $0.75, which was the price most investors paid to purchase common stock prior to that date.
(2) Expected term of stock options is based on the average of the vesting period and the contractual term for each grant according to Staff Accounting Bulletin 110.
(3) Volatility is calculated based on the historical volatility of ACM's comparable companies in the period equal to the expected term of each grant.
(4) Risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the stock options in effect at the time of grant.
(5) Expected dividend is assumed to be 0% as ACM has no history or expectation of paying a dividend on its common stock.

In addition to the assumptions used in the Black-Scholes valuation model, the Company estimates, based on the historical turnover rate, a forfeiture rate of 10% for use in calculating the stock-based compensation for its stock-based awards.

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Non-employee Awards

The following table summarizes ACM's non-employee share option activities:

	Number of Option Shares	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at January 1, 2015	1,036,673	$ 0.39	$ 0.75	4.60
Granted	496,670	0.66	1.50	
Exercised	—	—	—	
Expired	—	—	—	
Forfeited	—	—	—	
Outstanding at December 31, 2015	1,533,343	0.48	0.99	5.53
Granted	415,225	0.54	3.00	
Exercised	(370,003)	0.45	0.75	
Expired	—	—	—	
Forfeited	—	—	—	
Outstanding at December 31, 2016	1,578,565	0.51	1.58	6.81
Granted	133,335	2.46	7.50	
Exercised	(231,886)	0.36	0.99	
Expired	—	—	—	
Forfeited	—	—	—	
Outstanding at June 30, 2017	1,480,014	0.72	2.20	6.91
Vested and exercisable at December 31, 2015	1,006,117			
Vested and exercisable at December 31, 2016	877,097			
Vested and exercisable at June 30, 2017	789,997			

During the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015, the Company recognized non-employee stock-based compensation expense of $1,220, $148, $291 and $350, respectively.

The fair value of each option granted to non-employees is re-measured at each period end until the vesting date using the Black-Scholes valuation model with the following assumptions:

	June 30,		December 31,	
	2017	2016	2016	2015
Fair value of common share(1)	$6.87-$7.59	$1.86	$2.28	$1.59
Expected term in years(2)	4.08-6.19	2.62-5.69	2.11-6.24	3.12-5.94
Volatility(3)	28.87%-29.41%	30.59%-31.43%	29.93%	33.21%
Risk-free interest rate(4)	1.85%-2.33%	0.71%-1.21%	1.00%-2.25%	1.31%-1.76%
Expected dividend(5)	0%	0%	0%	0%

(1) As the common stock was not publicly traded, the Company used an independent third-party valuation firm to value the common stock in 2014, 2015, 2016 and the six months ended June 30, 2017. The fair value of common stock issued prior to January 1, 2014 was determined to be $0.75, which was the price most investors paid to purchase common stock prior to that date.

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(2) Expected term of share options is based on the average of the vesting period and the contractual term for each grant according to Staff Accounting Bulletin 110.
(3) Volatility is calculated based on the historical volatility of ACM's comparable companies in the period equal to the expected term of each grant.
(4) Risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the share options in effect at the time of grant.
(5) Expected dividend is assumed to be 0% as ACM has no history or expectation of paying a dividend on its common stock.

NOTE 17 – INCOME TAXES

The following represent components of the income tax benefit (expense) for the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015:

	Six Months Ended June 30,		December 31,	
	2017	2016	2016	2015
Current:				
U.S. federal	$—	$—	$ —	$ (40)
U.S. state	—	—	(1)	30
Foreign	—	—	—	—
Total current tax benefit (expense)	—	—	(1)	(10)
Deferred:				
U.S. federal	—	—	—	—
U.S. state	—	—	—	—
Foreign	(749)	73	(594)	2,535
Total deferred tax benefit (expense)	(749)	73	(594)	2,535
Total income tax benefit (expense)	$(749)	73	$(595)	2,525

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Tax effects of temporary differences that give rise to significant portions of the Company's deferred tax assets at June 30, 2017 and December 31, 2016 and 2015 are presented below:

	June 30, 2017	December 31, 2016	December 31, 2015
Deferred tax assets:			
Net operating loss carry forwards (offshore)	$1,275	$ 1,029	$ 1,568
Net operating loss carry forwards (U.S.) and credit	7,124	5,815	5,141
Deferred revenue (offshore)	589	840	1,130
Accruals (U.S.)	42	18	472
Reserves and other (offshore)	43	43	72
Stock-based compensation (U.S.)	760	342	298
Property and equipment (U.S.)	3	3	3
Total gross deferred tax assets	9,836	8,090	8,684
Less: valuation allowance	(8,713)	(6,249)	(6,148)
Total deferred tax assets	1,123	1,841	2,536
Total deferred tax liabilities	—	—	—
Translation difference	—	—	(104)
Deferred tax assets, net	$1,123	$ 1,841	$ 2,432

The Company considers all available evidence to determine whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become realizable. Management considers the scheduled reversal of deferred tax liabilities (including the impact of available carryback and carry-forward periods), and projected taxable income in assessing the realizability of deferred tax assets. In making such judgments, significant weight is given to evidence that can be objectively verified. Based on all available evidence, a partial valuation allowance has been established against some net deferred tax assets as of June 30, 2017 and December 31, 2016 and 2015, based on estimates of recoverability. While the Company has optimistic plans for its business strategy, it determined that such a valuation allowance was necessary given its historical losses and the uncertainty with respect to its ability to generate sufficient profits from its business model from all tax jurisdictions. In order to fully realize the U.S. deferred tax assets, the Company must generate sufficient taxable income in future periods before the expiration of the deferred tax assets governed by the tax code. The valuation allowance in the U.S. increased by approximately $1,811, $264 and $106 during the six months ended June 30, 2017 and the years ended December 31, 2016 and 2015, respectively. The valuation allowance in China increased by approximately $653 and decreased by $163 and $2,469 during six months ended June 30, 2017 and the years ended December 31, 2016 and 2015, respectively.

The Company did not have any significant temporary differences relating to deferred tax liabilities as of June 30, 2017 or December 31, 2016 or 2015.

As of June 30, 2017 and December 31, 2016, the Company had net operating loss carry-forwards of respectively, $18,886 and $15,037 for U.S federal purposes, $322 for U.S. state purposes and $8,409 and $6,822 for Chinese income tax purposes. Such losses are set to expire in 2019, 2032, and 2017 for U.S. federal, U.S. state and Chinese income tax purposes, respectively.

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As of June 30, 2017 and December 31, 2016, the Company had research credit carry-forwards of $606 for U.S. federal purposes, and $377 for U.S. state purposes. Such credits are set to expire in 2025 for U.S. federal carry-forwards. There is no expiration date for U.S. state carry-forwards.

A limitation may apply to the use of the U.S. net operating loss and credit carry-forwards, under provisions of the U.S. Internal Revenue Code that would be applicable if ACM experiences an "ownership change." Should these limitations apply, the carry-forwards would be subject to an annual limitation, resulting in a substantial reduction in the gross deferred tax assets before considering the valuation allowance. As of June 30, 2017 and December 31, 2016, the Company had not performed an analysis to determine if its net operating loss and credit carry-forwards would be subject to such limitations.

The Company's effective tax rate differs from statutory rates of 34% for U.S. federal income tax purposes and 15%-25% for Chinese income tax purpose due to the effects of the valuation allowance and certain permanent differences as it pertains to book-tax differences in the value of client shares received for services. Pursuant to the Corporate Income Tax Law of the PRC, all of the Company's PRC subsidiaries are liable to PRC Corporate Income Taxes at a rate of 25% except for ACM Shanghai. According to Guoshuihan 2009 No. 203, if an entity is certified as an "advanced and new technology enterprise," it is entitled to a preferential income tax rate of 15%. ACM Shanghai obtained the certificate of "advanced and new technology enterprise" in 2012 and again in 2016 with an effective period of three years, and the provision for PRC corporate income tax for ACM Shanghai is calculated by applying the income tax rate of 15% for the six months ended June 30, 2017 and 2016 and the years ended December 31, 2016 and 2015.

Income tax (expense) benefit for the six months ended June 30, 2017 and 2016 and years ended December 31, 2016 and 2015 differed from the amounts computed by applying the statutory federal income tax rate of 34% to pretax income (loss) as a result of the following:

	Six Months Ended June 30,		December 31,	
	2017	2016	2016	2015
Effective tax rate reconciliation:				
Income tax provision at statutory rate	34.0%	34.0%	(34.0)%	(34.0)%
State taxes, net of Federal benefit	0.0	0.0	0.0	0.6
Foreign rate differential	4.5	20.4	38.7	20.7
Other permanent difference	5.6	(32.4)	(20.9)	(2.0)
Change in valuation allowance	(78.0)	(16.0)	(3.8)	61.6
Total income tax (expense) benefit	(33.9)%	6.0%	(20.0)%	46.9%

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Tax positions are evaluated in a two-step process. The Company first determines whether it is more likely than not that a tax position will be sustained upon examination. If a tax position meets the more-likely-than-not recognition threshold it is then measured to determine the amount of benefit to recognize in the financial statements. The tax position is measured as the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement. The aggregate changes in the balance of gross unrecognized tax benefits, which excludes interest and penalties, for the six months ended June 30, 2017 and the years ended December 31, 2016 and 2015, are as follows:

	June 30, 2017	December 31, 2016	December 31, 2015
Beginning balance	$ 44	$ 44	$—
Increase/(Decrease) of unrecognized tax benefits taken in prior years	—	—	—
Increase/(Decrease) of unrecognized tax benefits related to current year	—	—	44
Increase/(Decreases) of unrecognized tax benefits related to settlements	—	—	—
Reductions to unrecognized tax benefits related to lapsing statute of limitations	—	—	—
Ending balance	$ 44	$ 44	$ 44

The Company files income tax returns in the United States, and state and foreign jurisdictions. The federal, state and foreign income tax returns are under the statute of limitations subject to tax examinations for the tax years ended December 31, 2009 through June 30, 2017. To the extent the Company has tax attribute carry-forwards, the tax years in which the attribute was generated may still be adjusted upon examination by the U.S. Internal Revenue Service, state or foreign tax authorities to the extent utilized in a future period.

The Company had $44 of unrecognized tax benefits as of June 30, 2017 and December 31, 2016 and 2015. The Company does not anticipate a significant change to its unrecognized tax benefits in the year ending December 31, 2017.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of June 30, 2017 and December 31, 2016 and 2015, the Company had $44 of accrued penalties and $0 of accrued penalties related to uncertain tax positions, none of which has been recognized in the Company's consolidated statements of operations and comprehensive income for the six months ended June 30, 2017 and the year ended December 31, 2016. There were no ongoing examinations by taxing authorities as of June 30, 2017 and December 31, 2016.

The Company intends to indefinitely reinvest the PRC earnings outside of the U.S. as of June 30, 2017 and December 31, 2016. Thus, deferred taxes are not provided in the U.S. for unremitted earnings in the PRC.

NOTE 18 – COMMITMENTS AND CONTINGENCIES

The Company leases offices under non-cancelable operating lease agreements. The rental expenses were $336, $342, $675 and $718 for the six months ended June 30, 2017 and the years ended December 31, 2016 and

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2015, respectively. See note 13 for future minimum lease payments under non-cancelable operating lease agreements with initial terms of one year or more.

The Company did not have any capital commitments during the reported periods.

From time to time the Company is subject to legal proceedings, including claims in the ordinary course of business and claims with respect to patent infringements.

NOTE 19 – RESTRICTED NET ASSETS

In accordance with the PRC's Foreign Enterprise Law, ACM Shanghai and ACM Wuxi are required to make contributions to a statutory surplus reserve (note 2).

As a result of PRC laws and regulations that require annual appropriations of 10% of net after-tax profits to be set aside prior to payment of dividends as general reserve fund or statutory surplus fund, ACM Shanghai is restricted in its ability to transfer a portion of its net assets to ACM (including any assets received as distributions from ACM Wuxi). Amounts restricted included paid-in capital and statutory reserve funds, as determined pursuant to PRC accounting standards and regulations, were $29,927 as of June 30, 2017 and December 31, 2016 and 2015.

NOTE 20 – SUBSEQUENT EVENTS

ACM has entered into the following agreements with minority third-party investors holding a minority, or non-controlling, equity interest in ACM Shanghai, which are reflected as "non-controlling interests" in the Company's consolidated financial statements:

- In March 2017 ACM entered into a securities purchase agreement with Shanghai Science and Technology Venture Capital Co., Ltd. ("SSTVC") pursuant to which, effective as of August 31, 2017, ACM acquired SSTVC's equity interests in ACM Shanghai for a purchase price of $5,800 and issued to SSTVC 4,998,508 shares of Series E convertible preferred stock for a purchase price of $5,800.
- In August 2017 ACM entered into a securities purchase agreement with Shanghai Pudong High-Tech Investment Co., Ltd. ("PDHTI") and its subsidiary Pudong Science and Technology (Cayman) Co., Ltd. ("PST"), in which ACM agreed to bid, in an auction process mandated by PRC regulations, to purchase PDHTI's 10.78% equity interests in ACM Shanghai and to sell shares of Class A common stock to PST. On September 8, 2017, ACM issued 1,119,576 shares of Class A common stock to PST for a purchase price of $7.50 per share, representing an aggregate purchase price of $8,397.
- In August 2017 ACM entered into a securities purchase agreement with Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. ("ZSTVC") and its subsidiary Zhangjiang AJ Company Limited ("ZJAJ"), in which ACM agreed to bid, in an auction process mandated by PRC regulations, to purchase ZSTVC's 7.58% equity interests in ACM Shanghai and to sell shares of Class A common stock to ZJAJ. On September 8, 2017, ACM issued 787,098 shares of Class A common stock to ZJAJ for a purchase price of $7.50 per share, or an aggregate purchase price of $5,903.

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On September 11, 2017 ACM and Ninebell Co., Ltd. ("Ninebell") entered into:

- an ordinary share purchase agreement pursuant to which, contemporaneously with signing, Ninebell issued to ACM, for a purchase price of $1,200, ordinary shares representing 20% of Ninebell's post-closing equity; and
- a common stock purchase agreement pursuant to which, contemporaneously with signing, ACM issued 133,334 shares of Class A common stock to Ninebell for a purchase price of $7.50 per share, or an aggregate purchase price of $1,000.

On September 13, 2017, ACM effected the Reverse Split. Under the terms of the Reverse Split, each share of Class A and Class B common stock, issued and outstanding as of such effective date, was automatically reclassified and changed into one-third of one share of Class A and Class B common stock, as applicable, without any action by the stockholders. Fractional shares were rounded up to the nearest whole share on a holder-by-holder basis. All share and per share amounts have been restated to reflect the Reverse Split for all periods presented.

NOTE 21 – PARENT COMPANY ONLY CONDENSED FINANCIAL INFORMATION

The Company performed a test on the restricted net assets of consolidated subsidiaries in accordance with Rule 4-08(e)(3) of Regulation S-X of the SEC and concluded that it was applicable for the Company to disclose the financial information for ACM only. Certain information and footnote disclosures generally included in financial statements prepared in accordance with GAAP have been condensed or omitted. The footnote disclosure contains supplemental information relating to the operations of ACM separately.

ACM's subsidiaries did not pay any dividends to ACM during the periods presented.

ACM did not have significant capital or other commitments, long-term obligations, or guarantees as of June 30, 2017 or December 31, 2016 or 2015.

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The following represents condensed unconsolidated financial information of ACM only as of and for the years ended December 31, 2016 and 2015:

CONDENSED BALANCE SHEET

	December 31,	
	2016	2015
Assets		
Current assets:		
Cash and cash equivalents	$ 7,264	$ 504
Inventory	1,042	732
Due from intercompany	1,986	—
Other receivable	3	—
Total current assets	10,295	1,236
Investment in unconsolidated subsidiaries	6,583	3,250
Total assets	$16,878	4,486
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit		
Notes payable	$ 11	$ 2,837
Accounts payable	1,176	685
Due to intercompany	—	280
Other payable	47	—
Income taxes payable	44	44
Total liabilities	1,278	3,846
Total redeemable convertible preferred stocks	18,034	8,876
Total stockholders' deficit	(2,434)	(8,236)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$16,878	$ 4,486

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CONDENSED STATEMENT OF OPERATIONS

	Year Ended December 31,	
	2016	2015
Revenue	$ 5,803	$ 6,787
Cost of revenue	(5,346)	(6,185)
Gross profit	457	602
Operating expenses:		
Sales and marketing expenses	(64)	(1)
General and administrative expenses	(1,202)	(715)
Research and development expenses	(6)	—
Loss from operations	(815)	(114)
Equity in earnings of unconsolidated subsidiaries	3,561	5,611
Other income (expense), net	(1,608)	1
Interest expense, net	(106)	(108)
Income before income taxes	1,032	5,390
Income tax expense	(1)	(10)
Net income	$ 1,031	$ 5,380

CONDENSED STATEMENT OF CASH FLOWS

	Year Ended December 31,	
	2016	2015
Net cash (used in) provided by operating activities	$(2,220)	$ 357
Net cash provided by financing activities	9,309	—
Net increase in cash and cash equivalents	7,089	357
Cash and cash equivalents, beginning of year	504	326
Effect of exchange rate changes on cash and cash equivalents	(329)	(179)
Cash and cash equivalents, end of year	$ 7,264	$ 504

NOTES TO CONDENSED FINANCIAL INFORMATION

Basis of Presentation

The condensed financial information has been prepared using the same accounting policies as set out in the Company's consolidated financial statements except that ACM has used the equity method to account for its investments in subsidiaries.

Investments in Subsidiaries

For the ACM-only condensed financial information, ACM records its investments in its subsidiaries under the equity method of accounting as prescribed in FASB ASC Topic 323, *Investment – Equity Method and Joint Ventures*. ACM's investments in subsidiaries are stated at cost plus its equity interest in undistributed earnings of subsidiaries less impairment loss, if any, since inception, and are presented on its condensed balance sheet as "Investments in unconsolidated subsidiaries" and ACM's share of the subsidiaries' income or loss as "Equity in earnings of unconsolidated subsidiaries" on ACM's condensed statement of operations.

Shares

Class A Common Stock

PROSPECTUS

Roth Capital Partners

Craig-Hallum Capital Group

The Benchmark Company

, 2017

Through and including , 2017 (the 25th day after the date of this offering), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table presents the costs and expenses, other than underwriting discounts and commissions, payable in connection with the sale of Class A common stock being registered. All amounts are estimates except the SEC registration fee, the FINRA filing fee and the exchange listing fee. Except as otherwise noted, all the expenses below will be paid by us.

SEC registration fee	$ 3,999
FINRA filing fee	5,675
Exchange listing fee	125,000
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Blue sky fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous fees and expenses	*
Total	*

* To be completed by amendment.

Item 14. Indemnification of Directors and Officers.

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that he or she was a director, officer, employee or agent of the corporation or is or was serving at the request of a corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which such person is adjudged to be liable to the corporation.

In connection with the completion of this offering, the registrant's restated charter will contain provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of the registrant's directors for monetary damages for breach of their fiduciary duties as directors. The registrant's restated bylaws to be in effect immediately prior to the completion of this offering provide that the registrant must indemnify its directors and officers and may indemnify its employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

The registrant has entered into indemnification agreements with its directors and executive officers, in addition to the indemnification provided for in its restated bylaws, and intends to enter into indemnification agreements with any new directors and executive officers in the future.

The registrant has purchased and intends to maintain insurance on behalf of any person who is or was a director or officer of the registrant against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

The Underwriting Agreement, the form of which is attached as Exhibit 1.1 hereto, provides for indemnification by the underwriters of the registrant and its executive officers and directors, and by the registrant of the underwriters, for certain liabilities, including liabilities arising under the Securities Act and affords certain rights of contribution with respect thereto.

See also "Undertakings" set out in response to Item 17 herein.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding the shares of common stock and preferred stock, and options granted, by us since January 30, 2014 that were not registered under the Securities Act of 1933.

(1) We granted stock options to purchase shares of Class A common stock to certain of our employees, officers, directors, consultants and advisors, as follows: (a) on May 1, 2015, we granted stock options to purchase an aggregate of 783,338 shares of Class A common stock at a price of $1.50 per share; (b) on September 8, 2015 we granted stock options to purchase an aggregate of 263,335 shares of Class A common stock at an exercise price of $1.50 per share; (c) on December 28, 2016 we granted stock options to purchase an aggregate of 1,424,596 shares of Class A common stock at a price of $3.00 per share; (d) on March 9, 2017 we granted a stock option to purchase 33,334 shares of Class A common stock at a price of $7.50 per share and (e) on May 9, 2017 we granted a stock option to purchase an aggregate of 183,335 shares of Class A common stock at a price of $2.50 per share.

(2) Options have been exercised to acquire a total of 822,891 shares of Class A common stock for consideration aggregating $673,910.

(3) Options have been exercised to acquire a total of 362,335 shares of Class B common stock for consideration aggregating $271,750.

(4) In December 2016 we issued (a) 3,615,800 shares of Series F convertible preferred stock for an aggregate purchase price of $9,039,500, (b) 47,454 shares of Series F convertible preferred stock pursuant to conversion of $118,665 of principal and accrued interest of convertible promissory notes and (c) 1,812,069 shares of Class A common stock pursuant to the conversion of $2,522,784 of principal of convertible promissory notes.

(5) In March 2017 we entered into a securities purchase agreement pursuant to which we issued a warrant to acquire 397,502 shares of Class A common stock for an aggregate purchase price of $2,981,265.

(6) In March 2017 we entered into a securities purchase agreement pursuant to which we issued 4,998,508 shares of Series E convertible preferred stock for an aggregate purchase price of $5,800,000.

(7) In August 2017 we entered into a securities purchase agreement pursuant to which we issued 1,119,576 shares of Class A common stock for an aggregate purchase price of $8,396,820.

(8) In August 2017 we entered into a securities purchase agreement pursuant to which we issued 787,098 shares of Class A common stock for an aggregate purchase price of $5,903,235.

(9) In September 2017 we entered into a securities purchase agreement pursuant to which we issued 133,334 shares of Class A common stock for an aggregate purchase price of $1,000,000.

The offers, sales, grants and issuances of the securities described in paragraphs (1), (2) and (3) were deemed to be exempt from registration under the Securities Act in reliance on Rule 701. The recipients of such securities were our employees, officers, directors, bona fide consultants and advisors and received the securities under our 1998 Stock Option Plan, written compensation contracts or our 2016 Omnibus Incentive Plan. Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about us.

The offer, sale and issuance of the securities described in paragraphs (4) through (9) were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act in that the issuance of the securities to the accredited investors did not involve a public offering. The recipients of the

securities in these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the securities issued in these transactions. The recipients of the securities in these transactions were accredited investors under Rule 501 of Regulation D.

Item 16. Exhibits and Consolidated Financial Statement Schedules.

(a) Exhibits

Exhibit No.	Description
1.01*	Form of Underwriting Agreement to be entered into between ACM Research, Inc. and the underwriters of this offering
3.01	Certificate of Incorporation of ACM Research, Inc. (currently in effect)
3.02	Bylaws of ACM Research, Inc. (currently in effect)
3.03*	Form of Restated Certificate of Incorporation (to be effective following completion of this offering)
3.04*	Form of Restated Bylaws of ACM Research, Inc. (to be effective upon completion of this offering)
4.01*	Specimen stock certificate evidencing Class A common stock of ACM Research, Inc.
4.02*	Form of Class A Common Stock Warrant of ACM Research Inc. to be issued to the underwriters of this offering
5.01*	Opinion of K&L Gates LLP
10.01	Lease dated March 22, 2017 between ACM Research, Inc. and D&J Construction, Inc.
10.02	Lease dated September 6, 2016 between ACM Research (Shanghai), Inc. and Shanghai Zhangjiang Group Co., Ltd.
10.03	Securities Purchase Agreement dated March 14, 2017 by and among ACM Research, Inc., Shengxin (Shanghai) Management Consulting Limited Partnership and ACM Research (Shanghai), Inc.
10.03(a)	Warrant dated March 14, 2017 issued by ACM Research, Inc. to Shengxin (Shanghai) Management Consulting Limited Partnership
10.04*	Securities Purchase Agreement dated March 23, 2017 between ACM Research, Inc. and Shanghai Science and Technology Venture Capital Co., Ltd., as amended
10.05	Securities Purchase Agreement dated August 31, 2017 by and among ACM Research, Inc., Shanghai Pudong High-Tech Investment Co., Ltd. and Pudong Science and Technology (Cayman) Co., Ltd.
10.06	Securities Purchase Agreement dated August 31, 2017 by and among ACM Research, Inc., Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. and Zhangjiang AJ Company Limited
10.07*	Ordinary Share Purchase Agreement dated September 11, 2017 by and among ACM Research, Inc., Ninebell Co., Ltd. and Moon-Soo Choi
10.08*	Class A Common Stock Purchase Agreement dated September 11, 2017 by and among ACM Research, Inc., Ninebell Co., Ltd. and Moon-Soo Choi
10.09*	Form of Amended and Restated Registration Rights Agreement to be entered into between ACM Research, Inc. and certain of its stockholders
10.10+	2016 Omnibus Incentive Plan of ACM Research, Inc.
10.10(a)+	Form of Incentive Stock Option Grant Notice and Agreement under 2016 Omnibus Incentive Plan
10.10(b)+	Form of Non-qualified Stock Option Grant Notice and Agreement under 2016 Omnibus Incentive Plan

Exhibit No.	Description
10.10(c)+	Form of Restricted Stock Unit Grant Notice and Agreement under 2016 Omnibus Incentive Plan
10.11+	Form of Nonstatutory Stock Option Agreement of ACM Research, Inc.
10.12+	1998 Stock Option Plan of ACM Research, Inc.
10.12(a)+	Form of Incentive Stock Option Agreement under 1998 Stock Option Plan
10.12(b)+	Form of Non-statutory Stock Option Agreement under 1998 Stock Option Plan
10.13	Form of Indemnification Agreement to be entered into between ACM Research, Inc. and certain of its directors and officers
10.14+	Executive Retention Agreement dated November 14, 2016 between ACM Research, Inc. and Min Xu
21.01	List of Subsidiaries of ACM Research, Inc.
23.01	Consent of BDO China Shu Lan Pan Certified Public Accountants LLP
23.02*	Consent of K&L Gates LLP (included in Exhibit 5.01)
24.01	Power of Attorney (included on signature page)

* To be filed by amendment.
\+ Indicates management contract or compensatory plan.

(b) Consolidated Financial Statement Schedules

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act of 1933, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes to provide the underwriters, at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

The undersigned registrant hereby undertakes that:

1. For purposes of determining any liability under the Securities Act of 1933, the information omitted from a form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

2. For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, State of California, on September 13, 2017.

ACM RESEARCH, INC.

By: /S/ DAVID H. WANG
David H. Wang
Chief Executive Officer and President

SIGNATURES AND POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints David H. Wang and Min Xu, and each of them, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments) and any registration statement related thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought, and to file the same, with all exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities indicated on September 13, 2017:

Signature	Title
/S/ DAVID H. WANG **David H. Wang**	Chief Executive Officer, President and Director (*Principal Executive Officer*)
/S/ MIN XU **Min Xu**	Chief Financial Officer and Treasurer (*Principal Financial and Accounting Officer*)
/S/ HAIPING DUN **Haiping Dun**	Director
/S/ CHENMING HU **Chenming Hu**	Director
/S/ TRACY LIU **Tracy Liu**	Director

EXHIBIT INDEX

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23.02*	Consent of K&L Gates LLP (included in Exhibit 5.01)
24.01	Power of Attorney (included on signature page)

* To be filed by amendment.
\+ Indicates management contract or compensatory plan.

Exhibit 3.01

CERTIFICATE OF INCORPORATION

OF

ACM RESEARCH, INC.

I. NAME AND ADDRESS

The name of this corporation is ACM Research, Inc. (the "Corporation").

The address of the Corporation's registered office in the State of Delaware is Corporation Service Company, 2711 Centerville Road, Suite 400, in the City of Wilmington, County of New Castle, Delaware 19808. The name of its registered agent at such address is Corporation Service Company.

II. PURPOSE

The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware, as may be amended from time to time (the "Delaware GCL").

III. CAPITAL STOCK

The total number of shares of capital stock that the Corporation is authorized to issue is 130,000,000, each of which shares has a par value of $0.0001. The Corporation is authorized to issue three classes of capital stock, which are designated "Class A Common Stock," "Class B Common Stock" and "Preferred Stock." Class A Common Stock and Class B Common Stock are referred to collectively as "Common Stock." Of the 130,000,000 authorized shares of capital stock, 100,000,000 shares shall be designated as Class A Common Stock, 7,303,533 shares shall be designated as Class B Common Stock, and 22,696,467 shares shall be designated as Preferred Stock.

A. Common Stock.

(1) Authorized Shares. Of the authorized shares of capital stock, 100,000,000 are designated as Class A Common Stock and 7,303,533 are designated as Class B Common Stock. The number of authorized shares of Class A Common Stock or Class B Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Certificate of Incorporation) the affirmative vote of the holders of capital stock representing a majority of the voting power of the then-outstanding shares of Common Stock and Preferred Stock, voting together as a single class on an as-converted basis.

(2) Dividends. Shares of Class A Common Stock and Class B Common Stock shall be treated equally, identically and ratably, on a per share basis, with respect to any dividends or distributions as may be declared and paid from time to time out of any assets of the Corporation legally available therefor, *provided* that in the event a dividend is paid in the form of shares of Class A Common Stock or Class B Common Stock (or rights to acquire such shares), then holders of Class A Common Stock shall receive shares of Class A Common Stock (or rights to acquire such shares, as the case may be) and holders of Class B Common Stock shall receive shares of Class B Common Stock (or rights to acquire such shares, as the case may be), with holders of shares of Class A Common Stock and Class B Common Stock receiving, on a per share basis, an identical number of shares of Class A Common Stock or Class B Common Stock, as applicable. Notwithstanding the foregoing, the Board may declare a dividend or

distribution that is not identical or equivalent on a per share basis as between the Class A Common Stock and Class B Common Stock (whether in the amount of such dividend or distribution payable per share, the form in which such dividend or distribution is payable, the timing of the payment, or otherwise) if such disparate dividend or distribution is approved in advance by the affirmative vote of the holders of a majority of the then-outstanding shares of Class A Common Stock and a majority of the then-outstanding shares of Class B Common Stock, voting separately as classes.

(3) Voting. Except as otherwise provided in Section III.B(4)(b) or elsewhere in this Certificate of Incorporation or as required by the Delaware GCL, on any matter submitted to a vote or for the consent of the stockholders of the Corporation, holders of Common Stock are entitled to one vote for each share of Class A Common Stock held and twenty votes for each share of Class B Common Stock held, *provided* that, except as otherwise required by the Delaware GCL, holders of Common Stock, as such, shall not be entitled to vote on any amendment to this Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation or the Delaware GCL.

(4) Conversion Rights.

(a) Voluntary Conversion. Each share of Class B Common Stock shall be convertible at any time, at the option of the holder thereof upon written notice to the Corporation, into one fully paid and nonassessable share of Class A Common Stock. Before any holder may convert any shares of Class B Common Stock, the holder shall (i) surrender the certificate or certificates therefor, duly endorsed, at the principal corporate office of the Corporation or of the transfer agent for the Class B Common Stock and (ii) provide written notice to the Corporation, at its principal corporate office, of the holder's election to convert such shares of Class B Common Stock and the name or names in which the certificate or certificates for shares of Class A Common Stock are to be issued. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder, or to the nominee or nominees or such holder, a certificate or certificates for the number of shares of Class A Common Stock to which such holder shall be entitled upon such conversion. The conversion of such shares of Class B Common Stock shall be deemed to have been made immediately prior to the close of business on the first date as of which the holder has, in accordance with this Section III.A(4)(a), both delivered written notice to the Corporation and surrendered the certificate or certificates for such shares, and the person or persons entitled to receive the shares of Class A Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Class A Common Stock as of such time and date. Each share of Class B Common Stock that is converted pursuant to this Section III.A(4)(a) shall be retired by the Corporation and shall not be available for reissuance.

(b) Automatic Conversion. This Section III.A(4)(b) shall become effective as of the date (the "IPO Date") that a registration statement under the Securities Act of 1933, as amended (the "Securities Act"), is declared effective by the Securities and Exchange Commission with respect to the initial public offering and sale of shares of Common Stock to the public (the "IPO").

(i) On or after the IPO Date, a share of Class B Common Stock shall be immediately and automatically converted into one fully paid and nonassessable share of Class A Common Stock, upon any of the following (each a "Common Conversion Event" with respect to such share of Class B Common Stock):

(A) the occurrence of a Transfer, other than a Permitted Transfer, of such share of Class B Common Stock;

(B) the receipt by the Corporation of the affirmative vote at a duly noticed stockholders meeting (or a duly executed written consent) of the holders of a majority of the shares of Class B Common Stock then outstanding in favor of the conversion of all of the shares of Class B Common Stock; or

(C) at 11:59 p.m. (Eastern standard time) on the first December 31 that occurs more than five years after the IPO Date if the October Market Cap with respect to the month of October immediately preceding such December 31 exceeds $1,000,000,000.00, provided that this clause (C) shall be of no further effect, and no Common Conversion Event shall ever occur pursuant to this clause (C), as of any December 31 occurring less than five years after the IPO Date if the October Market Cap for the month of October immediately preceding such December 31 exceeds $1,000,000,000.00.

For purposes of clarity, a Common Conversion Event pursuant to the preceding clause (A) shall apply only with respect to the share or shares being Transferred (other than in a Permitted Transfer) and not with respect to any other outstanding shares of Class B Common Stock and a Common Conversion Event pursuant to the preceding clause (B) or (C) shall apply to all outstanding shares of Class B Common Stock.

(ii) Each outstanding stock certificate that, immediately prior to a Common Conversion Event, represented one or more shares of Class B Common Stock subject to such Common Conversion Event shall, upon such Common Conversion Event, be deemed to represent an equal number of shares of Class A Common Stock, without the need for surrender or exchange thereof. The Corporation shall, upon the request of any holder whose shares of Class B Common Stock have been converted into shares of Class A Common Stock as a result of a Common Conversion Event and upon surrender by such holder to the Corporation of the outstanding certificate or certificates formerly representing such holder's shares of Class B Common Stock, issue and deliver to such holder a certificate or certificates representing the shares of Class A Common Stock into which such holder's shares of Class B Common Stock were converted as a result of such Common Conversion Event. Each share of Class B Common Stock that is converted pursuant to this Section III.A(4)(b) shall thereupon be retired by the Corporation and shall not be available for reissuance.

(iii) The Corporation may, from time to time, establish such policies and procedures, not in violation of the other provisions of this Certificate of Incorporation or of applicable law, relating to the conversion of the Class B Common Stock into Class A Common Stock, as it may deem necessary or advisable in connection therewith. If the Corporation has reason to believe that a Transfer giving rise to a conversion of shares of Class B Common Stock into Class A Common Stock has occurred but has not theretofore been reflected on the books of the Corporation, the Corporation may request that the holder of such shares furnish affidavits or other evidence to the Corporation as the Corporation deems necessary to determine whether a conversion of shares of Class B Common Stock to Class A Common Stock has occurred, and if such holder does not within ten days after the date of such request furnish sufficient evidence to the Corporation (in the manner provided in the request) to enable the Corporation to determine that no such conversion has occurred, any such shares of Class B Common Stock, to the extent not previously converted, shall be automatically converted into shares of Class A Common Stock and the same shall thereupon be registered on the books and records of the Corporation.

(c) Reservation of Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Class A Common Stock, solely for the purpose of effecting the conversion of the shares of Class B Common Stock, such number of shares of Class A Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Class B Common Stock into shares of Class A Common Stock.

(d) Subdivision or Combinations. If the Corporation in any manner subdivides or combines the outstanding shares of one class of Common Stock, the outstanding shares of the other class of Common Stock will be subdivided or combined in the same manner.

(e) Equal Status. Except as expressly provided in this Article III, shares of Class A Common Stock and Class B Common Stock shall have the same rights, preferences, powers and restrictions and limitations, shall rank equally, shall share ratably and shall be identical in all respects as to all matters.

(f) Protective Provision. The Corporation shall not, whether by merger, consolidation or otherwise, amend, alter, repeal or waive any provision of this Section III.A (or adopt any provision inconsistent therewith), without first obtaining the affirmative vote (or written consent if action by written consent of stockholders is permitted at such time under this Certificate of Incorporation) of the holders of a majority of the then outstanding shares of Class B Common Stock, voting as a separate class, in addition to any other vote required by the Delaware GCL, this Certificate of Incorporation or the Bylaws of the Corporation.

(g) Special Definitions. For purposes of this Section III.A(4), the following definitions shall apply:

(i) "Family Member" shall mean, with respect to any natural person who is a Qualified Stockholder, the spouse, parents, grandparents, lineal descendants, siblings and lineal descendants of siblings of such Qualified Stockholder. Lineal descendants shall include adopted persons, but only so long as they are adopted during minority.

(ii) "Permitted Entity" shall mean, with respect to a Qualified Stockholder:

(A) a bona fide trust for which (1) the trustee is such Qualified Stockholder, a Family Member of such Qualified Stockholder, or a professional in the business of providing trustee services (including private professional fiduciaries, trust companies and bank trust departments) and (2) the beneficiaries are comprised solely of such Qualified Stockholder, one or more Family Members of such Qualified Stockholder and/or any other Permitted Entity of such Qualified Stockholder, or

(B) any general partnership, limited partnership, limited liability company, corporation or other entity owned exclusively by such Qualified Stockholder, one or more Family Members of such Qualified Stockholder, and/or any other Permitted Entity of such Qualified Stockholder.

(iii) "October Market Cap" shall mean, with respect to any October throughout which Class A Common Stock is traded on a securities exchange registered with the Securities and Exchange Commission, the product of:

(A) the average of the VWAPs for each of the days in such month of October on which Class A Common Stock is traded on a securities exchange registered

with the Securities and Exchange Commission, where "VWAP" means, for any such trading day, the average of the daily volume weighted average trading price (the total dollar amount traded on each day divided by trading volume for such day) of the Class A Common Stock for the regular trading day session as reported as of 4:15 p.m. (Eastern time), as reported by Bloomberg, LP function key HP by using W to calculate the daily weighted average, multiplied by

(B) the number of shares of Common Stock outstanding as of 11:59 p.m. (Eastern daylight saving time) on the last trading day of such month of October.

(iv) "Permitted Transfer" shall mean, and be restricted to, any Transfer of a share of Class B Common Stock:

(A) by a Qualified Stockholder to either one or more Family Members of such Qualified Stockholder and/or any Permitted Entity of such Qualified Stockholder; or

(B) by a Permitted Entity of a Qualified Stockholder to such Qualified Stockholder, one or more Family Members of such Qualified Stockholder, or any other Permitted Entity of such Qualified Stockholder.

(v) "Qualified Stockholder" shall mean: (A) a holder of a share of Class B Common Stock immediately following the IPO Date; (B) the initial holder of any shares of Class B Common Stock that are originally issued by the Corporation after the IPO Date pursuant to the exercise or conversion of options or warrants or the settlement of restricted stock units that, in each case, are outstanding as of the IPO Date; (C) each natural person who Transferred shares of or equity awards for Class B Common Stock (including any option or warrant exercisable for, or any restricted stock unit that can be settled in, shares of Class B Common Stock) to a Permitted Entity that is or becomes a Qualified Stockholder pursuant to clause (A) or (B) of this paragraph; and (D) a Transferee of shares pursuant to a Permitted Transfer.

(vi) "Transfer" of a share of Class B Common Stock shall mean any sale, assignment, transfer, conveyance, hypothecation or other transfer or disposition of such share or any legal or beneficial interest in such share, whether or not for value and whether voluntary or involuntary or by operation of law, including a transfer of a share of Class B Common Stock to a broker or other nominee (regardless of whether there is a corresponding change in beneficial ownership), or the transfer of, or entering into a binding agreement with respect to, Voting Control over such share by proxy or otherwise, *provided*, *however*, that the following shall not be considered a "Transfer":

(A) the granting of a revocable proxy to officers or directors of the Corporation at the request of the Board in connection with actions to be taken at an annual or special meeting of stockholders or in connection with any action by written consent of the stockholders solicited by the Board (if action by written consent of stockholders is permitted at such time under this Certificate of Incorporation);

(B) the entry into of a voting trust, agreement or arrangement (with or without granting a proxy) solely with stockholders who are holders of Class B Common Stock that (1) is disclosed either in a Schedule 13D filed with the Securities and Exchange Commission or in writing to the Secretary of the

Corporation, (2) either has a term not exceeding one year or is terminable by the holder of the shares subject thereto at any time and (3) does not involve any payment of cash, securities, property or other consideration to the holder of the shares subject thereto other than the mutual promise to vote shares in a designated manner; or

(C) a pledge of shares of Class B Common Stock by a stockholder that creates a mere security interest in such shares pursuant to a bona fide loan or indebtedness transaction for so long as such stockholder continues to exercise Voting Control over such pledged shares, provided that a foreclosure on such shares or other similar action by the pledgee shall constitute a "Transfer" unless such foreclosure or similar action qualifies as a "Permitted Transfer."

A "Transfer" shall also be deemed to have occurred with respect to a share of Class B Common Stock beneficially held by (A) an entity that is a Permitted Entity, if there occurs any act or circumstance that causes such entity to no longer be a Permitted Entity or (B) an entity that is a Qualified Stockholder, if there occurs a Transfer on a cumulative basis, from and after the IPO Date, of a majority of the voting power of the voting securities of such entity or any other entity that directly or indirectly owns or controls a majority of the voting power of the voting securities of such initial entity, other than a Transfer to parties that are, as of the IPO Date, holders of voting securities of any such initial entity or other entity.

(vii) "Voting Control" shall mean, with respect to a share of Class B Common Stock, the power (whether exclusive or shared) to vote or direct the voting of such share by proxy, voting agreement or otherwise.

B. Preferred Stock.

(1) Authorized Shares. Preferred Stock may be issued from time to time in one or more series. A total of 22,696,467 of the authorized shares of capital stock shares are designated as Preferred Stock as follows:

(a) 385,000 shares of Preferred Stock are designated as "Series A Preferred Stock";

(b) 1,572,000 shares of Preferred Stock are designated as "Series B Preferred Stock";

(c) 1,360,962 shares of Preferred Stock are designated as "Series C Preferred Stock";

(d) 2,659,975 shares of Preferred Stock are designated as "Series D Preferred Stock";

(e) 10,718,530 shares of Preferred Stock are designated as "Series E Preferred Stock"; and

(f) 6,000,000 shares of Preferred Stock are designated as "Series F Preferred Stock."

The Board of Directors of the Corporation (the "Board"), within the limits and restrictions stated in Article IV or in any resolution or resolutions of the Board originally fixing the number of shares constituting a series of Preferred Stock, may increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of such series subsequent to the issuance of shares of that series.

(2) Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock

payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in this Certificate of Incorporation) the holders of each series of Preferred Stock shall first receive, or simultaneously receive, a dividend on each outstanding share of such series of Preferred Stock in an amount equal to at least:

(a) in the case of a dividend on Common Stock, the product of (i) the dividend payable on each share of Common Stock and (ii) the number of shares of Class A Common Stock issuable upon conversion of such share of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend;

(b) in the case of a dividend on any other series of Preferred Stock that is convertible into Class A Common Stock, the product of (i) the dividend payable on each share of such other series of Preferred Stock, determined as if all shares of such other series of Preferred Stock had been converted into Class A Common Stock and (ii) the number of shares of Class A Common Stock issuable upon conversion of such outstanding share of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend; or

(c) in the case of a dividend on any other series of Preferred Stock that is not convertible into Class A Common Stock, the amount determined by (i) dividing the amount of the dividend payable on each share of such other series of Preferred Stock by the Original Issue Price (as defined below) thereof and (ii) multiplying such quotient by the Original Issue Price of such outstanding share of Preferred Stock.

Notwithstanding the foregoing, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock, the dividend payable to the holders of a series of Preferred Stock shall be calculated based upon the dividend on the class or series of capital stock that would result in the greatest dividend on such series of Preferred Stock. The "Original Issue Price" shall mean:

(a) with respect to Series A Preferred Stock, $0.80 per share;

(b) with respect to Series B Preferred Stock, $1.00 per share;

(c) with respect to Series C Preferred Stock, $1.50 per share;

(d) with respect to Series D Preferred Stock, $3.75 per share;

(e) with respect to Series E Preferred Stock, $1.00 per share; and

(f) with respect to Series F Preferred Stock, $2.50 per share;

subject in each case to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization occurring with respect to a series of Preferred Stock.

(3) Liquidation.

(a) Preferential Payments to Holders of Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation (each a "Liquidation"), the holders of Preferred Stock shall be entitled to be paid out of the assets of the Corporation available for distribution to stockholders, before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share of Preferred Stock equal to the greater of

(a) the applicable Original Issue Price of such share, plus an amount equal to any dividends declared but unpaid thereon, and (b) if such share of Preferred Stock is convertible into shares of a class of Common Stock, such amount as would have been payable had such share of Preferred Stock been converted into such Common Stock immediately prior to such Liquidation (the amount payable pursuant to this sentence is hereinafter referred to as the "Liquidation Amount"). If upon any Liquidation or Deemed Liquidation Event the assets of the Corporation available for distribution to stockholders shall be insufficient to pay all of the holders of Preferred Stock the full amounts to which they shall be entitled under this Section III.B(3)(a), the holders of Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts that would otherwise be payable in respect of the shares of Preferred Stock held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

(b) Distribution of Remaining Assets. In the event of any Liquidation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Preferred Stock pursuant to Section III.B(3)(a), the remaining assets of the Corporation available for distribution to stockholders shall be distributed among the holders of Preferred Stock and Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such Preferred Stock as if it had been converted to Common Stock pursuant to the terms of this Certificate of Incorporation immediately prior to the Liquidation or Deemed Liquidation Event.

(c) Deemed Liquidation Events.

(i) Definition. Each of the following events shall be considered a "Deemed Liquidation Event" unless the holders of a majority of the then-outstanding voting power of the shares of Preferred Stock elect otherwise by written notice sent to the Corporation at least five days prior to the effective date of any such event:

(A) a merger or consolidation in which:

(1) the Corporation is a constituent party or

(2) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, a majority, by voting power, of the capital stock of (x) the surviving or resulting corporation or (y) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(B) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, in a single transaction or series of related transactions, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

(ii) Effecting a Deemed Liquidation Event.

(A) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Section III.B(3)(c)(i)(A)(1) unless the agreement or plan of merger or consolidation for such transaction (the "Merger Agreement") provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Sections III.B(3)(a) and III.B(3)(b).

(B) In the event of a Deemed Liquidation Event referred to in Sections III.B(3)(c)(i)(A)(2) or III.B(3)(c)(i)(B), if the Corporation does not effect a dissolution of the Corporation under the Delaware GCL within 90 days after such Deemed Liquidation Event, then (A) the Corporation shall send a written notice to each holder of Preferred Stock no later than the ninetieth day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (B) to require the redemption of such shares of Preferred Stock and (B) if the holders of a majority of the then-outstanding shares of Preferred Stock so request in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the "Available Proceeds"), on the one hundred fiftieth day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the applicable Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall ratably redeem each holder's shares of Preferred Stock to the fullest extent of the Available Proceeds, and then shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders.

Prior to the distribution or redemption provided for in this Section III.B(3)(c)(ii), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

(iii) Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board.

(4) Voting. Except as otherwise provided in Section III.B(4)(b) or elsewhere in this Certificate of Incorporation or as required by the Delaware GCL, on any matter (including the election of directors) submitted to a vote or for the consent of the stockholders of the Corporation, holders of Preferred Stock are entitled to cast a number of votes equal to the number of whole shares of Class A Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter.

(a) Voting and Notice. Except as otherwise provided in Section III.B(4)(b) or elsewhere in this Certificate of Incorporation or as required by the Delaware GCL, the holders of Common Stock and Preferred Stock (a) shall vote together as a single class on all matters submitted to a vote or for the consent of the stockholders of the Corporation, (b) shall be entitled to notice of any stockholder meeting in accordance with the Bylaws of the Corporation and (c) shall be entitled to vote upon such matters and in such manner as may be provided in this Certificate of Incorporation or by the Delaware GCL. In connection with any action of stockholders taken at a meeting or by written consent (if action by written consent of stockholders is permitted at such time under this Certificate of Incorporation), the stock ledger of the Corporation shall be presumptive evidence as to who are the stockholders entitled to vote in person or by proxy at any meeting of stockholders or in connection with any such written consent and the number of shares of each class or series of capital stock held by such stockholder.

(b) Election of Directors.

(i) General. Except as otherwise set forth in clause (ii) of this Section III.B(4)(b), the holders of Common Stock and Preferred Stock, voting together as a single class by the affirmative vote of a majority of the outstanding voting power of such holders, shall be entitled to elect all of the directors of the Corporation.

(ii) Voting for the Election of Directors.

(A) At any time when at least 1,000,000 shares of Series B Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock) are outstanding, the holders of Series B Preferred Stock then outstanding shall be entitled, voting together as a class, to elect one director of the Corporation at each election of directors by the affirmative vote of a majority of the outstanding voting power of such holders.

(B) At any time when at least 1,333,333 shares of Series C Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series C Preferred Stock) are outstanding, the holders of Series C Preferred Stock then outstanding shall be entitled, voting together as a class, to elect one director of the Corporation at each election of directors by the affirmative vote of a majority of the outstanding voting power of such holders.

(C) At any time when at least 1,200,000 shares of Series D Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock) are outstanding, the holders of Series D Preferred Stock then outstanding shall be entitled, voting together as a class, to elect one director of the Corporation at each election of directors by the affirmative vote of a majority of the outstanding voting power of such holders.

(D) The holders of Series E Preferred Stock then outstanding shall be entitled, voting together as a class, to elect one director of the Corporation at each election of directors by the affirmative vote of a majority of the outstanding voting power of such holders.

(E) The holders of Series F Preferred Stock then outstanding shall be entitled, voting together as a class, to elect one director of the Corporation at each election of directors by the affirmative vote of a majority of the outstanding voting power of such holders.

(F) The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation.

Any director elected as provided in this Section III.B(4)(b)(ii) may be removed without cause by, and only by, the affirmative vote of a majority of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of a series of Preferred Stock fail to elect a director to fill the directorship for which they are entitled to elect a director, voting exclusively and as a separate class, pursuant to Section III.B(4)(b)(ii), then any directorship not so filled shall remain vacant until such time as the holders of such series of Preferred Stock elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. A vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of a majority of the shares of such class or series or, in the absence of such action by such holders, by any remaining director or directors then in office.

(5) Conversion Right.

(a) Voluntary Conversion.

(i) Conversion Ratio. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Class A Common Stock as is determined by dividing the applicable Original Issue Price by the applicable Conversion Price in effect at the time of conversion. The "Conversion Price" shall mean:

(A) with respect to Series A Preferred Stock, $0.80 per share;

(B) with respect to Series B Preferred Stock, $1.00 per share;

(C) with respect to Series C Preferred Stock, $1.50 per share;

(D) with respect to Series D Preferred Stock, $3.75 per share;

(E) with respect to Series E Preferred Stock, $1.00 per share; and

(F) with respect to Series F Preferred Stock, $2.50 per share.

(ii) Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Class A Common Stock, such holder shall surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Class A Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "Conversion Time"), and the shares of Class A Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (A) issue and deliver to such holder of Preferred Stock, or to such holder's nominees, a certificate or certificates for the number of full shares of Class A Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Class A Common Stock and (B) pay an amount equal to all declared but unpaid dividends on the shares of Preferred Stock converted.

(iii) Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as provided in this Section III.B(5)(a) shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Class A Common Stock in exchange therefor and to receive payment of an amount equal to any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

(b) Automatic Conversion.

(i) Automatic Conversion Time. All shares of a series of Preferred Stock shall be automatically converted into shares of Class A Common Stock based on the applicable Conversion Rate upon either (A) the closing of a sale of shares of Class A Common Stock to the public at a price of at least $5.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Class A Common Stock or the Preferred Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act resulting in at least $20,000,000 of gross proceeds to the Corporation and any selling stockholders and in connection with which the Class A Common Stock is listed on the NASDAQ Stock Market or the New York Stock Exchange or (B) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the then-outstanding shares of such series (the "Automatic Conversion Time").

(ii) Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written notice of the Automatic Conversion Time and the place designated for automatic conversion of all such shares of Preferred Stock pursuant to this Section III.B(5)(b). Such notice need not be sent in advance of the occurrence of the Automatic Conversion Time. Upon receipt of such notice, each such holder shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that any such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to this Section III.B(5)(b), including the rights, if any, to receive notices and vote (other than as a holder of Class A Common Stock), will terminate at the Automatic Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section III.B(5)(b)(ii). As soon as practicable after the Automatic Conversion Time and the surrender pursuant to this Section III.B(5)(b)(ii) of the certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock held by such holder, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Class A Common Stock issuable on such conversion in accordance with the provisions hereof, together with the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

(c) Equitable Adjustments to Conversion Price of each Series of Preferred Stock.

(i) Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time effect a subdivision of the outstanding Common Stock, each Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time combine the outstanding shares of Common Stock, each Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

(ii) Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the

Common Stock in additional shares of Common Stock, then and in each such event each Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying such Conversion Price then in effect by a fraction:

(A) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(B) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (A) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, each Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter such Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions, and (B) that no such adjustment shall be made if the holders of the series of Preferred Stock to which such Conversion Price applies simultaneously receive a dividend or other distribution of shares of Class A Common Stock in a number equal to the number of shares of Class A Common Stock as they would have received if all outstanding shares of such series of Preferred Stock had been converted into Class A Common Stock on the date of such event.

(iii) Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section III.B(2) do not apply to such dividend or distribution, then and in each such event the holders of each series of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of such series of Preferred Stock had been converted into Class A Common Stock on the date of such event.

(iv) Adjustment for Merger or Reorganization, etc. Subject to the provisions of Section III.B(3)(c), if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Class A Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Section III.B(5)(c)(i) or (ii)), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of each series of Preferred Stock not so converted or exchanged shall thereafter be convertible in lieu of the Class A Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Class A Common Stock issuable upon conversion of one share of such series of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board) shall be made in the

application of the provisions in this Section III.B(5) with respect to the rights and interests thereafter of the holders of such series of Preferred Stock, to the end that the provisions set forth in this Section III.B(5) (including provisions with respect to changes in and other adjustments of the applicable Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of such series of Preferred Stock. For the avoidance of doubt, nothing in this Section III.B(5)(c)(iv) shall be construed as preventing the holders of shares of such series of Preferred Stock from seeking any appraisal rights to which they are otherwise entitled under the Delaware GCL in connection with a merger triggering an adjustment hereunder, nor shall this Section III.B(5)(c)(iv) be deemed conclusive evidence of the fair value of the shares of such series of Preferred Stock in any such appraisal proceeding.

(d) Adjustments to Certain Conversion Prices for Diluting Issues of Common Stock. This Section III.B(5)(d) shall apply only to the Conversion Prices of Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock and Series F Preferred Stock.

(i) Deemed Issue of Additional Shares of Common Stock.

(A) If the Corporation at any time or from time to time shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(B) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to a Conversion Price pursuant to the terms of Section III.B(5)(d)(ii), are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, such Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to the Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this Section III.B(5)(d)(i)(B) shall have the effect of increasing a Conversion Price to an amount which exceeds the lower of (1) such Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security and (2) the Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(C) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to a Conversion Price pursuant to the terms of Section III.B(5)(d)(ii) (either because the consideration per share (determined pursuant to Section III.B(5)(d)(iii)) of the Additional Shares of Common Stock subject thereto was equal to or greater than such Conversion Price then in effect, or because such Option or Convertible Security was issued before the filing of this Certificate of Incorporation are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Section III.B(5)(d)(i)(A)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(D) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to a Conversion Price pursuant to the terms of Section III.B(5)(d)(ii), such Conversion Price shall be readjusted to the Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(E) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to a Conversion Price provided for in this Section III.B(5)(d)(i) shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in Sections III.B(5)(d)(i)(B) and (C)). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to such Conversion Price that would result under the terms of this Section III.B(5)(d)(i) at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to such Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

(ii) Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section III.B(5)(d)(i)), without consideration or for a consideration per share less than a

Conversion Price in effect immediately prior to such issue, then such Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-tenth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(A) "CP_2" shall mean such Conversion Price in effect immediately after such issue of Additional Shares of Common Stock;

(B) "CP_1" shall mean such Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;

(C) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(D) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP1); and

(E) "C" shall mean the number of such Additional Shares of Common Stock.

(iii) Determination of Consideration. For purposes of this Section III.B(5)(d), the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(A) Cash and Property: Such consideration shall:

(1) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

(2) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board; and

(3) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in Sections III.B(5)(d)(iii)(A)(1) and (2) above, as determined in good faith by the Board.

(B) Options and Convertible Securities: The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section III.B(5)(d)(i), relating to Options and Convertible Securities, shall be determined by dividing:

(1) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(2) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

(iv) Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to a Conversion Price pursuant to the terms of Section III.B(5)(d)(ii) then, upon the final such issuance, the such Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

(v) Special Definitions. For purposes of this Section III.B(5)(d), the following definitions shall apply:

(A) "Additional Shares of Common Stock" shall mean all shares of Common Stock issued (or, pursuant to Section III.B(5)(d)(i), deemed to be issued) by the Corporation, other than the following shares of Common Stock and shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (collectively, "Exempted Securities"):

(1) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock;

(2) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Section III.B(5)(c);

(3) shares of Common Stock or Options issued to employees or officers or directors of, or consultants or advisors to, the Corporation pursuant to a grant, plan, agreement or arrangement approved by the Board;

(4) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(5) Options or Convertible Securities issued to strategic partners or investors pursuant to certain material agreements between such partners or investors and the Corporation approved by the Board;

(6) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board;

(7) with respect to Series D Preferred Stock only, the issuance of shares of Series D Preferred Stock and warrants to purchase shares of Series D Preferred Stock to any holder of Series D Preferred Stock;

(8) with respect to Series E Preferred Stock only, (a) any issuance of Series E Preferred Stock pursuant to [a 2006 joint venture agreement] or (b) the issuance of shares of Series E Preferred Stock and warrants to purchase shares of Series E Preferred Stock to any holder of Series E Preferred Stock; or

(9) with respect to Series F Preferred Stock only, the issuance of shares of Series F Preferred Stock and warrants to purchase shares of Series F Preferred Stock to any holder of Series F Preferred Stock.

The shares described in the preceding clause (5) shall be deemed to be "Excluded Shares" with respect to (a) strategic partners or investors that are also purchasers or potential purchasers of the Corporation's equipment and (b) any other strategic partners or investors only upon the written waiver by holders of a majority of the then-outstanding shares of Series D Preferred Stock, Series E Preferred Stock or Series F Preferred Stock, as applicable.

(B) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(C) "Option" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(e) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of a Conversion Price of a series of Preferred Stock pursuant to this Section III.B(5), the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of shares of such series of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which such series of Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of shares of such series of Preferred Stock (but in any event not later than ten days thereafter), furnish or cause to be furnished to such holder a certificate setting

forth (i) the applicable Conversion Price then in effect and (ii) the number of shares of Class A Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of shares of such series of Preferred Stock.

(f) Notice of Record Date. In the event:

(i) the Corporation shall take a record of the holders of Common Stock (or other capital stock or securities at the time issuable upon conversion of Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security, or

(ii) of any capital reorganization of the Corporation, any reclassification of the Common Stock, any Liquidation or any Deemed Liquidation Event,

then, and in each such case, the Corporation will send or cause to be sent to the holders of Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, Liquidation or Deemed Liquidation Event is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, Liquidation or Deemed Liquidation Event, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least twenty days prior to the record date or effective date for the event specified in such notice.

(g) No Fractional Shares or Payments Therefor. No fractional shares of Class A Common Stock shall be issued upon conversion of Preferred Stock, and no payment in cash or other consideration shall be due from the Corporation with respect to any fractional shares to which a holder would otherwise be entitled upon any such conversion.

(h) Reservation of Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Class A Common Stock, solely for the purpose of effecting the conversion of the shares of Preferred Stock, such number of shares of Class A Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Preferred Stock into shares of Class A Common Stock. If at any time the number of authorized but unissued shares of Class A Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of Preferred Stock, in addition to such other remedies as shall be available to the holder of such Preferred Stock, the Corporation will take such corporate action as may be necessary to increase the authorized but unissued shares of Class A Common Stock to such number of shares as shall be sufficient for such purposes, including engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate of Incorporation.

C. Preemptive Rights.

(1) General. Each stockholder shall have a preemptive right, subject to the terms and conditions of this Section III.C, to purchase such stockholder's pro rata portion (determined on an as-converted-to-Common Stock basis) of any New Securities (as defined below) issued by the Corporation. The term "New Securities" shall mean any shares of capital stock of the Corporation or any securities that are (directly or indirectly) exercisable or exchangeable for, or convertible into, shares of such capital stock, but excluding the following:

(a) securities issued for noncash consideration;

(b) securities issued or issuable pursuant to a stock option, stock purchase, stock bonus, savings investment or other stock incentive plan of the Corporation or any subsidiary, affiliate or joint venture of the Corporation;

(c) securities issued or issuable upon exercise, exchange or conversion of currently outstanding securities;

(d) securities registered under the Securities Act or offered pursuant to Regulation A, as amended, under the Securities Act;

(e) shares of Series E Preferred Stock issued for the purpose of acquiring an equity interest in ACM Research (Shanghai), Inc.;

(f) shares of Series F Preferred Stock;

(g) securities issued pursuant to the acquisition of another corporation or other business entity by the Corporation by merger, purchase of substantially all of the assets or other reorganization, following which the Corporation or its stockholders own, directly or indirectly, a majority of the voting power of the surviving or successor corporation or business entity; and

(h) securities issued as a dividend or distribution on, or in connection with a stock split or recapitalization of, any class or series of capital stock of the Corporation.

(2) Right of First Offer. Subject to the terms and conditions of this Section III.C and applicable securities laws, if the Corporation proposes to offer or sell any New Securities, it shall first offer the New Securities to each of the stockholders. The Corporation shall give notice (the "Offer Notice") to each stockholder, stating (a) its bona fide intention to offer the New Securities, (b) the number, type and principal terms of the New Securities to be offered, and (c) the price and terms, if any, upon which it proposes to offer such New Securities. By notification to the Corporation within twenty days after the Offer Notice is given, each stockholder may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of the New Securities that equals the proportion that the shares of Common Stock then held by such stockholder (including all shares of Class A Common Stock then issuable, directly or indirectly, upon conversion of the Preferred Stock then held by such stockholder) bears to the total number of shares of Common Stock then outstanding (assuming full conversion of all Preferred Stock). The closing of any sale pursuant to this Section III.C shall occur by the later of (x) the one hundred twentieth day after the date on which the Offer Notice was given and (y) the date of initial sale of New Securities pursuant to Section III.C(3).

(3) Third-Party Sales. If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Section III.C(2), the Corporation may, during the 120-day period following the expiration of the period provided in Section III.C(2), offer and sell the remaining unsubscribed portion of the New Securities to any party or parties at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Corporation does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty days of the execution thereof, the right provided under this Section III.C shall be deemed to be revived and the New Securities shall not be offered unless first reoffered to stockholders in accordance with this Section III.C.

D. Lock Up Provision.

In connection with an IPO of any equity securities pursuant to a registration statement under the Securities Act, each holder of Common Stock or Preferred Stock shall not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Corporation and the managing underwriter (such period not to exceed 180 days in the case of the IPO, or such other period as may be requested by the Corporation or an underwriter to accommodate regulatory restrictions on the publication or other distribution of research reports and analyst recommendations and opinions, (1) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right, or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or Preferred Stock or any other securities (directly or indirectly) exercisable or exchangeable for, or convertible into, Common Stock (whether such shares or any such securities are then owned by the holder or are thereafter acquired) or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such shares or other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Section III.D shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the holder or the immediate family of the holder, provided that any such transfer shall not involve a disposition for value. Each holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section III.D or that are necessary to give further effect thereto.

E. Waiver.

Any of the rights, powers, preferences and other terms of any series of Preferred Stock set forth herein, including requirements as to notice, may be waived on behalf of all holders of such series of Preferred Stock by the affirmative written consent or vote of the holders of a majority in voting power of the then-outstanding shares of such series of Preferred Stock.

IV. ADDITIONAL MATTERS REGARDING DIRECTORS

In furtherance of and not in limitation of powers conferred by statute, it is further provided:

(1) The business and affairs of the Corporation shall be managed by or under the direction of the Board.

(2) Election of directors need not be by written ballot.

(3) The Board is expressly authorized to adopt, amend, alter or repeal the Bylaws of the Corporation.

V. DIRECTOR AND OFFICER LIABILITY

Except to the extent that the Delaware GCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director,

notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment.

The Corporation shall, to the fullest extent permitted by Section 145 of the Delaware GCL, as amended from time to time, indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) (all such persons being referred to hereafter as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by or on behalf of an Indemnitee in connection with such action, suit or proceeding and any appeal therefrom.

As a condition precedent to an Indemnitee's right to be indemnified, the Indemnitee must notify the Corporation in writing as soon as practicable of any action, suit, proceeding or investigation involving such Indemnitee for which indemnity will or could be sought. With respect to any action, suit, proceeding or investigation of which the Corporation is so notified, the Corporation will be entitled to participate therein at its own expense and/or to assume the defense thereof at its own expense, with legal counsel reasonably acceptable to the Indemnitee.

In the event that the Corporation does not assume the defense of any action, suit, proceeding or investigation of which the Corporation receives notice under this Article V, the Corporation shall pay in advance of the final disposition of such matter any expenses (including attorneys' fees) incurred by an Indemnitee in defending a civil or criminal action, suit, proceeding or investigation or any appeal therefrom, *provided*, *however*, that the payment of such expenses incurred by an Indemnitee in advance of the final disposition of such matter shall be made only upon receipt of an undertaking by or on behalf of the Indemnitee to repay all amounts so advanced in the event that it shall ultimately be determined that the Indemnitee is not entitled to be indemnified by the Corporation as authorized in this Article V or by law, which undertaking shall be accepted without reference to the financial ability of the Indemnitee to make such repayment.

The Corporation shall not indemnify an Indemnitee pursuant to this Article V in connection with a proceeding (or part thereof) initiated by such Indemnitee unless the initiation thereof was approved by the Board. In addition, the Corporation shall not indemnify an Indemnitee to the extent such Indemnitee is reimbursed from the proceeds of insurance, and in the event the Corporation makes any indemnification payments to an Indemnitee and such Indemnitee is subsequently reimbursed from the proceeds of insurance, such Indemnitee shall promptly refund such indemnification payments to the Corporation to the extent of such insurance reimbursement.

All determinations hereunder as to the entitlement of an Indemnitee to indemnification shall be made in each instance (a) by a majority vote of the directors of the Corporation consisting of persons who are not at that time parties to the action, suit or proceeding in question ("disinterested directors"), whether or not a quorum, (b) by a committee of disinterested directors designated by majority vote of disinterested directors, whether or not a quorum, (c) if there are no disinterested directors, or if the disinterested directors so direct, by independent legal counsel (who may, to the extent permitted by law, be regular legal counsel to the Corporation) in a written opinion, or (d) by the stockholders of the Corporation.

The rights provided in this Article V (1) shall not be deemed exclusive of any other rights to which an Indemnitee may be entitled under any law, agreement or vote of stockholders or disinterested directors or otherwise and (2) shall inure to the benefit of the heirs, executors and administrators of the Indemnitees. The Corporation may, to the extent authorized from time to time by the Board, grant indemnification rights to other employees or agents of the Corporation or other persons serving the Corporation and such rights may be equivalent to, or greater or less than, those set forth in this Article V.

VI. AMENDMENT

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

VII. SOLE INCORPORATOR

The name and mailing address of the sole incorporator are as follows:

Name	Mailing Address
Mark L. Johnson	K&L Gates LLP State Street Financial Center One Lincoln Street Boston, Massachusetts 02111

* * *

Executed at Boston, Massachusetts, on September 27, 2016.

/s/ MARK L. JOHNSON
Mark L. Johnson, Sole Incorporator

CERTIFICATE OF AMENDMENT
TO
CERTIFICATE OF INCORPORATION
OF
ACM RESEARCH, INC.

ACM RESEARCH, INC. (the "*Corporation*"), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of Delaware, DOES HEREBY CERTIFY THAT:

FIRST: The Certificate of Incorporation of the Corporation is hereby amended by adding the following new Section III.A(6) at the end of Section III.A thereof, which shall read in its entirety as follows:

"(6) Reverse Split.

(a) Class A Common Stock. Upon the effectiveness of this Certificate of Amendment (the "Effective Time"), each share of Class A Common Stock issued and outstanding immediately prior to the Effective Time shall be automatically reclassified as, and converted into, one-third of a share of Class A Common Stock; *provided* that no fractional shares of Class A Common Stock shall be issued to stockholders as a result of the foregoing reclassification and that, in lieu of issuance of any fractional shares of Class A Common Stock, the Corporation shall, after aggregating all fractions of a share to which a holder would otherwise be entitled, round any resulting fractional shares up to the nearest whole share. Any stock certificate that, immediately prior to the Effective Time, represented shares of Class A Common Stock will, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent the number of shares of Class A Common Stock equal to the product the number of shares of Class A Common Stock represented by such certificate immediately prior to the Effective Time divided by three, but giving effect to the rounding of fractional shares provided for in the immediately preceding sentence.

(b) Class B Common Stock. Upon the Effective Time, each share of Class B Common Stock issued and outstanding immediately prior to the Effective Time will be automatically reclassified as, and converted into, one-third of a share of Class B Common Stock; *provided* that no fractional shares of Class B Common Stock shall be issued to stockholders as a result of the foregoing reclassification and that, in lieu of issuance of any fractional shares of Class B Common Stock, the Corporation shall, after aggregating all fractions of a share to which a holder would otherwise be entitled, round any resulting fractional shares up to the nearest whole share. Any stock certificate that, immediately prior to the Effective Time, represented shares of Class B Common Stock will, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent the number of shares of Class B Common Stock equal to the product the number of shares of Class B Common Stock represented by such certificate immediately prior to the Effective Time divided by three, but giving effect to the rounding of fractional shares provided for in the immediately preceding sentence"

SECOND: The foregoing amendment was duly adopted in accordance with the provisions of Sections 228 and 242 (by the written consent of the stockholders of the Corporation) of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its duly authorized officer as of September 13, 2017.

ACM RESEARCH, INC.

By: /s/ David H. Wang
David H. Wang
President and Chief Executive Officer

BYLAWS
OF
ACM RESEARCH, INC.

ARTICLE I
OFFICES

The address of the registered office of ACM Research, Inc. (the "**Corporation**") is c/o Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware, 19808. The registered agent at such address is Corporation Service Company. The Corporation may also have offices at such other places both within and outside the State of Delaware as the Board of Directors may from time to time determine or the business of the Corporation may require.

ARTICLE II
MEETINGS OF STOCKHOLDERS

Section 1. Annual Meeting. If required by applicable law, the annual meeting of the stockholders of the Corporation shall be held on such date, at such time and at such place, if any, within or outside the State of Delaware as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting.

Section 2. Special Meetings. Special meetings of the stockholders of the Corporation shall be held on such date, at such time and at such place, if any, as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting.

Section 3. Notice of Meetings. Whenever stockholders are required or permitted to take any action at a meeting, a notice of the meeting shall be given that shall state the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, the record date for determining the stockholders entitled to vote at the meeting (if such date is different from the record date for stockholders entitled to notice of the meeting) and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Unless otherwise provided by law, the Certificate of Incorporation or these Bylaws, the notice of any meeting shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at the meeting as of the record date for determining the stockholders entitled to notice of the meeting. If mailed, such notice shall be deemed to be given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation.

Section 4. Quorum and Adjournment. Except as otherwise required by law, by the Certificate of Incorporation or by these Bylaws, the presence, in person or by proxy, of the holders of a majority of the aggregate voting power of the stock issued and outstanding, entitled to vote thereat, shall constitute a quorum for the transaction of business at all meetings of the stockholders. If such majority shall not be present or represented at any meeting of the stockholders, the chair or the stockholders present, although less than a quorum, shall have the power to adjourn the meeting to another time and place.

Section 5. Adjourned Meetings. Any meeting of stockholders, annual or special, may adjourn from time to time to reconvene at the same or some other place, and notice need not be given of any such adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting the Corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, a notice of the

adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date for determination of stockholders entitled to vote is fixed for the adjourned meeting, the Board of Directors shall fix as the record date for determining stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote at the adjourned meeting, and shall give notice of the adjourned meeting to each stockholder of record as of the record date so fixed for notice of such adjourned meeting.

Section 6. Vote Required. Except as otherwise provided by law, these Bylaws, the rules or regulations of any stock exchange applicable to the Corporation, any regulation applicable to the Corporation or its securities or by the Certificate of Incorporation:

(a) Directors shall be elected by a plurality of the votes present in person or represented by proxy at a meeting of the stockholders and entitled to vote in the election of directors, and

(b) Whenever any corporate action other than the election of Directors is to be taken, it shall be authorized by the affirmative vote of a majority in voting power of the shares present in person or represented by proxy at a meeting of stockholders and entitled to vote on the subject matter.

Section 7. Manner of Voting. At each meeting of stockholders, each stockholder having the right to vote shall be entitled to vote in person or by proxy. Proxies need not be filed with the Secretary of the Corporation until the meeting is called to order, but shall be filed before being voted. Each stockholder shall be entitled to vote each share of stock having voting power registered in his or her name on the books of the Corporation on the record date fixed for determination of stockholders entitled to vote at such meeting.

Section 8. Stockholder Action without a Meeting. Except as otherwise provided by law or by the Certificate of Incorporation, any action required to be taken at any meeting of stockholders of the Corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent, setting forth the action so taken, shall be given by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of the corporate action without a meeting by less than unanimous consent shall be given to those stockholders who have not consented and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for notice of such meeting had been the date that consents given by a sufficient number of the holders to take the action were delivered to the Corporation.

ARTICLE III
DIRECTORS

Section 1. Number; Term of Office. Subject to the Certificate of Incorporation, the number of directors that shall constitute the whole Board of Directors initially shall be four. Thereafter, the exact number of directors shall be determined from time to time by resolution adopted by the Board of Directors. Each director shall hold office until a successor is duly elected and qualified or until the director’s earlier death, resignation, disqualification or removal.

Section 2. General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. The Board of Directors may adopt such rules and procedures, not inconsistent with the Certificate of Incorporation, these by-laws or applicable law, as it may deem proper for the conduct of its meetings and the management of the Corporation.

Section 3. Resignations. Any Director may resign at any time by giving notice in writing or by electronic transmission to the Corporation. Such resignation shall take effect at the date of receipt of such notice or at any later time specified therein. Acceptance of such resignation shall not be necessary to make it effective.

Section 4. Removal. Except as prohibited by applicable law or the Certificate of Incorporation, the stockholders entitled to vote in an election of directors may remove any director from office at any time, with or without cause, by the affirmative vote of a majority in voting power thereof.

Section 5. Vacancies. Any vacancies occurring in the Board of Directors, shall be filled only by the affirmative votes of a majority of the remaining members of the Board of Directors, although less than a quorum, or by a sole remaining director. A director so elected shall be elected to hold office until the earlier of the expiration of the term of office of the director whom he or she has replaced, a successor is duly elected and qualified or the earlier of such director's death, resignation or removal.

Section 6. Annual Meetings. The Board of Directors may meet each year immediately following the annual meeting of stockholders, at the place where such meeting of stockholders has been held, or at such other place as shall be fixed by the person presiding over the meeting of the stockholders, for the purpose of election of officers and consideration of such other business as the Board of Directors considers relevant to the management of the Corporation. In the event that in any year Directors are elected by written or electronic consent in lieu of an annual meeting of stockholders, the Board of Directors may meet in such year as soon as practicable after receipt of such written or electronic consent by the Corporation at such time and place as shall be fixed by the Chairman of the Board, for the purpose of election of officers and consideration of such other business as the Board of Directors considers relevant to the management of the Corporation.

Section 7. Regular Meetings. Regular meetings of the Board of Directors may be held on such dates and at such times and places, if any, within or without the State of Delaware, as shall from time to time be determined by the Board of Directors. In the absence of any such determination, such meetings shall be held at such times and places, within or without the State of Delaware, as shall be designated by the Chairman of the Board on not less than 24 hours' notice to each Director, given verbally or in writing, whether personally, by telephone (including by message or recording device), by facsimile transmission, or by other electronic transmission, or on not less than 3 calendar days' notice to each Director given in writing by mail.

Section 8. Special Meetings. Special meetings of the Board of Directors may be held at the call of the Chairman of the Board at such times and places, if any, within or without the State of Delaware, as he or she shall designate, on not less than 24 hours' notice to each Director, given verbally or in writing, whether personally, by telephone (including by message or recording device), by facsimile transmission, or by other electronic transmission, or on not less than 3 calendar days' notice to each Director given in writing by mail. Special meetings may also be called by the Secretary on like notice at the written request of a majority of the Directors then in office.

Section 9. Quorum and Powers of a Majority. At all meetings of the Board of Directors or committee of the Board of Directors, the directors entitled to cast a majority of the votes of the whole Board of Directors or committee, as the case may be, shall constitute a quorum for the transaction of business, and except in cases in which the Certificate of Incorporation, these Bylaws or applicable law otherwise provides, a majority of the votes entitled to be cast by the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors or of such committee. In the absence of a quorum, a majority of the members present at any meeting may, without notice other than announcement at the meeting, adjourn such meeting from time to time until a quorum is present.

Section 10. Manner of Acting.

(a) Members of the Board of Directors, or any committee thereof, may participate in any meeting of the Board of Directors or such committee by means of conference telephone or similar communications equipment by means of which all persons participating therein can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(b) Any action required or permitted to be taken at any meeting of the Board of Directors or any committee thereof may be taken without a meeting if all members of the Board of Directors or such committee, as the case may be, consent thereto in writing or by electronic transmission, and the writings or electronic transmissions are filed with the minutes of proceedings of the Board of Directors or such committee.

Section 11. Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of the committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he, she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in place of any such absent or disqualified member. Any such committee, to the extent permitted by law and to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it.

Section 12. Committee Procedure, Limitations of Committee Powers.

(a) Except as otherwise provided by these Bylaws or by the Board of Directors, each committee shall adopt its own rules governing the time, place, and method of holding its meetings and the conduct of its proceedings. In the absence of such rules, each committee shall conduct its business in the same manner as the Board of Directors conducts its business pursuant to Article III of these Bylaws.

(b) Each committee shall keep regular minutes of its proceedings and report the same to the Board of Directors when required.

(c) Any member of any committee may be removed from such committee either with or without cause, at any time, by the Board of Directors at any meeting thereof. Any vacancy in any committee shall be filled by the Board of Directors in the manner prescribed by the Certificate of Incorporation, these Bylaws or applicable law for the original appointment of the members of such committee.

Section 13. Compensation.

(a) The Board of Directors, by a resolution or resolutions, may fix, and from time to time change, the compensation of Directors.

(b) Each Director shall be entitled to reimbursement from the Corporation for his or her reasonable expenses incurred with respect to duties as a member of the Board of Directors or any committee thereof.

(c) Nothing contained in these Bylaws shall be construed to preclude any Director from serving the Corporation in any other capacity and from receiving compensation from the Corporation for service rendered to it in such other capacity.

ARTICLE IV
OFFICERS

Section 1. Number. The officers of the Corporation shall include a President and a Secretary. The Board of Directors may also elect such other officers as the Board of Directors may from time to time deem appropriate or necessary. Any two or more offices may be held by the same person.

Section 2. Election of Officers, Qualification and Term. The officers of the Corporation shall be appointed from time to time by the Board of Directors and, shall hold office at the pleasure of the Board of Directors.

Section 3. Removal. Any officer of the Corporation may be removed, with or without cause, by the Board of Directors, without prejudice to the rights, if any, of such officer under any contract to which it is a party.

Section 4. Resignations. Any officer of the Corporation may resign at any time by giving notice to the Board of Directors. Such resignation shall take effect at the date of the receipt of such notice or at any later time specified therein and, unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 5. Salaries. The salaries of all officers of the Corporation shall be fixed by the Board of Directors from time to time, and no officer shall be prevented from receiving such salary by reason of the fact that he is also a Director of the Corporation.

Section 6. The Chairman of the Board. The Chairman of the Board, if any, shall have the powers and duties customarily and usually associated with the office of the Chairman of the Board.

Section 7. Vice Chairman of the Board. The Vice Chairman of the Board, if any, shall have the powers and duties customarily and usually associated with the office of the Vice Chairman of the Board.

Section 8. The President. The President shall be the chief executive officer of the Corporation, shall have, subject to the supervision, direction, and control of the Board of Directors, the general powers and duties of supervision, direction, and management of the affairs and business of the Corporation usually vested in the chief executive officer of a corporation, including, without limitation, all powers necessary to direct and control the organizational and reporting relationships within the Corporation. If at any time the office of the Chairman of the Board and the Vice Chairman of the Board shall not be filled, or in the event of the temporary absence or disability of the Chairman of the Board and the Vice Chairman of the Board, the President shall have the powers and duties of the Chairman of the Board.

Section 9. The Vice Presidents. Each Vice President, if any, shall have such powers and perform such duties as may from time to time be assigned to him or her by the Board of Directors or the President.

Section 10. The Secretary and Assistant Secretaries.

(a) The Secretary shall attend meetings of the Board of Directors and meetings of the stockholders and record all votes and minutes of all such proceedings in a book kept for such purpose. He or she shall have all such further powers and duties as generally are incident to the position of Secretary or as may from time to time be assigned to him or her by the Board of Directors or the President.

(b) Each Assistant Secretary, if any, shall have such powers and perform such duties as may from time to time be assigned to him or her by the Board of Directors, the President, or the Secretary. In case of the absence or disability of the Secretary, the Assistant Secretary designated by the President (or, in the absence of such designation, by the Secretary) shall perform the duties and exercise the powers of the Secretary.

Section 11. The Treasurer and Assistant Treasurers. To the extent that the officers of the Corporation include a Treasurer and any Assistant Treasurers:

(a) The Treasurer shall have custody of the Corporation's funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit or cause to be deposited moneys or other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The Treasurer shall also maintain adequate records of all assets, liabilities, and transactions of the Corporation and shall see that adequate audits thereof are currently and regularly made. The Treasurer shall have such other powers and perform such other duties that generally are incident to the position of the Treasurer or as may from time to time be assigned to him or her by the Board of Directors or the President.

(b) The Treasurer shall be responsible for maintaining the accounting records and statements, and shall properly account for all monies and obligations due the Corporation and all properties, assets, and liabilities of the Corporation. The Treasurer shall render to the Chairman of the Board or the President such periodic reports covering the results of operations of the Corporation as may be required by either of them or by law.

(c) Each Assistant Treasurer shall have such powers and perform such duties as may from time to time be assigned to him or her by the Board of Directors, the President, or the Treasurer. In case of the absence or disability of the Treasurer, the Assistant Treasurer designated by the President (or, in the absence of such designation, by the Treasurer) shall perform the duties and exercise the powers of the Treasurer.

ARTICLE V
STOCK

Section 1. Certificates. The shares of the Corporation shall be represented by certificates, provided that the Board of Directors may provide by resolution or resolutions that some or all of any or all classes or series of stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation. Every holder of stock represented by certificates shall be entitled to have a certificate signed by or in the name of the Corporation by any two duly authorized officers of the Corporation. Any of or all the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent, or registrar at the date of issue.

Section 2. Transfers. Transfers of stock of the Corporation shall be made on the books of the Corporation only upon surrender to the Corporation of a certificate (if any) for the shares duly endorsed or accompanied by proper evidence of succession, assignment, or authority to transfer, provided such succession, assignment, or transfer is not prohibited by the Certificate of Incorporation, these Bylaws, applicable law, or contract. Thereupon, the Corporation shall issue a new certificate (if requested) to the person entitled thereto, cancel the old certificate (if any), and record the transaction upon its books.

Section 3. Lost, Stolen, or Destroyed Certificates. Any person claiming a certificate of stock to be lost, stolen, or destroyed shall make an affidavit or an affirmation of that fact, and shall give the Corporation a bond of indemnity in satisfactory form and with one or more satisfactory sureties, whereupon a new certificate (if requested) may be issued of the same tenor and for the same number of shares as the one alleged to be lost, stolen, or destroyed.

Section 4. Record Stockholders. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares as the person entitled to exercise the rights of a stockholder and shall not be bound to recognize any equitable or other claim to or interest in any such shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise expressly provided by the General Corporation Law of the State of Delaware.

Section 5. Additional Powers of the Board.

(a) In addition to those powers set forth in Section 2 of Article III, the Board of Directors shall have power and authority to make all such rules and regulations as it shall deem expedient concerning the issue, transfer, and registration of certificates for shares of stock of the Corporation, including the use of uncertificated shares of stock subject to the provisions of the General Corporation Law of the State of Delaware.

(b) The Board of Directors may appoint and remove transfer agents and registrars of transfers, and may require all stock certificates to bear the signature of any such transfer agent and/or any such registrar of transfers.

ARTICLE VI
INDEMNIFICATION

Section 1. Indemnification. The Corporation shall indemnify, to the full extent that it shall have power under applicable law to do so and in a manner permitted by such law, any person made or threatened to be made a party to or is otherwise involved in any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (hereinafter, a "***Proceeding***"), by reason of the fact that such person, or a person for whom he or she is the legal representative, is or was a director or officer of the Corporation, or is or was serving at the request of Corporation as a director or officer of another corporation, partnership, joint venture, trust, or other enterprise. The Corporation may indemnify, to the full extent that it shall have power under applicable law to do so and in a manner permitted by such law, any person made or threatened to be made party to any Proceeding, by reason of the fact that such person is or was an employee or agent of the Corporation, or is or was serving at the request of the Corporation as an employee or agent of another corporation, partnership, joint venture, trust, or other enterprise. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article VI, the Corporation shall be required to indemnify any person in connection with a Proceeding (or part thereof) commenced by such person only if the commencement of such Proceeding (or part thereof) by the person was authorized in the specific case by the Board of Directors of the Corporation.

Section 2. Advancement of Expenses. With respect to any person made or threatened to be made a party to any threatened, pending, or completed Proceeding, by reason of the fact that such person, or a person for whom he or she is the legal representative, is or was a director or officer of the Corporation, the Corporation shall pay the expenses (including attorneys' fees) incurred by such person in defending any such Proceeding in advance of its final disposition (hereinafter an "***advancement of expenses***"); provided, however, that the payment of expenses (including attorneys' fees) incurred by such person in advance of the final disposition of such Proceeding shall be made only upon receipt of an undertaking (hereinafter an "***undertaking***") by such person to repay all amounts advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter a "***final adjudication***") that such person is not entitled to be indemnified for such expenses under this Article VI or otherwise. With respect to any person made or threatened to be made a party to any Proceeding, by reason of the fact that such person is or was an employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, the Corporation may, in its discretion and upon such terms and conditions, if any, as the Corporation deems appropriate, pay the expenses (including attorneys' fees) incurred by such person in defending any such Proceeding in advance of its final disposition.

Section 3. Claims. With respect to any person made or threatened to be made a party to any Proceeding, by reason of the fact that such person is or was a director or officer of the Corporation, or is or was serving at the request of the Corporation as a director or officer of another corporation, partnership, joint venture, trust, or other enterprise, the rights to indemnification and to the advancement of expenses conferred in Sections 1 and 2 of this Article VI shall be contract rights. If a claim under Sections 1 or 2 of this Article VI with respect to such rights is not paid in full by the Corporation within 60 days after a written demand has been received by the Corporation, except in the case of a claim for an advancement of expenses by an officer or director of the Corporation, in which case the applicable period shall be 30 days, the person seeking to enforce a right to indemnification or an advancement of expenses hereunder may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the person seeking to enforce a right to indemnification or an advancement of expenses hereunder or the person from whom the Corporation seeks to recover an advancement of expenses shall also be entitled to be paid the expenses (including attorneys' fees) of prosecuting or defending such suit. In any suit brought by a person seeking to enforce a right to indemnification hereunder (but not in a suit brought by a person seeking to enforce a right to an advancement of expenses hereunder) it shall be a defense that the person seeking to enforce a right to indemnification has not met any applicable standard for indemnification under applicable law. In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the person from whom the Corporation seeks to recover an advancement of expenses has not met any applicable standard for indemnification under applicable law. In any suit brought by a person seeking to enforce a right to indemnification or to an advancement of expenses hereunder, or by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the person seeking to enforce a right to indemnification or to an advancement of expenses or the person from whom the Corporation seeks to recover an advancement of expenses is not entitled to be indemnified, or to such an advancement of expenses, under this Article VI or otherwise shall be on the Corporation.

Section 4. Non-exclusive Rights. The indemnification and advancement of expenses provided in this Article VI shall not be deemed exclusive of any other rights to which any person indemnified may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be such director, officer, employee, or agent and shall inure to the benefit of the heirs, executors, and administrators of such person.

Section 5. Insurance. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee, or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Corporation would have the power to indemnify such person against such liability under the provisions of this Article VI or otherwise.

Section 6. Amendment or Repeal. Any right to indemnification or to advancement of expenses of any person arising hereunder shall not be eliminated or impaired by an amendment to or repeal of these Bylaws after the occurrence of the act or omission that is the subject of the civil, criminal, administrative or investigative action, suit or proceeding for which indemnification or advancement of expenses is sought.

ARTICLE VII
MISCELLANEOUS

Section 1. Place and Inspection of Books.

(a) The books of the Corporation other than such books as are required by law to be kept within the State of Delaware shall be kept in such place or places either within or without the State of Delaware as the Board of Directors may from time to time determine.

(b) The officer who has charge of the stock ledger shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting (provided, however, if the record date for determining the stockholders entitled to vote is less than 10 days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date), arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting at least 10 days prior to the meeting (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of meeting or (ii) during ordinary business hours at the principal place of business of the Corporation. If the meeting is to be held at a place, then a list of stockholders entitled to vote at the meeting shall be produced and kept at the time and place of the meeting during the whole time thereof and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Except as otherwise provided by law, the stock ledger shall be the only evidence as to who are the stockholders entitled to examine the list of stockholders required by this Section 1(b) of Article VII or to vote in person or by proxy at any meeting of stockholders.

(c) The Board of Directors shall determine from time to time whether and, if allowed, when and under what conditions and regulations the accounts and books of the Corporation (except such as may be by law specifically open to inspection or as otherwise provided by these Bylaws) or any of them shall be open to the inspection of the stockholders and the stockholders' rights in respect thereof.

Section 2. Waivers of Notice. Any waiver of notice, given by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at nor the purpose of any regular or special meeting of the stockholders, directors, or members of a committee of directors need be specified in a waiver of notice.

Section 3. Voting Shares in Other Corporations. The President or any other officer of the Corporation designated by the Board of Directors may vote any and all shares held by the Corporation in any other corporation.

Section 4. Fiscal Year. The fiscal year of the Corporation shall be such fiscal year as the Board of Directors from time to time by resolution shall determine.

Section 5. Gender/Number. As used in these Bylaws, the masculine, feminine, or neuter gender, and the singular and plural number, shall each include the other whenever the context so indicates.

Section 6. Paragraph Titles. The titles of the paragraphs have been inserted as a matter of reference only and shall not control or affect the meaning or construction of any of the terms and provisions hereof.

Section 7. Amendment. These Bylaws may be altered, amended or repealed, and new bylaws made, by the Board of Directors or by the stockholders of the Corporation.

Section 8. Certificate of Incorporation. Notwithstanding anything to the contrary contained herein, if any provision contained in these Bylaws is inconsistent with or conflicts with a provision of the Certificate of Incorporation, such provision of these Bylaws shall be superseded by the inconsistent provision in the Certificate of Incorporation to the extent necessary to give effect to such provision in the Certificate of Incorporation.

AIR COMMERCIAL REAL ESTATE ASSOCIATION
STANDARD INDUSTRIAL/COMMERCIAL
MULTI-TENANT LEASE – GROSS

1. **Basic Provisions** ("**Basic Provisions**").

1.1 **Parties:** This Lease ("**Lease**"), dated for reference purposes only March 22, 2017 is made by and between D&J Construction, Inc. ("**Lessor**") and ACM Research, Inc. ("**Lessee**"), (collectively the "**Parties**", or individually a "**Party**").

1.2 (a) **Premises:** That certain portion of the Project (as defined below), including all improvements therein or to be provided by Lessor under the terms of this Lease, commonly known by the street address of 42307 Osgood Rd., Unit I located in the City of Fremont, County of Alameda State of California , with zip code 94539, as outlined on Exhibit ____ attached hereto ("**Premises**") and generally described as (describe briefly the nature of the Premises): an approximately 3,000 sf office/warehouse unit in a larger multi-tenant industrial building. Lessee to take possession of the premises as is. In addition to Lessee's rights to use and occupy the Premises as hereinafter specified, Lessee shall have non-exclusive rights to any utility raceways of the building containing the Premises ("**Building**") and to the Common Areas (as defined in Paragraph 2.7 below), but shall not have any rights to the roof, or exterior walls of the Building or to any other buildings in the Project. The Premises, the Building, the Common Areas, the land upon which they are located, along with all other buildings and improvements thereon, are herein collectively referred to as the "**Project.**" (See also Paragraph 2)

(b) **Parking:** 7 unreserved vehicle parking spaces. (See also Paragraph 2.6)

1.3 **Term:** 1 years and 0 months ("**Original Term**") commencing April 1, 2017 ("**Commencement Date**") and ending March 31, 2018 ("**Expiration Date**"). (See also Paragraph 3)

1.4 **Early Possession:** If the Premises are available Lessee may have non-exclusive possession of the Premises commencing upon lease execution ("**Early Possession Date**"). (See also Paragraphs 3.2 and 3.3)

1.5 **Base Rent:** $ 2,775.00 per month ("**Base Rent**"), payable on the 1st day of each month commencing April 1, 2017. (See also Paragraph 4)

☐ If this box is checked, there are provisions in this Lease for the Base Rent to be adjusted. See Paragraph ____.

1.6 **Lessee's Share of Common Area Operating Expenses:** $0.07/ sf/mo ($210.00) ("**Lessee's Share**"). In the event that the size of the Premises and/or the Project are modified during the term of this Lease, Lessor shall recalculate Lessee's Share to reflect such modification.

1.7 Base Rent and Other Monies Paid Upon Execution:

(a) **Base Rent:** $ 2,775.00 for the period April 2017.

(b) **Common Area** Operating Expenses: $ 210.00 for the period April 2017.

(c) **Security Deposit:** $ 2,550 (existing) ("**Security Deposit**"). (See also Paragraph 5)

(d) **Other:** $_____ for _____.

(e) Total Due Upon Execution of this Lease: $2,985.00.

1.8 **Agreed Use:** Wholesale and retail sales of goods manufactured or assembled onsite; warehouse and storage. (See also Paragraph 6)

1.9 **Insuring Party:** Lessor is the "**Insuring Party**". (See also Paragraph 8)

1.10 **Real Estate Brokers:** (See also Paragraph 15 and 25)

(a) **Representation:** The following real estate brokers (the "**Brokers**") and brokerage relationships exist in this transaction (check applicable boxes):

☐ represents Lessor exclusively ("**Lessor's Broker**");

☐ represents Lessee exclusively ("**Lessee's Broker**"); or

☐ represents both Lessor and Lessee ("**Dual Agency**").

(b) **Payment to Brokers:** Upon execution and delivery of this Lease by both Parties, Lessor shall pay to the Brokers the brokerage fee agreed to in a separate written agreement (or if there is no such agreement, the sum of _____ or _____% of the total Base Rent) for the brokerage services rendered by the Brokers.

1.11 **Guarantor**. The obligations of the Lessee under this Lease are to be guaranteed by Lillian Chien ("**Guarantor**"). (See also Paragraph 37)

1.12 **Attachments**. Attached hereto are the following, all of which constitute a part of this Lease:

☐ an Addendum consisting of Paragraphs _____ through _____;

☐ a site plan depicting the Premises;

☐ a site plan depicting the Project;

☐ a current set of the Rules and Regulations for the Project;

☐ a current set of the Rules and Regulations adopted by the owners' association;

☐ a Work Letter;

☐ other (specify): _____.

2. **Premises**.

2.1 **Letting**. Lessor hereby leases to Lessee, and Lessee hereby leases from Lessor, the Premises, for the term, at the rental, and upon all of the terms, covenants and conditions set forth in this Lease. While the approximate square footage of the Premises may have been used in the marketing of the Premises for purposes of comparison, the Base Rent stated herein is NOT tied to square footage and is not subject to adjustment should the actual size be determined to be different. **NOTE: Lessee is advised to verify the actual size prior to executing this Lease**.

2.2 **Condition**. Lessor shall deliver that portion of the Premises contained within the Building ("**Unit**") to Lessee broom clean and free of debris on the Commencement Date or the Early Possession Date, whichever first occurs ("**Start Date**"), and, so long as the required service contracts described in **Paragraph** 7.1(b) below are obtained by Lessee and in effect within thirty days following the Start Date, warrants that the existing electrical, plumbing, **fire sprinkler**, lighting, heating, ventilating and air conditioning systems ("**HVAC**"), loading doors, sump pumps, if any, and all other such elements in the Unit, other than those constructed by Lessee, shall be in good operating condition on said date, that the structural elements of the roof, bearing walls and foundation of the Unit shall be free of material defects, and that the Unit does not contain hazardous levels of any mold or fungi defined as toxic under applicable state or federal law. If a non-compliance with such warranty exists as of the Start Date, or if one of such systems or elements should malfunction or fail within the appropriate warranty period, Lessor shall, as Lessor's sole obligation with respect to such matter, except as otherwise provided in this Lease, promptly after receipt of written notice from Lessee setting forth with specificity the nature and extent of such non-compliance, malfunction or failure, rectify same at Lessor's expense. The warranty periods shall be as follows: (i) 6 months as to the HVAC systems, and (ii) 30 days as to the remaining systems and other elements of the Unit. If Lessee does not give Lessor the required notice within the appropriate warranty period, correction of any such non-compliance, malfunction or failure shall be the obligation of Lessee at Lessee's sole cost and expense (except for the repairs to the fire sprinkler systems, roof, foundations, and/or bearing walls – see Paragraph 7). Lessor also warrants, that unless otherwise specified in writing, Lessor is unaware of (i) any recorded Notices of Default affecting the Premise; (ii) any delinquent amounts due under any loan secured by the Premises; and (iii) any bankruptcy proceeding affecting the Premises.

2.3 **Compliance**. Lessor warrants that to the best of its knowledge the improvements on the Premises and the Common Areas comply with the building codes applicable laws, covenants or restrictions of record, regulations, and ordinances ("**Applicable Requirements**") that were in effect at the time that each improvement, or portion thereof, was constructed. Said warranty does not apply to the use to which Lessee will put the Premises, modifications which may be required by the Americans with Disabilities Act or any similar laws as a result of Lessee's use (see Paragraph 49), or to any Alterations or Utility Installations (as defined in Paragraph 7.3(a)) made or to be made by Lessee. **NOTE: Lessee is responsible for determining whether or not the Applicable Requirements**, **and especially the zoning are appropriate for Lessee's intended use**, **and acknowledges that past uses of the Premises may no longer be allowed**. If the Premises do not comply with said warranty, Lessor shall, except as otherwise provided, promptly after receipt of written notice from Lessee setting forth with specificity the nature and extent of such non-compliance, rectify the same at Lessor's expense. If Lessee does not give Lessor written notice of a non-compliance with this warranty within 6 months following the Start Date, correction of that non-compliance shall be the obligation of Lessee at Lessee's sole cost and expense. If the Applicable Requirements are hereafter changed so as to require during the term of this Lease the construction of an addition to or an alteration of the Unit, Premises and/or Building, the remediation of any Hazardous Substance, or the reinforcement or other physical modification of the Unit, Premises and/or Building ("**Capital Expenditure**"), Lessor and Lessee shall allocate the cost of such work as follows:

(a) Subject to Paragraph 2.3(c) below, if such Capital Expenditures are required as a result of the specific and unique use of the Premises by Lessee as compared with uses by tenants in general, Lessee shall be fully responsible for the cost thereof, provided, however, that if such Capital Expenditure is required during the last 2 years of this Lease and the cost thereof exceeds 6 months' Base Rent, Lessee may instead terminate this Lease unless Lessor notifies Lessee, in writing, within 10 days after receipt of Lessee's termination notice that Lessor has elected to pay the difference between the actual cost thereof and the amount equal to 6 months' Base Rent. If Lessee elects termination, Lessee shall immediately cease the use of the Premises which requires such Capital Expenditure and deliver to Lessor written notice specifying a termination date at least 90 days thereafter. Such termination date shall, however, in no event be earlier than the last day that Lessee could legally utilize the Premises without commencing such Capital Expenditure.

(b) If such Capital Expenditure is not the result of the specific and unique use of the Premises by Lessee (such as, governmentally mandated seismic modifications), then Lessor shall pay for such Capital Expenditure and Lessee shall only be obligated to pay, each month during the remainder of the term of this Lease or any extension thereof, on the date that on which the Base Rent is due, an amount equal to 1/144th of the portion of such costs reasonably attributable to the Premises. Lessee shall pay Interest on the balance but may prepay its obligation at any time. If, however, such Capital Expenditure is required during the last 2 years of this Lease or if Lessor reasonably determines that it is not economically feasible to pay its share thereof, Lessor shall have the option to terminate this Lease upon 90 days prior written notice to Lessee unless Lessee notifies Lessor, in writing, within 10 days after receipt of Lessor's termination notice that Lessee will pay for such Capital Expenditure. If Lessor does not elect to terminate, and fails to tender its share of any such Capital Expenditure, Lessee may advance such funds and deduct same, with Interest, from Rent until Lessor's share of such costs have been fully paid. If Lessee is unable to finance Lessor's share, or if the balance of the Rent due and payable for the remainder of this Lease is not sufficient to fully reimburse Lessee on an offset basis, Lessee shall have the right to terminate this Lease upon 30 days written notice to Lessor.

(c) Notwithstanding the above, the provisions concerning Capital Expenditures are intended to apply only to non-voluntary, unexpected, and new Applicable Requirements. If the Capital Expenditures are instead triggered by Lessee as a result of an actual or proposed change in use, change in intensity of use, or modification to the Premises then, and in that event, Lessee shall either: (i) immediately cease such changed use or intensity of use and/or take such other steps as may be necessary to eliminate the requirement for such Capital Expenditure, or (ii) complete such Capital Expenditure at its own expense. Lessee shall not have any right to terminate this Lease.

2.4 **Acknowledgements**. Lessee acknowledges that: (a) it has been given an opportunity to inspect and measure the Premises, (b) it has been advised by Lessor and/or Brokers to satisfy itself with respect to the size and condition of the Premises (including but not limited to the electrical, HVAC and fire sprinkler systems, security, environmental aspects, and compliance with Applicable Requirements and the Americans with Disabilities Act), and their suitability for Lessee's intended use, (c) Lessee has made such investigation as it deems necessary with reference to such matters and assumes all responsibility therefor as the same relate to its occupancy of the Premises, (d) it is not relying on any representation as to the size of the Premises made by Brokers or Lessor, (e) the square footage of the Premises was not material to Lessee's decision to lease the Premises and pay the Rent stated herein, and (f) neither Lessor, Lessor's agents, nor Brokers have made any oral or written representations or warranties with respect to said matters other than as set forth in this Lease. In addition, Lessor acknowledges that: (i) Brokers have made no representations, promises or warranties concerning Lessee's ability to honor the Lease or suitability to occupy the Premises, and (ii) it is Lessor's sole responsibility to investigate the financial capability and/or suitability of all proposed tenants.

2.5 **Lessee as Prior Owner/Occupant**. The warranties made by Lessor in Paragraph 2 shall be of no force or effect if immediately prior to the Start Date Lessee was the owner or occupant of the Premises. In such event, Lessee shall be responsible for any necessary corrective work.

2.6 **Vehicle Parking**. Lessee shall be entitled to use the number of Parking Spaces specified in Paragraph 1.2(b) on those portions of the Common Areas designated from time to time by Lessor for parking. Lessee shall not use more parking spaces than said number. Said parking spaces shall be used for parking by vehicles no larger than full-size passenger automobiles or pick-up trucks, herein called "**Permitted Size Vehicles.**" Lessor may regulate the loading and unloading of vehicles by adopting Rules and Regulations as provided in Paragraph 2.9. No vehicles other than Permitted Size Vehicles may be parked in the Common Area without the prior written permission of Lessor. In addition:

(a) Lessee shall not permit or allow any vehicles that belong to or are controlled by Lessee or Lessee's employees, suppliers, shippers, customers, contractors or invitees to be loaded, unloaded, or parked in areas other than those designated by Lessor for such activities.

(b) Lessee shall not service or store any vehicles in the Common Areas.

(c) If Lessee permits or allows any of the prohibited activities described in this Paragraph 2.6, then Lessor shall have the right, without notice, in addition to such other rights and remedies that it may have, to remove or tow away the vehicle involved and charge the cost to Lessee, which cost shall be immediately payable upon demand by Lessor.

2.7 **Common Areas – Definition**. The term "**Common Areas**" is defined as all areas and facilities outside the Premises and within the exterior boundary line of the Project and interior utility raceways and installations within the Unit that are provided and designated by the Lessor from time to time for the general non-exclusive use of Lessor, Lessee and other tenants of the Project and their respective employees, suppliers, shippers, customers, contractors and invitees, including parking areas, loading and unloading areas, trash areas, roofs, roadways, walkways, driveways and landscaped areas.

2.8 **Common Areas – Lessee's Rights**. Lessor grants to Lessee, for the benefit of Lessee and its employees, suppliers, shippers, contractors, customers and invitees, during the term of this Lease, the non-exclusive right to use, in common with others entitled to such use, the Common Areas as they exist from time to time, subject to any rights, powers, and privileges reserved by Lessor under the terms hereof or under the terms of any rules and regulations or restrictions governing the use of the Project. Under no circumstances shall the right herein granted to use the Common Areas be deemed to include the right to store any property, temporarily or permanently, in the Common Areas. Any such storage shall be permitted only by the prior written consent of Lessor or Lessor's designated agent, which consent may be revoked at any time. In the event that any unauthorized storage shall occur, then Lessor shall have the right, without notice, in addition to such other rights and remedies that it may have, to remove the property and charge the cost to Lessee, which cost shall be immediately payable upon demand by Lessor.

2.9 **Common Areas – Rules and Regulations**. Lessor or such other person(s) as Lessor may appoint shall have the exclusive control and management of the Common Areas and shall have the right, from time to time, to establish, modify, amend and enforce reasonable rules and regulations ("**Rules and Regulations**") for the management, safety, care, and cleanliness of the grounds, the parking and unloading of vehicles and the preservation of good order, as well as for the convenience of other occupants or tenants of the Building and the Project and their invitees. Lessee agrees to abide by and conform to all such Rules and Regulations, and shall use its best efforts to cause its employees, suppliers, shippers, customers, contractors and invitees to so abide and conform. Lessor shall not be responsible to Lessee for the non-compliance with said Rules and Regulations by other tenants of the Project.

2.10 **Common Areas – Changes**. Lessor shall have the right, in Lessor's sole discretion, from time to time:

(a) To make changes to the Common Areas, including, without limitation, changes in the location, size, shape and number of driveways, entrances, parking spaces, parking areas, loading and unloading areas, ingress, egress, direction of traffic, landscaped areas, walkways and utility raceways;

(b) To close temporarily any of the Common Areas for maintenance purposes so long as reasonable access to the Premises remains available;

(c) To designate other land outside the boundaries of the Project to be a part of the Common Areas;

(d) To add additional buildings and improvements to the Common Areas;

(e) To use the Common Areas while engaged in making additional improvements, repairs or alterations to the Project, or any portion thereof; and

(f) To do and perform such other acts and make such other changes in, to or with respect to the Common Areas and Project as Lessor may, in the exercise of sound business judgment, deem to be appropriate.

3. **Term**.

3.1 **Term**. The Commencement Date, Expiration Date and Original Term of this Lease are as specified in Paragraph 1.3.

3.2 **Early Possession**. Any provision herein granting Lessee Early Possession of the Premises is subject to and conditioned upon the Premises being available for such possession prior to the Commencement Date. Any grant of Early Possession only conveys a non-exclusive right to occupy the Premises. If Lessee totally or partially occupies the Premises prior to the Commencement Date, the obligation to pay Base Rent shall be abated for the period of such Early Possession. All other terms of this Lease (including but not limited to the obligations to pay Lessee's Share of Common Area Operating Expenses, Real Property Taxes and insurance premiums and to maintain the Premises) shall be in effect during such period. Any such Early Possession shall not affect the Expiration Date.

3.3 **Delay In Possession**. Lessor agrees to use its best commercially reasonable efforts to deliver possession of the Premises to Lessee by the Commencement Date. If, despite said efforts, Lessor is unable to deliver possession by such date, Lessor shall not be subject to any liability therefor, nor shall such failure affect the validity of this Lease or change the Expiration Date. Lessee shall not, however, be obligated to pay Rent or perform its other obligations until Lessor delivers possession of the Premises and any period of rent abatement that Lessee would otherwise have enjoyed shall run from the date of delivery of possession and continue for a period equal to what Lessee would otherwise have enjoyed under the terms hereof, but minus any days of delay caused by the acts or omissions of Lessee. If possession is not delivered within 60 days after the Commencement Date, as the same may be extended under the terms of any Work Letter executed by Parties, Lessee may, at its option, by notice in writing within 10 days after the end of such 60 day period, cancel this Lease, in which event the Parties shall be discharged from all obligations hereunder. If such written notice is not received by Lessor within said 10 day period, Lessee's right to cancel shall terminate. If possession of the Premises is not delivered within 120 days after the Commencement Date, this Lease shall terminate unless other agreements are reached between Lessor and Lessee, in writing.

3.4 **Lessee Compliance**. Lessor shall not be required to tender possession of the Premises to Lessee until Lessee complies with its obligation to provide evidence of insurance (Paragraph 8.5). Pending delivery of such evidence, Lessee shall be required to perform all of its obligations under this Lease from and after the Start Date, including the payment of Rent, notwithstanding Lessor's election to withhold possession pending receipt of such evidence of insurance. Further, if Lessee is required to perform any other conditions prior to or concurrent with the Start Date, the Start Date shall occur but Lessor may elect to withhold possession until such conditions are satisfied.

4. **Rent**.

4.1 **Rent Defined**. All monetary obligations of Lessee to Lessor under the terms of this Lease (except for the Security Deposit) are deemed to be rent ("**Rent**").

4.2 **Common Area Operating Expenses**. Lessee shall pay to Lessor during the term hereof, in addition to the Base Rent, Lessee's Share (as specified in Paragraph 1.6) of all Common Area Operating Expenses, as hereinafter defined, during each calendar year of the term of this Lease, in accordance with the following provisions:

(a) The following costs relating to the ownership and operation of the Project are defined as "**Common Area Operating Expenses**":

(i) Costs relating to the operation, repair and maintenance, in neat, clean, good order and condition, but not the replacement (see subparagraph (e)), of the following:

(aa) The Common Areas and Common Area improvements, including parking areas, loading and unloading areas, trash areas, roadways, parkways, walkways, driveways, landscaped areas, bumpers, irrigation systems, Common Area lighting facilities, fences and gates, elevators, roofs, exterior walls of the buildings, building systems and roof drainage systems.

(bb) Exterior signs and any tenant directories.

(cc) Any fire sprinkler systems.

(dd) All other areas and improvements that are within the exterior boundaries of the Project but outside of the Premises and/or any other space occupied by a tenant.

(ii) The cost of water, gas, electricity and telephone to service the Common Areas and any utilities not separately metered.

(iii) The cost of trash disposal, pest control services, property management, security services, owner's association dues and fees, the cost to repaint the exterior of any structures and the cost of any environmental inspections.

(iv) Reserves set aside for maintenance and repair of Common Areas and Common Area equipment.

(v) Any increase above the Base Real Property Taxes (as defined in Paragraph 10).

(vi) Any "**Insurance Cost Increase**" (as defined in Paragraph 8).

(vii) Any deductible portion of an insured loss concerning the Building or the Common Areas.

(viii) Auditors', accountants' and attorneys' fees and costs related to the operation, maintenance, repair and replacement of the Project.

(ix) The cost of any capital improvement to the Building or the Project not covered under the provisions of Paragraph 2.3 provided; however, that Lessor shall allocate the cost of any such capital improvement over a 12 year period and Lessee shall not be required to pay more than Lessee's Share of 1/144th of the cost of such capital improvement in any given month.

(x) The cost of any other services to be provided by Lessor that are stated elsewhere in this Lease to be a Common Area Operating Expense.

(b) Any Common Area Operating Expenses and Real Property Taxes that are specifically attributable to the Unit, the Building or to any other building in the Project or to the operation, repair and maintenance thereof, shall be allocated entirely to such Unit, Building, or other building. However, any Common Area Operating Expenses and Real Property Taxes that are not specifically attributable to the Building or to any other building or to the operation, repair and maintenance thereof, shall be equitably allocated by Lessor to all buildings in the Project.

(c) The inclusion of the improvements, facilities and services set forth in Subparagraph 4.2(a) shall not be deemed to impose an obligation upon Lessor to either have said improvements or facilities or to provide those services unless the Project already has the same, Lessor already provides the services, or Lessor has agreed elsewhere in this Lease to provide the same or some of them.

(d) Lessee's Share of Common Area Operating Expenses is payable monthly on the same day as the Base Rent is due hereunder. The amount of such payments shall be based on Lessor's estimate of the annual Common Area Operating Expenses. Within 60 days after written request (but not more than once each year) Lessor shall deliver to Lessee a reasonably detailed statement showing Lessee's Share of the actual Common Area Operating Expenses for the preceding year. If Lessee's payments during such year exceed Lessee's Share, Lessor shall credit the amount of such over-payment against Lessee's future payments. If Lessee's payments during such year were less than Lessee's Share, Lessee shall pay to Lessor the amount of the deficiency within 10 days after delivery by Lessor to Lessee of the statement.

(e) Common Area Operating Expenses shall not include the cost of replacing equipment or capital components such as the roof, foundations, exterior walls or Common Area capital improvements, such as the parking lot paving, elevators, fences that have a useful life for accounting purposes of 5 years or more.

(f) Common Area Operating Expenses shall not include any expenses paid by any tenant directly to third parties, or as to which Lessor is otherwise reimbursed by any third party, other tenant, or insurance proceeds.

4.3 **Payment.** Lessee shall cause payment of Rent to be received by Lessor in lawful money of the United States, without offset or deduction (except as specifically permitted in this Lease), on or before the day on which it is due. All monetary amounts shall be rounded to the nearest whole dollar. In the event that any statement or invoice prepared by Lessor is inaccurate such inaccuracy shall not constitute a waiver and Lessee shall be obligated to pay the amount set forth in this Lease. Rent for any period during the term hereof which is for less than one full calendar month shall be prorated based upon the actual number of days of said month. Payment of Rent shall be made to Lessor at its address stated herein or to such other persons or place as Lessor may from time to time designate in writing. Acceptance of a payment which is less than the amount then due shall not be a waiver of Lessor's rights to the balance of such Rent, regardless of Lessor's endorsement of any check so stating. In the event that any check, draft, or other instrument of payment given by Lessee to Lessor is dishonored for any reason, Lessee agrees to pay to Lessor the sum of $25 in addition to any Late Charge and Lessor, at its option, may require all future Rent be paid by cashier's check. Payments will be applied first to accrued late charges and attorney's fees, second to accrued interest, then to Base Rent and Common Area Operating Expenses, and any remaining amount to any other outstanding charges or costs.

5. **Security Deposit**. Lessee shall deposit with Lessor upon execution hereof the Security Deposit as security for Lessee's faithful performance of its obligations under this Lease. If Lessee fails to pay Rent, or otherwise Defaults under this Lease, Lessor may use, apply or retain all or any portion of said Security Deposit for the payment of any amount already due Lessor, for Rents which will be due in the future, and/ or to reimburse or compensate Lessor for any liability, expense, loss or damage which Lessor may suffer or incur by reason thereof. If Lessor uses or applies all or any portion of the Security Deposit, Lessee shall within 10 days after written request therefor deposit monies with Lessor sufficient to restore said Security Deposit to the full amount required by this Lease. If the Base Rent increases during the term of this Lease, Lessee shall, upon written request from Lessor, deposit additional monies with Lessor so that the total amount of the Security Deposit shall at all times bear the same proportion to the increased Base Rent as the initial Security Deposit bore to the initial Base Rent. Should the Agreed Use be amended to accommodate a material change in the business of Lessee or to accommodate a sublessee or assignee, Lessor shall have the right to increase the Security Deposit to the

extent necessary, in Lessor's reasonable judgment, to account for any increased wear and tear that the Premises may suffer as a result thereof. If a change in control of Lessee occurs during this Lease and following such change the financial condition of Lessee is, in Lessor's reasonable judgment, significantly reduced, Lessee shall deposit such additional monies with Lessor as shall be sufficient to cause the Security Deposit to be at a commercially reasonable level based on such change in financial condition. Lessor shall not be required to keep the Security Deposit separate from its general accounts. Within 90 days after the expiration or termination of this Lease, Lessor shall return that portion of the Security Deposit not used or applied by Lessor. Lessor shall upon written request provide Lessee with an accounting showing how that portion of the Security Deposit that was not returned was applied. No part of the Security Deposit shall be considered to be held in trust, to bear interest or to be prepayment for any monies to be paid by Lessee under this Lease. THE SECURITY DEPOSIT SHALL NOT BE USED BY LESSEE IN LIEU OF PAYMENT OF THE LAST MONTH'S RENT.

6. **Use**.

6.1 **Use**. Lessee shall use and occupy the Premises only for the Agreed Use, or any other legal use which is reasonably comparable thereto, and for no other purpose. Lessee shall not use or permit the use of the Premises in a manner that is unlawful, creates damage, waste or a nuisance, or that disturbs occupants of or causes damage to neighboring premises or properties. Other than guide, signal and seeing *eye* dogs, Lessee shall not keep or allow in the Premises any pets, animals, birds, fish, or reptiles. Lessor shall not unreasonably withhold or delay its consent to any request for a modification of the Agreed Use, so long as the same will not impair the structural integrity of the Building or the mechanical or electrical systems therein, and/or is not significantly more burdensome to the Project. If Lessor elects to withhold consent, Lessor shall within 7 days after such request give written notification of same, which notice shall include an explanation of Lessor's objections to the change in the Agreed Use.

6.2 Hazardous Substances.

(a) **Reportable Uses Require Consent**. The term "**Hazardous Substance**" as used in this Lease shall mean any product, substance, or waste whose presence, use, manufacture, disposal, transportation, or release, either by itself or in combination with other materials expected to be on the Premises, is either: (i) potentially injurious to the public health, safety or welfare, the environment or the Premises, (ii) regulated or monitored by any governmental authority, or (iii) a basis for potential liability of Lessor to any governmental agency or third party under any applicable statute or common law theory. Hazardous Substances shall include, but not be limited to, hydrocarbons, petroleum, gasoline, and/or crude oil or any products, by-products or fractions thereof. Lessee shall not engage in any activity in or on the Premises which constitutes a Reportable Use of Hazardous Substances without the express prior written consent of Lessor and timely compliance (at Lessee's expense) with all Applicable Requirements. "**Reportable Use**" shall mean (i) the installation or use of any above or below ground storage tank, (ii) the generation, possession, storage, use, transportation, or disposal of a Hazardous Substance that requires a permit from, or with respect to which a report, notice, registration or business plan is required to be filed with, any governmental authority, and/or (iii) the presence at the Premises of a Hazardous Substance with respect to which any Applicable Requirements requires that a notice be given to persons entering or occupying the Premises or neighboring properties. Notwithstanding the foregoing, Lessee may use any ordinary and customary materials reasonably required to be used in the normal course of the Agreed Use, ordinary office supplies (copier toner, liquid paper, glue, etc.) and common household cleaning materials, so long as such use is in compliance with all Applicable Requirements, is not a Reportable Use, and does not expose the Premises or neighboring property to any meaningful risk of contamination or damage or expose Lessor to any liability therefor. In addition, Lessor may condition its consent to any Reportable Use upon receiving such additional assurances as Lessor reasonably deems necessary to protect itself, the public, the Premises and/or the environment against damage, contamination, injury and/or liability, including, but not limited to, the installation (and removal on or before Lease expiration or termination) of protective modifications (such as concrete encasements) and/or increasing the Security Deposit.

(b) **Duty to Inform Lessor**. If Lessee knows, or has reasonable cause to believe, that a Hazardous Substance has come to be located in, on, under or about the Premises, other than as previously consented to by Lessor, Lessee shall immediately give written notice of such fact to Lessor, and provide Lessor with a copy of any report, notice, claim or other documentation which it has concerning the presence of such Hazardous Substance.

(c) **Lessee Remediation**. Lessee shall not cause or permit any Hazardous Substance to be spilled or released in, on, under, or about the Premises (including through the plumbing or sanitary sewer system) and shall promptly, at Lessee's expense, comply with all Applicable Requirements and take all investigatory and/or remedial action reasonably recommended, whether or not formally ordered or required, for the cleanup of any contamination of, and for the maintenance, security and/or monitoring of the Premises or neighboring properties, that was caused or materially contributed to by Lessee, or pertaining to or involving any Hazardous Substance brought onto the Premises during the term of this Lease, by or for Lessee, or any third party.

(d) **Lessee Indemnification**. Lessee shall indemnify, defend and hold Lessor, its agents, employees, lenders and ground lessor, if any, harmless from and against any and all loss of rents and/or damages, liabilities, judgments, claims, expenses, penalties, and attorneys' and consultants' fees arising out of or involving any Hazardous Substance brought onto the Premises by or for Lessee, or any third party (provided, however, that Lessee shall have no liability under this Lease with respect to underground migration of any Hazardous Substance under the Premises from areas outside of the Project not caused or contributed to by Lessee). Lessee's obligations shall include, but not be limited to, the effects of any contamination or injury to person, property or the environment created or suffered by Lessee, and the cost of investigation, removal, remediation, restoration and/or abatement, and shall survive the expiration or termination of this Lease. No termination, cancellation or release agreement entered into by Lessor and Lessee shall release Lessee from its obligations under this Lease with respect to Hazardous Substances, unless specifically so agreed by Lessor in writing at the time of such agreement.

(e) **Lessor Indemnification**. Except as otherwise provided in paragraph 8.7, Lessor and its successors and assigns shall indemnify, defend, reimburse and hold Lessee, its employees and lenders, harmless from and against any and all environmental damages, including the cost of remediation, which suffered as a direct result of Hazardous Substances on the Premises

prior to Lessee taking possession or which are caused by the gross negligence or willful misconduct of Lessor, its agents or employees. Lessor's obligations, as and when required by the Applicable Requirements, shall include, but not be limited to, the cost of investigation, removal, remediation, restoration and/or abatement, and shall survive the expiration or termination of this Lease.

(f) **Investigations and Remediations**. Lessor shall retain the responsibility and pay for any investigations or remediation measures required by governmental entities having jurisdiction with respect to the existence of Hazardous Substances on the Premises prior to Lessee taking possession, unless such remediation measure is required as a result of Lessee's use (including "**Alterations**", as defined in paragraph 7.3(a) below) of the Premises, in which event Lessee shall be responsible for such payment. Lessee shall cooperate fully in any such activities at the request of Lessor, including allowing Lessor and Lessor's agents to have reasonable access to the Premises at reasonable times in order to carry out Lessors investigative and remedial responsibilities.

(g) **Lessor Termination Option**. If a Hazardous Substance Condition (see Paragraph 9.1(e)) occurs during the term of this Lease, unless Lessee is legally responsible therefor (in which case Lessee shall make the investigation and remediation thereof required by the Applicable Requirements and this Lease shall continue in full force and effect, but subject to Lessor's rights under Paragraph 6.2(d) and Paragraph 13), Lessor may, at Lessor's option, either (i) investigate and remediate such Hazardous Substance Condition, if required, as soon as reasonably possible at Lessor's expense, in which event this Lease shall continue in full force and effect, or (ii) if the estimated cost to remediate such condition exceeds 12 times the then monthly Base Rent or $100,000, whichever is greater, give written notice to Lessee, within 30 days after receipt by Lessor of knowledge of the occurrence of such Hazardous Substance Condition, of Lessor's desire to terminate this Lease as of the date 60 days following the date of such notice. In the event Lessor elects to give a termination notice, Lessee may, within 10 days thereafter, give written notice to Lessor of Lessee's commitment to pay the amount by which the cost of the remediation of such Hazardous Substance Condition exceeds an amount equal to 12 times the then monthly Base Rent or $100,000, whichever is greater. Lessee shall provide Lessor with said funds or satisfactory assurance thereof within 30 days following such commitment. In such event, this Lease shall continue in full force and effect, and Lessor shall proceed to make such remediation as soon as reasonably possible after the required funds are available. If Lessee does not give such notice and provide the required funds or assurance thereof within the time provided, this Lease shall terminate as of the date specified in Lessor's notice of termination.

6.3 **Lessee's Compliance with Applicable Requirements**. Except as otherwise provided in this Lease, Lessee shall, at Lessee's sole expense, fully, diligently and in a timely manner, materially comply with all Applicable Requirements, the requirements of any applicable fire insurance underwriter or rating bureau, and the recommendations of Lessor's engineers and/or consultants which relate in any manner to the Premises, without regard to whether said Applicable Requirements are now in effect or become effective after the Start Date. Lessee shall, within 10 days after receipt of Lessor's written request, provide Lessor with copies of all permits and other documents, and other information evidencing Lessee's compliance with any Applicable Requirements specified by Lessor, and shall immediately upon receipt, notify Lessor in writing (with copies of any documents involved) of any threatened or actual claim, notice, citation, warning, complaint or report pertaining to or involving the failure of Lessee or the Premises to comply with any Applicable Requirements. Likewise, Lessee shall immediately give written notice to Lessor of: (i) any water damage to the Premises and any suspected seepage, pooling, dampness or other condition conducive to the production of mold; or (ii) any mustiness or other odors that might indicate the presence of mold in the Premises.

6.4 **Inspection; Compliance**. Lessor and Lessor's "**Lender**" (as defined in Paragraph 30) and consultants authorized by Lessor shall have the right to enter into Premises at any time, in the case of an emergency, and otherwise at reasonable times after reasonable notice, for the purpose of inspecting and/or testing the condition of the Premises and/or for verifying compliance by Lessee with this Lease. The cost of any such inspections shall be paid by Lessor, unless a violation of Applicable Requirements, or a Hazardous Substance Condition (see Paragraph 9.1) is found to exist or be imminent, or the inspection is requested or ordered by a governmental authority. In such case, Lessee shall upon request reimburse Lessor for the cost of such inspection, so long as such inspection is reasonably related to the violation or contamination. In addition, Lessee shall provide copies of all relevant material safety data sheets (**MSDS**) to Lessor within 10 days of the receipt of written request therefor. Lessee acknowledges that any failure on its part to allow such inspections or testing will expose Lessor to risks and potentially cause Lessor to incur costs not contemplated by this Lease, the extent of which will be extremely difficult to ascertain. Accordingly, should the Lessee fail to allow such inspections and/or testing in a timely fashion the Base Rent shall be automatically increased, without any requirement for notice to Lessee, by an amount equal to 10% of the then existing Base Rent or $100, whichever is greater for the remainder to the Lease. The Parties agree that such increase in Base Rent represents fair and reasonable compensation for the additional risk/costs that Lessor will incur by reason of Lessee's failure to allow such inspection and/or testing. Such increase in Base Rent shall in no event constitute a waiver of Lessee's Default or Breach with respect to such failure nor prevent the exercise of any of the other rights and remedies granted hereunder.

7. **Maintenance; Repairs; Utility Installations; Trade Fixtures and Alterations**.

7.1 **Lessee's Obligations**.

(a) **In General**. Subject to the provisions of Paragraph 2.2 (Condition), 2.3 (Compliance), 6.3 (Lessee's Compliance with Applicable Requirements), 7.2 (Lessor's Obligations), 9 (Damage or Destruction), and 14 (Condemnation), Lessee shall, at Lessee's sole expense, keep the Premises, Utility Installations (intended for Lessee's exclusive use, no matter where located), and Alterations in good order, condition and repair (whether or not the portion of the Premises requiring repairs, or the means of repairing the same, are reasonably or readily accessible to Lessee, and whether or not the need for such repairs occurs as a result of Lessee's use, any prior use, the elements or the age of such portion of the Premises), including, but not limited to, all equipment or facilities, such as plumbing, HVAC equipment, electrical, lighting facilities, boilers, pressure vessels, fixtures, interior walls, interior surfaces of exterior walls, ceilings, floors, windows, doors, plate glass, and skylights but excluding any items which are the responsibility of Lessor pursuant to Paragraph 7.2. Lessee, in keeping the Premises in good order, condition and repair, shall exercise and perform good maintenance practices, specifically including the procurement and maintenance of the service contracts required by Paragraph 7.1(b) below. Lessee's obligations shall include restorations, replacements or renewals when necessary to keep the Premises and all improvements thereon or a part thereof in good order, condition and state of repair.

(b) **Service Contracts**. Lessee shall, at Lessee's sole expense, procure and maintain contracts, with copies to Lessor, in customary form and substance for, and with contractors specializing and experienced in the maintenance of the following equipment and improvements, if any, if and when installed on the Premises: (i) HVAC equipment, (ii) boiler and pressure vessels, and (iii) clarifiers. However, Lessor reserves the right, upon notice to Lessee, to procure and maintain any or all of such service contracts, and Lessee shall reimburse Lessor, upon demand, for the cost thereof.

(c) **Failure to Perform**. If Lessee fails to perform Lessee's obligations under this Paragraph 7.1, Lessor may enter upon the Premises after 10 days' prior written notice to Lessee (except in the case of an emergency, in which case no notice shall be required), perform such obligations on Lessee's behalf, and put the Premises in good order, condition and repair, and Lessee shall promptly pay to Lessor a sum equal to 115% of the cost thereof.

(d) **Replacement**. Subject to Lessee's indemnification of Lessor as set forth in Paragraph 8.7 below, and without relieving Lessee of liability resulting from Lessee's failure to exercise and perform good maintenance practices, if an item described in Paragraph 7.1(b) cannot be repaired other than at a cost which is in excess of 50% of the cost of replacing such item, then such item shall be replaced by Lessor, and the cost thereof shall be prorated between the Parties and Lessee shall only be obligated to pay, each month during the remainder of the term of this Lease, on the date on which Base Rent is due, an amount equal to the product of multiplying the cost of such replacement by a fraction, the numerator of which is one, and the denominator of which is 144 (i.e. 1/144th of the cost per month). Lessee shall pay Interest on the unamortized balance but may prepay its obligation at any time.

7.2 **Lessor's Obligations**. Subject to the provisions of Paragraphs 2.2 (Condition), 2.3 (Compliance), 4.2 (Common Area Operating Expenses), 6 (Use), 7.1 (Lessee's Obligations), 9 (Damage or Destruction) and 14 (Condemnation), Lessor, subject to reimbursement pursuant to Paragraph 4.2, shall keep in good order, condition and repair the foundations, exterior walls, structural condition of interior bearing walls, exterior roof, fire sprinkler system, Common Area fire alarm and/or smoke detection systems, fire hydrants, parking lots, walkways, parkways, driveways, landscaping, fences, signs and utility systems serving the Common Areas and all parts thereof, as well as providing the services for which there is a Common Area Operating Expense pursuant to Paragraph 4.2. Lessor shall not be obligated to paint the exterior or interior surfaces of exterior walls nor shall Lessor be obligated to maintain, repair or replace windows, doors or plate glass of the Premises.

7.3 **Utility Installations; Trade Fixtures; Alterations**.

(a) **Definitions**. The term "**Utility Installations**" refers to all floor and window coverings, air and/or vacuum lines, power panels, electrical distribution, security and fire protection systems, communication cabling, lighting fixtures, HVAC equipment, plumbing, and fencing in or on the Premises. The term "**Trade Fixtures**" shall mean Lessee's machinery and equipment that can be removed without doing material damage to the Premises. The term "**Alterations**" shall mean any modification of the improvements, other than Utility Installations or Trade Fixtures, whether by addition or deletion. "**Lessee Owned Alterations and/or Utility Installations**" **are** defined as Alterations and/or Utility Installations made by Lessee that are not yet owned by Lessor pursuant to Paragraph 7.4(a).

(b) **Consent**. Lessee shall not make any Alterations or Utility Installations to the Premises without Lessor's prior written consent. Lessee may, however, make non-structural Alterations or Utility Installations to the interior of the Premises (excluding the roof) without such consent but upon notice to Lessor, as long as they are not visible from the outside, do not involve puncturing, relocating or removing the roof or any existing walls, will not affect the electrical, plumbing, HVAC, and/or life safety systems, do not trigger the requirement for additional modifications and/or improvements to the Premises resulting from Applicable Requirements, such as compliance with Title 24, and the cumulative cost thereof during this Lease as extended does not exceed a sum equal to 3 month's Base Rent in the aggregate or a sum equal to one month's Base Rent in any one year. Notwithstanding the foregoing, Lessee shall not make or permit any roof penetrations and/or install anything on the roof without the prior written approval of Lessor. Lessor may, as a precondition to granting such approval, require Lessee to utilize a contractor chosen and/or approved by Lessor. Any Alterations or Utility Installations that Lessee shall desire to make and which require the consent of the Lessor shall be presented to Lessor in written form with detailed plans. Consent shall be deemed conditioned upon Lessee's: (i) acquiring all applicable governmental permits, (ii) furnishing Lessor with copies of both the permits and the plans and specifications prior to commencement of the work, and (iii) compliance with all conditions of said permits and other Applicable Requirements in a prompt and expeditious manner. Any Alterations or Utility Installations shall be performed in a workmanlike manner with good and sufficient materials. Lessee shall promptly upon completion furnish Lessor with as-built plans and specifications. For work which costs an amount in excess of one month's Base Rent, Lessor may condition its consent upon Lessee providing a lien and completion bond in an amount equal to 150% of the estimated cost of such Alteration or Utility Installation and/or upon Lessee's posting an additional Security Deposit with Lessor.

(c) **Liens; Bonds**. Lessee shall pay, when due, all claims for labor or materials furnished or alleged to have been furnished to or for Lessee at or for use on the Premises, which claims are or may be secured by any mechanic's or materialmen's lien against the Premises or any interest therein. Lessee shall give Lessor not less than 10 days notice prior to the commencement of any work in, on or about the Premises, and Lessor shall have the right to post notices of non-responsibility. If Lessee shall contest the validity of any such lien, claim or demand, then Lessee shall, at its sole expense defend and protect itself, Lessor and the Premises against the same and shall pay and satisfy any such adverse judgment that may be rendered thereon before the enforcement thereof. If Lessor shall require, Lessee shall furnish a surety bond in an amount equal to 150% of the amount of such contested lien, claim or demand, indemnifying Lessor against liability for the same. If Lessor elects to participate in any such action, Lessee shall pay Lessor's attorneys' fees and costs.

7.4 **Ownership; Removal; Surrender; and Restoration**.

(a) **Ownership**. Subject to Lessor's right to require removal or elect ownership as hereinafter provided, all Alterations and Utility Installations made by Lessee shall be the property of Lessee, but considered a part of the Premises. Lessor may, at any time, elect in writing to be the owner of all or any specified part of the Lessee Owned Alterations and Utility Installations. Unless otherwise instructed per paragraph 7.4(b) hereof, all Lessee Owned Alterations and Utility Installations shall, at the expiration or termination of this Lease, become the property of Lessor and be surrendered by Lessee with the Premises.

(b) **Removal**. By delivery to Lessee of written notice from Lessor not earlier than 90 and not later than 30 days prior to the end of the term of this Lease, Lessor may require that any or all Lessee Owned Alterations or Utility Installations be removed by the expiration or termination of this Lease. Lessor may require the removal at any time of all or any part of any Lessee Owned Alterations or Utility Installations made without the required consent.

(c) **Surrender; Restoration**. Lessee shall surrender the Premises by the Expiration Date or any earlier termination date, with all of the improvements, parts and surfaces thereof broom clean and free of debris, and in good operating order, condition and state of repair, ordinary wear and tear excepted. "**Ordinary wear and tear**" shall not include any damage or deterioration that would have been prevented by good maintenance practice. Notwithstanding the foregoing, if the Lessee occupies the Premises for 12 months or less, then Lessee shall surrender the Premises in the same condition as delivered to Lessee on the Start Date with NO allowance for ordinary wear and tear. Lessee shall repair any damage occasioned by the installation, maintenance or removal of Trade Fixtures, Lessee owned Alterations and/or Utility Installations, furnishings, and equipment as well as the removal of any storage tank installed by or for Lessee. Lessee shall also remove from the Premises any and all Hazardous Substances brought onto the Premises by or for Lessee, or any third party (except Hazardous Substances which were deposited via underground migration from areas outside of the Premises) to the level specified in Applicable Requirements. Trade Fixtures shall remain the property of Lessee and shall be removed by Lessee. Any personal property of Lessee not removed on or before the Expiration Date or any earlier termination date shall be deemed to have been abandoned by Lessee and may be disposed of or retained by Lessor as Lessor may desire. The failure by Lessee to timely vacate the Premises pursuant to this Paragraph 7.4(c) without the express written consent of Lessor shall constitute a holdover under the provisions of Paragraph 26 below.

8. **Insurance; Indemnity**.

8.1 **Payment of Premium Increases**.

(a) As used herein, the term "**Insurance Cost Increase**" is defined as any increase in the actual cost of the insurance applicable to the Building and/or the Project and required to be carried by Lessor, pursuant to Paragraphs 8.2(b), 8.3(a) and 8.3(b), over and above the Base Premium, as hereinafter defined, calculated on an annual basis. Insurance Cost Increase shall include, but not be limited to, requirements of the holder of a mortgage or deed of trust covering the Premises, Building and/or Project, increased valuation of the Premises, Building and/or Project, and/or a general premium rate increase. The term Insurance Cost Increase shall not, however, include any premium increases resulting from the nature of the occupancy of any other tenant of the Building. The "**Base Premium**" shall be the annual premium applicable to the 12 month period immediately preceding the Start Date. If, however, the Project was not insured for the entirety of such 12 month period, then the Base Premium shall be the lowest annual premium reasonably obtainable for the Required Insurance as of the Start Date, assuming the most nominal use possible of the Building. In no event, however, shall Lessee be responsible for any portion of the premium cost attributable to liability insurance coverage in excess of $2,000,000 procured under Paragraph 8.2(b).

(b) Lessee shall pay any Insurance Cost Increase to Lessor pursuant to Paragraph 4.2. Premiums for policy periods commencing prior to, or extending beyond, the term of this Lease shall be prorated to coincide with the corresponding Start Date or Expiration Date.

8.2 **Liability Insurance**.

(a) **Carried by Lessee**. Lessee shall obtain and keep in force a Commercial General Liability policy of insurance protecting Lessee and Lessor as an additional insured against claims for bodily injury, personal injury and property damage based upon or arising out of the ownership, use, occupancy or maintenance of the Premises and all areas appurtenant thereto. Such insurance shall be on an occurrence basis providing single limit coverage in an amount not less than $1,000,000 per occurrence with an annual aggregate of not less than $2,000,000. Lessee shall add Lessor as an additional insured by means of an endorsement at least as broad as the Insurance Service Organization's "**Additional Insured-Managers or Lessors of Premises**" Endorsement. The policy shall not contain any intra-insured exclusions as between insured persons or organizations, but shall include coverage for liability assumed under this Lease as an "**insured contract**" for the performance of Lessee's indemnity obligations under this Lease. The limits of said insurance shall not, however, limit the liability of Lessee nor relieve Lessee of any obligation hereunder. Lessee shall provide an endorsement on its liability policy(ies) which provides that its insurance shall be primary to and not contributory with any similar insurance carried by Lessor, whose insurance shall be considered excess insurance only.

(b) **Carried by Lessor**. Lessor shall maintain liability insurance as described in Paragraph 8.2(a), in addition to, and not in lieu of, the insurance required to be maintained by Lessee. Lessee shall not be named as an additional insured therein.

8.3 **Property Insurance – Building, Improvements and Rental Value**.

(a) **Building and Improvements**. Lessor shall obtain and keep in force a policy or policies of insurance in the name of Lessor, with loss payable to Lessor, any ground-lessor, and to any Lender insuring loss or damage to the Premises. The amount of such insurance shall be equal to the full insurable replacement cost of the Premises, as the same shall exist from time to time, or the amount required by any Lender, but in no event more than the commercially reasonable and available insurable value thereof. Lessee Owned Alterations and Utility Installations, Trade Fixtures, and Lessee's personal property shall be insured by Lessee not by Lessor. If the coverage is available and commercially appropriate, such policy or policies shall insure against all risks of direct

physical loss or damage (except the perils of flood and/or earthquake unless required by a Lender), including coverage for debris removal and the enforcement of any Applicable Requirements requiring the upgrading, demolition, reconstruction or replacement of any portion of the Premises as the result of a covered loss. Said policy or policies shall also contain an agreed valuation provision in lieu of any coinsurance clause, waiver of subrogation, and inflation guard protection causing an increase in the annual property insurance coverage amount by a factor of not less than the adjusted U.S. Department of Labor Consumer Price Index for All Urban Consumers for the city nearest to where the Premises are located. If such insurance coverage has a deductible clause, the deductible amount shall not exceed $5,000 per occurrence.

(b) **Rental Value**. Lessor shall also obtain and keep in force a policy or policies in the name of Lessor with loss payable to Lessor and any Lender, insuring the loss of the full Rent for one year with an extended period of indemnity for an additional 180 days ("**Rental Value insurance**"). Said insurance shall contain an agreed valuation provision in lieu of any coinsurance clause, and the amount of coverage shall be adjusted annually to reflect the projected Rent otherwise payable by Lessee, for the next 12 month period.

(c) **Adjacent Premises**. Lessee shall pay for any increase in the premiums for the property insurance of the Building and for the Common Areas or other buildings in the Project if said increase is caused by Lessee's acts, omissions, use or occupancy of the Premises.

(d) **Lessee's Improvements**. Since Lessor is the Insuring Party, Lessor shall not be required to insure Lessee Owned Alterations and Utility Installations unless the item in question has become the property of Lessor under the terms of this Lease.

8.4 **Lessee's Property; Business Interruption Insurance; Worker's Compensation Insurance**.

(a) **Property Damage**. Lessee shall obtain and maintain insurance coverage on all of Lessee's personal property, Trade Fixtures, and Lessee Owned Alterations and Utility Installations. Such insurance shall be full replacement cost coverage with a deductible of not to exceed $1,000 per occurrence. The proceeds from any such insurance shall be used by Lessee for the replacement of personal property, Trade Fixtures and Lessee Owned Alterations and Utility Installations.

(b) **Business Interruption**. Lessee shall obtain and maintain loss of income and extra expense insurance in amounts as will reimburse Lessee for direct or indirect loss of earnings attributable to all perils commonly insured against by prudent lessees in the business of Lessee or attributable to prevention of access to the Premises as a result of such perils.

(c) **Worker's Compensation Insurance**. Lessee shall obtain and maintain Worker's Compensation Insurance in such amount as may be required by Applicable Requirements. Such policy shall include a 'Waiver of Subrogation' endorsement. Lessee shall provide Lessor with a copy of such endorsement along with the certificate of insurance or copy of the policy required by paragraph 8.5.

(d) **No Representation of Adequate Coverage**. Lessor makes no representation that the limits or forms of coverage of insurance specified herein are adequate to cover Lessee's property, business operations or obligations under this Lease.

8.5 **Insurance Policies**. Insurance required herein shall be by companies maintaining during the policy term a "**General Policyholders Rating**" of at least A-, VII, as set forth in the most current issue of "**Best's Insurance Guide**", or such other rating as may be required by a Lender. Lessee shall not do or permit to be done anything which invalidates the required insurance policies. Lessee shall, prior to the Start Date, deliver to Lessor certified copies of policies of such insurance or certificates with copies of the required endorsements evidencing the existence and amounts of the required insurance. No such policy shall be cancelable or subject to modification except after 30 days prior written notice to Lessor. Lessee shall, at least 10 days prior to the expiration of such policies, furnish Lessor with evidence of renewals or "**insurance binders**" evidencing renewal thereof, or Lessor may increase his liability insurance coverage and charge the cost thereof to Lessee, which amount shall be payable by Lessee to Lessor upon demand. Such policies shall be for a term of at least one year, or the length of the remaining term of this Lease, whichever is less. If either Party shall fail to procure and maintain the insurance required to be carried by it, the other Party may, but shall not be required to, procure and maintain the same.

8.6 **Waiver of Subrogation**. Without affecting any other rights or remedies, Lessee and Lessor each hereby release and relieve the other, and waive their entire right to recover damages against the other, for loss of or damage to its property arising out of or incident to the perils required to be insured against herein. The effect of such releases and waivers is not limited by the amount of insurance carried or required, or by any deductibles applicable hereto. The Parties agree to have their respective property damage insurance carriers waive any right to subrogation that such companies may have against Lessor or Lessee, as the case may be, so long as the insurance is not invalidated thereby.

8.7 **Indemnity**. Except for Lessor's gross negligence or willful misconduct, Lessee shall indemnify, protect, defend and hold harmless the Premises, Lessor and its agents, Lessor's master or ground lessor, partners and Lenders, from and against any and all claims, loss of rents and/or damages, liens, judgments, penalties, attorneys' and consultants' fees, expenses and/or liabilities arising out of, involving, or in connection with, the use and/or occupancy of the Premises by Lessee. If any action or proceeding is brought against Lessor by reason of any of the foregoing matters, Lessee shall upon notice defend the same at Lessee's expense by counsel reasonably satisfactory to Lessor and Lessor shall cooperate with Lessee in such defense. Lessor need not have first paid any such claim in order to be defended or indemnified.

8.8 **Exemption of Lessor and its Agents from Liability**. Notwithstanding the negligence or breach of this Lease by Lessor or its agents, neither Lessor nor its agents shall be liable under any circumstances for: (i) injury or damage to the person or goods, wares, merchandise or other property of Lessee, Lessee's employees, contractors, invitees, customers, or any other person in or about the Premises, whether such damage or injury is caused by or results from fire, steam, electricity, gas, water or rain, indoor air

quality, the presence of mold or from the breakage, leakage, obstruction or other defects of pipes, fire sprinklers, wires, appliances, plumbing, HVAC or lighting fixtures, or from any other cause, whether the said injury or damage results from conditions arising upon the Premises or upon other portions of the Building, or from other sources or places, (ii) any damages arising from any act or neglect of any other tenant of Lessor or from the failure of Lessor or its agents to enforce the provisions of any other lease in the Project, or (iii) injury to Lessee's business or for any loss of income or profit therefrom. Instead, it is intended that Lessee's sole recourse in the event of such damages or injury be to file a claim on the insurance policy(ies) that Lessee is required to maintain pursuant to the provisions of paragraph 8.

8.9 **Failure to Provide Insurance**. Lessee acknowledges that any failure on its part to obtain or maintain the insurance required herein will expose Lessor to risks and potentially cause Lessor to incur costs not contemplated by this Lease, the extent of which will be extremely difficult to ascertain. Accordingly, for any month or portion thereof that Lessee does not maintain the required insurance and/or does not provide Lessor with the required binders or certificates evidencing the existence of the required insurance, the Base Rent shall be automatically increased, without any requirement for notice to Lessee, by an amount equal to 10% of the then existing Base Rent or $100, whichever is greater. The parties agree that such increase in Base Rent represents fair and reasonable compensation for the additional risk/costs that Lessor will incur by reason of Lessee's failure to maintain the required insurance. Such increase in Base Rent shall in no event constitute a waiver of Lessee's Default or Breach with respect to the failure to maintain such insurance, prevent the exercise of any of the other rights and remedies granted hereunder, nor relieve Lessee of its obligation to maintain the insurance specified in this Lease.

9. **Damage or Destruction**.

9.1 **Definitions**.

(a) "**Premises Partial Damage**" shall mean damage or destruction to the improvements on the Premises, other than Lessee Owned Alterations and Utility Installations, which can reasonably be repaired in 3 months or less from the date of the damage or destruction, and the cost thereof does not exceed a sum equal to 6 month's Base Rent. Lessor shall notify Lessee in writing within 30 days from the date of the damage or destruction as to whether or not the damage is Partial or Total.

(b) "**Premises Total Destruction**" shall mean damage or destruction to the improvements on the Premises, other than Lessee Owned Alterations and Utility Installations and Trade Fixtures, which cannot reasonably be repaired in 3 months or less from the date of the damage or destruction and/or the cost thereof exceeds a sum equal to 6 month's Base Rent. Lessor shall notify Lessee in writing within 30 days from the date of the damage or destruction as to whether or not the damage is Partial or Total.

(c) "**Insured Loss**" shall mean damage or destruction to improvements on the Premises, other than Lessee Owned Alterations and Utility Installations and Trade Fixtures, which was caused by an event required to be covered by the insurance described in Paragraph 8.3(a), irrespective of any deductible amounts or coverage limits involved.

(d) "**Replacement Cost**" shall mean the cost to repair or rebuild the improvements owned by Lessor at the time of the occurrence to their condition existing immediately prior thereto, including demolition, debris removal and upgrading required by the operation of Applicable Requirements, and without deduction for depreciation.

(e) "**Hazardous Substance Condition**" shall mean the occurrence or discovery of a condition involving the presence of, or a contamination by, a Hazardous Substance, in, on, or under the Premises which requires restoration.

9.2 **Partial Damage – Insured Loss**. If a Premises Partial Damage that is an Insured Loss occurs, then Lessor shall, at Lessor's expense, repair such damage (but not Lessee's Trade Fixtures or Lessee Owned Alterations and Utility Installations) as soon as reasonably possible and this Lease shall continue in full force and effect; provided, however, that Lessee shall, at Lessor's election, make the repair of any damage or destruction the total cost to repair of which is $10,000 or less, and, in such event, Lessor shall make any applicable insurance proceeds available to Lessee on a reasonable basis for that purpose. Notwithstanding the foregoing, if the required insurance was not in force or the insurance proceeds are not sufficient to effect such repair, the Insuring Party shall promptly contribute the shortage in proceeds as and when required to complete said repairs. In the event, however, such shortage was due to the fact that, by reason of the unique nature of the improvements, full replacement cost insurance coverage was not commercially reasonable and available, Lessor shall have no obligation to pay for the shortage in insurance proceeds or to fully restore the unique aspects of the Premises unless Lessee provides Lessor with the funds to cover same, or adequate assurance thereof, within 10 days following receipt of written notice of such shortage and request therefor. If Lessor receives said funds or adequate assurance thereof within said 10 day period, the party responsible for making the repairs shall complete them as soon as reasonably possible and this Lease shall remain in full force and effect. If such funds or assurance are not received, Lessor may nevertheless elect by written notice to Lessee within 10 days thereafter to: (i) make such restoration and repair as is commercially reasonable with Lessor paying any shortage in proceeds, in which case this Lease shall remain in full force and effect, or (ii) have this Lease terminate 30 days thereafter. Lessee shall not be entitled to reimbursement of any funds contributed by Lessee to repair any such damage or destruction. Premises Partial Damage due to flood or earthquake shall be subject to Paragraph 9.3, notwithstanding that there may be some insurance coverage, but the net proceeds of any such insurance shall be made available for the repairs if made by either Party.

9.3 **Partial Damage – Uninsured Loss**. If a Premises Partial Damage that is not an Insured Loss occurs, unless caused by a negligent or willful act of Lessee (in which event Lessee shall make the repairs at Lessee's expense), Lessor may either: (i) repair such damage as soon as reasonably possible at Lessor's expense (subject to reimbursement pursuant to Paragraph 4.2), in which event this Lease shall continue in full force and effect, or (ii) terminate this Lease by giving written notice to Lessee within 30 days after receipt by Lessor of knowledge of the occurrence of such damage. Such termination shall be effective 60 days following the date of such notice. In the event Lessor elects to terminate this Lease, Lessee shall have the right within 10 days after receipt of the termination notice to give written notice to Lessor of Lessee's commitment to pay for the repair of such damage without reimbursement from Lessor. Lessee shall provide Lessor with said funds or satisfactory assurance thereof within 30 days after making such

commitment. In such event this Lease shall continue in full force and effect, and Lessor shall proceed to make such repairs as soon as reasonably possible after the required funds are available. If Lessee does not make the required commitment, this Lease shall terminate as of the date specified in the termination notice.

9.4 **Total Destruction**. Notwithstanding any other provision hereof, if a Premises Total Destruction occurs, this Lease shall terminate 60 days following such Destruction. If the damage or destruction was caused by the gross negligence or willful misconduct of Lessee, Lessor shall have the right to recover Lessor's damages from Lessee, except as provided in Paragraph 8.6.

9.5 **Damage Near End of Term**. If at any time during the last 6 months of this Lease there is damage for which the cost to repair exceeds one month's Base Rent, whether or not an Insured Loss, Lessor may terminate this Lease effective 60 days following the date of occurrence of such damage by giving a written termination notice to Lessee within 30 days after the date of occurrence of such damage. Notwithstanding the foregoing, if Lessee at that time has an exercisable option to extend this Lease or to purchase the Premises, then Lessee may preserve this Lease by, (a) exercising such option and (b) providing Lessor with any shortage in insurance proceeds (or adequate assurance thereof) needed to make the repairs on or before the earlier of (i) the date which is 10 days after Lessee's receipt of Lessor's written notice purporting to terminate this Lease, or (ii) the day prior to the date upon which such option expires. If Lessee duly exercises such option during such period and provides Lessor with funds (or adequate assurance thereof) to cover any shortage in insurance proceeds, Lessor shall, at Lessor's commercially reasonable expense, repair such damage as soon as reasonably possible and this Lease shall continue in full force and effect. If Lessee fails to exercise such option and provide such funds or assurance during such period, then this Lease shall terminate on the date specified in the termination notice and Lessee's option shall be extinguished.

9.6 **Abatement of Rent; Lessee's Remedies**.

(a) **Abatement**. In the event of Premises Partial Damage or Premises Total Destruction or a Hazardous Substance Condition for which Lessee is not responsible under this Lease, the Rent payable by Lessee for the period required for the repair, remediation or restoration of such damage shall be abated in proportion to the degree to which Lessee's use of the Premises is impaired, but not to exceed the proceeds received from the Rental Value insurance. All other obligations of Lessee hereunder shall be performed by Lessee, and Lessor shall have no liability for any such damage, destruction, remediation, repair or restoration except as provided herein.

(b) **Remedies**. If Lessor is obligated to repair or restore the Premises and does not commence, in a substantial and meaningful way, such repair or restoration within 90 days after such obligation shall accrue, Lessee may, at any time prior to the commencement of such repair or restoration, give written notice to Lessor and to any Lenders of which Lessee has actual notice, of Lessee's election to terminate this Lease on a date not less than 60 days following the giving of such notice. If Lessee gives such notice and such repair or restoration is not commenced within 30 days thereafter, this Lease shall terminate as of the date specified in said notice. If the repair or restoration is commenced within such 30 days, this Lease shall continue in full force and effect. "**Commence**" shall mean either the unconditional authorization of the preparation of the required plans, or the beginning of the actual work on the Premises, whichever first occurs.

9.7 **Termination; Advance Payments**. Upon termination of this Lease pursuant to Paragraph 6.2(g) or Paragraph 9, an equitable adjustment shall be made concerning advance Base Rent and any other advance payments made by Lessee to Lessor. Lessor shall, in addition, return to Lessee so much of Lessee's Security Deposit as has not been, or is not then required to be, used by Lessor.

10. **Real Property Taxes**.

10.1 **Definitions**.

(a) "**Real Property Taxes.**" As used herein, the term "**Real Property Taxes**" shall include any form of assessment; real estate, general, special, ordinary or extraordinary, or rental levy or tax (other than inheritance, personal income or estate taxes); improvement bond; and/or license fee imposed upon or levied against any legal or equitable interest of Lessor in the Project, Lessor's right to other income therefrom, and/or Lessor's business of leasing, by any authority having the direct or indirect power to tax and where the funds are generated with reference to the Project address. The term "**Real Property Taxes**" shall also include any tax, fee, levy, assessment or charge, or any increase therein: (i) imposed by reason of events occurring during the term of this Lease, including but not limited to, a change in the ownership of the Project, (ii) a change in the improvements thereon, and/or (iii) levied or assessed on machinery or equipment provided by Lessor to Lessee pursuant to this Lease.

(b) "**Base Real Property Taxes.**" As used herein, the term "**Base Real Property Taxes**" shall be the amount of Real Property Taxes, which are assessed against the Premises, Building, Project or Common Areas in the calendar year during which the Lease is executed. In calculating Real Property Taxes for any calendar year, the Real Property Taxes for any real estate tax year shall be included in the calculation of Real Property Taxes for such calendar year based upon the number of days which such calendar year and tax year have in common.

10.2 **Payment of Taxes**. Except as otherwise provided in Paragraph 10.3, Lessor shall pay the Real Property Taxes applicable to the Project, and said payments shall be included in the calculation of Common Area Operating Expenses in accordance with the provisions of Paragraph 4.2.

10.3 **Additional Improvements**. Common Area Operating Expenses shall not include Real Property Taxes specified in the tax assessor's records and work sheets as being caused by additional improvements placed upon the Project by other tenants or by Lessor for the exclusive enjoyment of such other Tenants. Notwithstanding Paragraph 10.2 hereof, Lessee shall, however, pay to Lessor at the time Common Area Operating Expenses are payable under Paragraph 4.2, the entirety of any increase in Real Property

Taxes if assessed solely by reason of Alterations, Trade Fixtures or Utility Installations placed upon the Premises by Lessee or at Lessee's request or by reason of any alterations or improvements to the Premises made by Lessor subsequent to the execution of this Lease by the Parties.

10.4 **Joint Assessment**. If the Building is not separately assessed, Real Property Taxes allocated to the Building shall be an equitable proportion of the Real Property Taxes for all of the land and improvements included within the tax parcel assessed, such proportion to be determined by Lessor from the respective valuations assigned in the assessor's work sheets or such other information as may be reasonably available. Lessor's reasonable determination thereof, in good faith, shall be conclusive.

10.5 **Personal Property Taxes**. Lessee shall pay prior to delinquency all taxes assessed against and levied upon Lessee Owned Alterations and Utility Installations, Trade Fixtures, furnishings, equipment and all personal property of Lessee contained in the Premises. When possible, Lessee shall cause its Lessee Owned Alterations and Utility Installations, Trade Fixtures, furnishings, equipment and all other personal property to be assessed and billed separately from the real property of Lessor. If any of Lessee's said property shall be assessed with Lessor's real property, Lessee shall pay Lessor the taxes attributable to Lessee's property within 10 days after receipt of a written statement setting forth the taxes applicable to Lessee's property.

11. **Utilities and Services**. Lessee shall pay for all water, gas, heat, light, power, telephone, trash disposal and other utilities and services supplied to the Premises, together with any taxes thereon. Notwithstanding the provisions of Paragraph 4.2, if at any time in Lessor's sole judgment, Lessor determines that Lessee is using a disproportionate amount of water, electricity or other commonly metered utilities, or that Lessee is generating such a large volume of trash as to require an increase in the size of the trash receptacle and/or an increase in the number of times per month that it is emptied, then Lessor may increase Lessee's Base Rent by an amount equal to such increased costs. There shall be no abatement of Rent and Lessor shall not be liable in any respect whatsoever for the inadequacy, stoppage, interruption or discontinuance of any utility or service due to riot, strike, labor dispute, breakdown, accident, repair or other cause beyond Lessor's reasonable control or in cooperation with governmental request or directions.

12. **Assignment and Subletting**.

12.1 **Lessor's Consent Required**.

(a) Lessee shall not voluntarily or by operation of law assign, transfer, mortgage or encumber (collectively, "**assign or assignment**") or sublet all or any part of Lessee's interest in this Lease or in the Premises without Lessor's prior written consent.

(b) Unless Lessee is a corporation and its stock is publicly traded on a national stock exchange, a change in the control of Lessee shall constitute an assignment requiring consent. The transfer, on a cumulative basis, of 25% or more of the voting control of Lessee shall constitute a change in control for this purpose.

(c) The involvement of Lessee or its assets in any transaction, or series of transactions (by way of merger, sale, acquisition, financing, transfer, leveraged buy-out or otherwise), whether or not a formal assignment or hypothecation of this Lease or Lessee's assets occurs, which results or will result in a reduction of the Net Worth of Lessee by an amount greater than 25% of such Net Worth as it was represented at the time of the execution of this Lease or at the time of the most recent assignment to which Lessor has consented, or as it exists immediately prior to said transaction or transactions constituting such reduction, whichever was or is greater, shall be considered an assignment of this Lease to which Lessor may withhold its consent. "**Net Worth of Lessee**" shall mean the net worth of Lessee (excluding any guarantors) established under generally accepted accounting principles.

(d) An assignment or subletting without consent shall, at Lessor's option, be a Default curable after notice per Paragraph 13.1(d), or a noncurable Breach without the necessity of any notice and grace period. If Lessor elects to treat such unapproved assignment or subletting as a noncurable Breach, Lessor may either: (i) terminate this Lease, or (ii) upon 30 days written notice, increase the monthly Base Rent to 110% of the Base Rent then in effect. Further, in the event of such Breach and rental adjustment, (i) the purchase price of any option to purchase the Premises held by Lessee shall be subject to similar adjustment to 110% of the price previously in effect, and (ii) all fixed and non-fixed rental adjustments scheduled during the remainder of the Lease term shall be increased to 110% of the scheduled adjusted rent.

(e) Lessee's remedy for any breach of Paragraph 12.1 by Lessor shall be limited to compensatory damages and/or injunctive relief.

(f) Lessor may reasonably withhold consent to a proposed assignment or subletting if Lessee is in Default at the time consent is requested.

(g) Notwithstanding the foregoing, allowing a de minimis portion of the Premises, i.e. 20 square feet or less, to be used by a third party vendor in connection with the installation of a vending machine or payphone shall not constitute a subletting.

12.2 Terms and Conditions Applicable to Assignment and Subletting.

(a) Regardless of Lessor's consent, no assignment or subletting shall : (i) be effective without the express written assumption by such assignee or sublessee of the obligations of Lessee under this Lease, (ii) release Lessee of any obligations hereunder, or (iii) alter the primary liability of Lessee for the payment of Rent or for the performance of any other obligations to be performed by Lessee.

(b) Lessor may accept Rent or performance of Lessee's obligations from any person other than Lessee pending approval or disapproval of an assignment. Neither a delay in the approval or disapproval of such assignment nor the acceptance of Rent or performance shall constitute a waiver or estoppel of Lessor's right to exercise its remedies for Lessee's Default or Breach.

(c) Lessor's consent to any assignment or subletting shall not constitute a consent to any subsequent assignment or subletting.

(d) In the event of any Default or Breach by Lessee, Lessor may proceed directly against Lessee, any Guarantors or anyone else responsible for the performance of Lessee's obligations under this Lease, including any assignee or sublessee, without first exhausting Lessor's remedies against any other person or entity responsible therefor to Lessor, or any security held by Lessor.

(e) Each request for consent to an assignment or subletting shall be in writing, accompanied by information relevant to Lessor's determination as to the financial and operational responsibility and appropriateness of the proposed assignee or sublessee, including but not limited to the intended use and/or required modification of the Premises, if any, together with a fee of $500 as consideration for Lessor's considering and processing said request. Lessee agrees to provide Lessor with such other or additional information and/or documentation as may be reasonably requested. (See also Paragraph 36)

(f) Any assignee of, or sublessee under, this Lease shall, by reason of accepting such assignment, entering into such sublease, or entering into possession of the Premises or any portion thereof, be deemed to have assumed and agreed to conform and comply with each and every term, covenant, condition and obligation herein to be observed or performed by Lessee during the term of said assignment or sublease, other than such obligations as are contrary to or inconsistent with provisions of an assignment or sublease to which Lessor has specifically consented to in writing.

(g) Lessor's consent to any assignment or subletting shall not transfer to the assignee or sublessee any Option granted to the original Lessee by this Lease unless such transfer is specifically consented to by Lessor in writing. (See Paragraph 39.2)

12.3 **Additional Terms and Conditions Applicable to Subletting**. The following terms and conditions shall apply to any subletting by Lessee of all or any part of the Premises and shall be deemed included in all subleases under this Lease whether or not expressly incorporated therein:

(a) Lessee hereby assigns and transfers to Lessor all of Lessee's interest in all Rent payable on any sublease, and Lessor may collect such Rent and apply same toward Lessee's obligations under this Lease; provided, however, that until a Breach shall occur in the performance of Lessee's obligations, Lessee may collect said Rent. In the event that the amount collected by Lessor exceeds Lessee's then outstanding obligations any such excess shall be refunded to Lessee. Lessor shall not, by reason of the foregoing or any assignment of such sublease, nor by reason of the collection of Rent, be deemed liable to the sublessee for any failure of Lessee to perform and comply with any of Lessee's obligations to such sublessee. Lessee hereby irrevocably authorizes and directs any such sublessee, upon receipt of a written notice from Lessor stating that a Breach exists in the performance of Lessee's obligations under this Lease, to pay to Lessor all Rent due and to become due under the sublease. Sublessee shall rely upon any such notice from Lessor and shall pay all Rents to Lessor without any obligation or right to inquire as to whether such Breach exists, notwithstanding any claim from Lessee to the contrary.

(b) In the event of a Breach by Lessee, Lessor may, at its option, require sublessee to attorn to Lessor, in which event Lessor shall undertake the obligations of the sublessor under such sublease from the time of the exercise of said option to the expiration of such sublease; provided, however, Lessor shall not be liable for any prepaid rents or security deposit paid by such sublessee to such sublessor or for any prior Defaults or Breaches of such sublessor.

(c) Any matter requiring the consent of the sublessor under a sublease shall also require the consent of Lessor.

(d) No sublessee shall further assign or sublet all or any part of the Premises without Lessor's prior written consent.

(e) Lessor shall deliver a copy of any notice of Default or Breach by Lessee to the sublessee, who shall have the right to cure the Default of Lessee within the grace period, if any, specified in such notice. The sublessee shall have a right of reimbursement and offset from and against Lessee for any such Defaults cured by the sublessee.

13. **Default; Breach; Remedies**.

13.1 **Default; Breach**. A "**Default**" is defined as a failure by the Lessee to comply with or perform any of the terms, covenants, conditions or Rules and Regulations under this Lease. A "**Breach**" is defined as the occurrence of one or more of the following Defaults, and the failure of Lessee to cure such Default within any applicable grace period:

(a) The abandonment of the Premises; or the vacating of the Premises without providing a commercially reasonable level of security, or where the coverage of the property insurance described in Paragraph 8.3 is jeopardized as a result thereof, or without providing reasonable assurances to minimize potential vandalism.

(b) The failure of Lessee to make any payment of Rent or any Security Deposit required to be made by Lessee hereunder, whether to Lessor or to a third party, when due, to provide reasonable evidence of insurance or surety bond, or to fulfill any obligation under this Lease which endangers or threatens life or property, where such failure continues for a period of 3 business days following written notice to Lessee. THE ACCEPTANCE BY LESSOR OF A PARTIAL PAYMENT OF RENT OR SECURITY DEPOSIT SHALL NOT CONSTITUTE A WAIVER OF ANY OF LESSOR'S RIGHTS, INCLUDING LESSOR'S RIGHT TO RECOVER POSSESSION OF THE PREMISES.

(c) The failure of Lessee to allow Lessor and/or its agents access to the Premises or the commission of waste, act or acts constituting public or private nuisance, and/or an illegal activity on the Premises by Lessee, where such actions continue for a period of 3 business days following written notice to Lessee. In the event that Lessee commits waste, a nuisance or an illegal activity a second time then, the Lessor may elect to treat such conduct as a non-curable Breach rather than a Default.

(d) The failure by Lessee to provide (i) reasonable written evidence of compliance with Applicable Requirements, (ii) the service contracts, (iii) the rescission of an unauthorized assignment or subletting, (iv) an Estoppel Certificate or financial statements, (v) a requested subordination, (vi) evidence concerning any guaranty and/or Guarantor, (vii) any document requested under Paragraph 41, (viii) material data safety sheets (MSDS), or (ix) any other documentation or information which Lessor may reasonably require of Lessee under the terms of this Lease, where any such failure continues for a period of 10 days following written notice to Lessee.

(e) A Default by Lessee as to the terms, covenants, conditions or provisions of this Lease, or of the rules adopted under Paragraph 2.9 hereof, other than those described in subparagraphs 13.1(a), (b), (c) or (d), above, where such Default continues for a period of 30 days after written notice; provided, however, that if the nature of Lessee's Default is such that more than 30 days are reasonably required for its cure, then it shall not be deemed to be a Breach if Lessee commences such cure within said 30 day period and thereafter diligently prosecutes such cure to completion.

(f) The occurrence of any of the following events: (i) the making of any general arrangement or assignment for the benefit of creditors; (ii) becoming a "**debtor**" as defined in 11 U.S.C. § 101 or any successor statute thereto (unless, in the case of a petition filed against Lessee, the same is dismissed within 60 days); (iii) the appointment of a trustee or receiver to take possession of substantially all of Lessee's assets located at the Premises or of Lessee's interest in this Lease, where possession is not restored to Lessee within 30 days; or (iv) the attachment, execution or other judicial seizure of substantially all of Lessee's assets located at the Premises or of Lessee's interest in this Lease, where such seizure is not discharged within 30 days; provided, however, in the event that any provision of this subparagraph is contrary to any applicable law, such provision shall be of no force or effect, and not affect the validity of the remaining provisions.

(g) The discovery that any financial statement of Lessee or of any Guarantor given to Lessor was materially false.

(h) If the performance of Lessee's obligations under this Lease is guaranteed: (i) the death of a Guarantor, (ii) the termination of a Guarantor's liability with respect to this Lease other than in accordance with the terms of such guaranty, (iii) a Guarantor's becoming insolvent or the subject of a bankruptcy filing, (iv) a Guarantor's refusal to honor the guaranty, or (v) a Guarantor's breach of its guaranty obligation on an anticipatory basis, and Lessee's failure, within 60 days following written notice of any such event, to provide written alternative assurance or security, which, when coupled with the then existing resources of Lessee, equals or exceeds the combined financial resources of Lessee and the Guarantors that existed at the time of execution of this Lease.

13.2 **Remedies**. If Lessee fails to perform any of its affirmative duties or obligations, within 10 days after written notice (or in case of an emergency, without notice), Lessor may, at its option, perform such duty or obligation on Lessee's behalf, including but not limited to the obtaining of reasonably required bonds, insurance policies, or governmental licenses, permits or approvals. Lessee shall pay to Lessor an amount equal to 115% of the costs and expenses incurred by Lessor in such performance upon receipt of an invoice therefor. In the event of a Breach, Lessor may, with or without further notice or demand, and without limiting Lessor in the exercise of any right or remedy which Lessor may have by reason of such Breach:

(a) Terminate Lessee's right to possession of the Premises by any lawful means, in which case this Lease shall terminate and Lessee shall immediately surrender possession to Lessor. In such event Lessor shall be entitled to recover from Lessee: (i) the unpaid Rent which had been earned at the time of termination; (ii) the worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that the Lessee proves could have been reasonably avoided; (iii) the worth at the time of award of the amount by which the unpaid rent for the balance of the term after the time of award exceeds the amount of such rental loss that the Lessee proves could be reasonably avoided; and (iv) any other amount necessary to compensate Lessor for all the detriment proximately caused by the Lessee's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, including but not limited to the cost of recovering possession of the Premises, expenses of reletting, including necessary renovation and alteration of the Premises, reasonable attorneys' fees, and that portion of any leasing commission paid by Lessor in connection with this Lease applicable to the unexpired term of this Lease. The worth at the time of award of the amount referred to in provision (iii) of the immediately preceding sentence shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of the District within which the Premises are located at the time of award plus one percent. Efforts by Lessor to mitigate damages caused by Lessee's Breach of this Lease shall not waive Lessor's right to recover any damages to which Lessor is otherwise entitled. If termination of this Lease is obtained through the provisional remedy of unlawful detainer, Lessor shall have the right to recover in such proceeding any unpaid Rent and damages as are recoverable therein, or Lessor may reserve the right to recover all or any part thereof in a separate suit. If a notice and grace period required under Paragraph 13.1 was not previously given, a notice to pay rent or quit, or to perform or quit given to Lessee under the unlawful detainer statute shall also constitute the notice required by Paragraph 13.1. In such case, the applicable grace period required by Paragraph 13.1 and the unlawful detainer statute shall run concurrently, and the failure of Lessee to cure the Default within the greater of the two such grace periods shall constitute both an unlawful detainer and a Breach of this Lease entitling Lessor to the remedies provided for in this Lease and/or by said statute.

(b) Continue the Lease and Lessee's right to possession and recover the Rent as it becomes due, in which event Lessee may sublet or assign, subject only to reasonable limitations. Acts of maintenance, efforts to relet, and/or the appointment of a receiver to protect the Lessor's interests, shall not constitute a termination of the Lessee's right to possession.

(c) Pursue any other remedy now or hereafter available under the laws or judicial decisions of the state wherein the Premises are located. The expiration or termination of this Lease and/or the termination of Lessee's right to possession shall not relieve Lessee from liability under any indemnity provisions of this Lease as to matters occurring or accruing during the term hereof or by reason of Lessee's occupancy of the Premises.

13.3 **Inducement Recapture**. Any agreement for free or abated rent or other charges, the cost of tenant improvements for Lessee paid for or performed by Lessor, or for the giving or paying by Lessor to or for Lessee of any cash or other bonus, inducement or consideration for Lessee's entering into this Lease, all of which concessions are hereinafter referred to as "**Inducement Provisions**", shall be deemed conditioned upon Lessee's full and faithful performance of all of the terms, covenants and conditions of this Lease. Upon Breach of this Lease by Lessee, any such Inducement Provision shall automatically be deemed deleted from this Lease and of no further force or effect, and any rent, other charge, bonus, inducement or consideration theretofore abated, given or paid by Lessor under such an Inducement Provision shall be immediately due and payable by Lessee to Lessor, notwithstanding any subsequent cure of said Breach by Lessee. The acceptance by Lessor of rent or the cure of the Breach which initiated the operation of this paragraph shall not be deemed a waiver by Lessor of the provisions of this paragraph unless specifically so stated in writing by Lessor at the time of such acceptance.

13.4 **Late Charges**. Lessee hereby acknowledges that late payment by Lessee of Rent will cause Lessor to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult to ascertain. Such costs include, but are not limited to, processing and accounting charges, and late charges which may be imposed upon Lessor by any Lender. Accordingly, if any Rent shall not be received by Lessor within 5 days after such amount shall be due, then, without any requirement for notice to Lessee, Lessee shall immediately pay to Lessor a one-time late charge equal to 10% of each such overdue amount or $100, whichever is greater. The parties hereby agree that such late charge represents a fair and reasonable estimate of the costs Lessor will incur by reason of such late payment. Acceptance of such late charge by Lessor shall in no event constitute a waiver of Lessee's Default or Breach with respect to such overdue amount, nor prevent the exercise of any of the other rights and remedies granted hereunder. In the event that a late charge is payable hereunder, whether or not collected, for 3 consecutive installments of Base Rent, then notwithstanding any provision of this Lease to the contrary, Base Rent shall, at Lessor's option, become due and payable quarterly in advance.

13.5 **Interest**. Any monetary payment due Lessor hereunder, other than late charges, not received by Lessor, when due shall bear interest from the 31st day after it was due. The interest ("**Interest**") charged shall be computed at the rate of 10% per annum but shall not exceed the maximum rate allowed by law. Interest is payable in addition to the potential late charge provided for in Paragraph 13.4.

13.6 **Breach by Lessor**.

(a) **Notice of Breach**. Lessor shall not be deemed in breach of this Lease unless Lessor fails within a reasonable time to perform an obligation required to be performed by Lessor. For purposes of this Paragraph, a reasonable time shall in no event be less than 30 days after receipt by Lessor, and any Lender whose name and address shall have been furnished to Lessee in writing for such purpose, of written notice specifying wherein such obligation of Lessor has not been performed; provided, however, that if the nature of Lessor's obligation is such that more than 30 days are reasonably required for its performance, then Lessor shall not be in breach if performance is commenced within such 30 day period and thereafter diligently pursued to completion.

(b) **Performance by Lessee on Behalf of Lessor**. In the event that neither Lessor nor Lender cures said breach within 30 days after receipt of said notice, or if having commenced said cure they do not diligently pursue it to completion, then Lessee may elect to cure said breach at Lessee's expense and offset from Rent the actual and reasonable cost to perform such cure, provided however, that such offset shall not exceed an amount equal to the greater of one month's Base Rent or the Security Deposit, reserving Lessee's right to reimbursement from Lessor for any such expense in excess of such offset. Lessee shall document the cost of said cure and supply said documentation to Lessor.

14. **Condemnation**. If the Premises or any portion thereof are taken under the power of eminent domain or sold under the threat of the exercise of said power (collectively "**Condemnation**"), this Lease shall terminate as to the part taken as of the date the condemning authority takes title or possession, whichever first occurs. If more than 10% of the floor area of the Unit, or more than 25% of the parking spaces is taken by Condemnation, Lessee may, at Lessee's option, to be exercised in writing within 10 days after Lessor shall have given Lessee written notice, of such taking (or in the absence of such notice, within 10 days after the condemning authority shall have taken possession) terminate this Lease as of ,the date the condemning authority takes such possession. If Lessee does not terminate this Lease in accordance with the foregoing, this Lease shall remain in full force and effect as to the portion of the Premises remaining, except that the Base Rent shall be reduced in proportion to the reduction in utility of the Premises caused by such Condemnation. Condemnation awards and/or payments shall be the property of Lessor, whether such award shall be made as compensation for diminution in value of the leasehold, the value of the part taken, or for severance damages; provided, however, that Lessee shall be entitled to any compensation paid by the condemnor for Lessee's relocation expenses, loss of business goodwill and/or Trade Fixtures, without regard to whether or not this Lease is terminated pursuant to the provisions of this Paragraph. All Alterations and Utility Installations made to the Premises by Lessee, for purposes of Condemnation only, shall be considered the property of the Lessee and Lessee shall be entitled to any and all compensation which is payable therefor. In the event that this Lease is not terminated by reason of the Condemnation, Lessor shall repair any damage to the Premises caused by such Condemnation.

15. **Brokerage Fees**.

15.1 **Additional Commission**. In addition to the payments owed pursuant to Paragraph 1.10 above, Lessor agrees that: (a) if Lessee exercises any Option, (b) if Lessee or anyone affiliated with Lessee acquires from Lessor any rights to the Premises or other premises owned by Lessor and located within the Project, (c) if Lessee remains in possession of the Premises, with the consent of Lessor, after the expiration of this Lease, or (d) if Base Rent is increased, whether by agreement or operation of an escalation clause herein, then, Lessor shall pay Brokers a fee in accordance with the fee schedule of the Brokers in effect at the time the Lease was executed.

15.2 **Assumption of Obligations**. Any buyer or transferee of Lessor's interest in this Lease shall be deemed to have assumed Lessor's obligation hereunder. Brokers shall be third party beneficiaries of the provisions of Paragraphs 1.10, 15, 22 and 31. If Lessor fails to pay to Brokers any amounts due as and for brokerage fees pertaining to this Lease when due, then such amounts shall accrue Interest. In addition, if Lessor fails to pay any amounts to Lessee's Broker when due, Lessee's Broker may send written notice to Lessor and Lessee of such failure and if Lessor fails to pay such amounts within 10 days after said notice, Lessee shall pay said monies to its Broker and offset such amounts against Rent. In addition, Lessee's Broker shall be deemed to be a third party beneficiary of any commission agreement entered into by and/or between Lessor and Lessor's Broker for the limited purpose of collecting any brokerage fee owed.

15.3 **Representations and Indemnities of Broker Relationships**. Lessee and Lessor each represent and warrant to the other that it has had no dealings with any person, firm, broker or finder (other than the Brokers, if any) in connection with this Lease, and that no one other than said named Brokers is entitled to any commission or finder's fee in connection herewith. Lessee and Lessor do each hereby agree to indemnify, protect, defend and hold the other harmless from and against liability for compensation or charges which may be claimed by any such unnamed broker, finder or other similar party by reason of any dealings or actions of the indemnifying Party, including any costs, expenses, attorneys' fees reasonably incurred with respect thereto.

16. **Estoppel Certificates**.

(a) Each Party (as "**Responding Party**") shall within 10 days after written notice from the other Party (the "**Requesting Party**") execute, acknowledge and deliver to the Requesting Party a statement in writing in form similar to the then most current "**Estoppel Certificate**" form published by the AIR Commercial Real Estate Association, plus such additional information, confirmation and/or statements as may be reasonably requested by the Requesting Party.

(b) If the Responding Party shall fail to execute or deliver the Estoppel Certificate within such 10 day period, the Requesting Party may execute an Estoppel Certificate stating that: (i) the Lease is in full force and effect without modification except as may be represented by the Requesting Party, (ii) there are no uncured defaults in the Requesting Party's performance, and (Hi) if Lessor is the Requesting Party, not more than one month's rent has been paid in advance. Prospective purchasers and encumbrancers may rely upon the Requesting Party's Estoppel Certificate, and the Responding Party shall be estopped from denying the truth of the facts contained in said Certificate. In addition, Lessee acknowledges that any failure on its part to provide such an Estoppel Certificate will expose Lessor to risks and potentially cause Lessor to incur costs not contemplated by this Lease, the extent of which will be extremely difficult to ascertain. Accordingly, should the Lessee fail to execute and/or deliver a requested Estoppel Certificate in a timely fashion the monthly Base Rent shall be automatically increased, without any requirement for notice to Lessee, by an amount equal to 10% of the then existing Base Rent or $100, whichever is greater for remainder of the Lease. The Parties agree that such increase in Base Rent represents fair and reasonable compensation for the additional risk/costs that Lessor will incur by reason of Lessee's failure to provide the Estoppel Certificate. Such increase in Base Rent shall in no event constitute a waiver of Lessee's Default or Breach with respect to the failure to provide the Estoppel Certificate nor prevent the exercise of any of the other rights and remedies granted hereunder.

(c) If Lessor desires to finance, refinance, or sell the Premises, or any part thereof, Lessee and all Guarantors shall within 10 days after written notice from Lessor deliver to any potential lender or purchaser designated by Lessor such financial statements as may be reasonably required by such lender or purchaser, including but not limited to Lessee's financial statements for the past 3 years. All such financial statements shall be received by Lessor and such lender or purchaser in confidence and shall be used only for the purposes herein set forth.

17. **Definition of Lessor**. The term "**Lessor**" as used herein shall mean the owner or owners at the time in question of the fee title to the Premises, or, if this is a sublease, of the Lessee's interest in the prior lease. In the event of a transfer of Lessor's title or interest in the Premises or this Lease, Lessor shall deliver to the transferee or assignee (in cash or by credit) any unused Security Deposit held by Lessor. Upon such transfer or assignment and delivery of the Security Deposit, as aforesaid, the prior Lessor shall be relieved of all liability with respect to the obligations and/or covenants under this Lease thereafter to be performed by the Lessor. Subject to the foregoing, the obligations and/or covenants in this Lease to be performed by the Lessor shall be binding only upon the Lessor as hereinabove defined.

18. **Severability**. The invalidity of any provision of this Lease, as determined by a court of competent jurisdiction, shall in no way affect the validity of any other provision hereof.

19. **Days**. Unless otherwise specifically indicated to the contrary, the word "**days**" as used in this Lease shall mean and refer to calendar days.

20. **Limitation on Liability**. The obligations of Lessor under this Lease shall not constitute personal obligations of Lessor, or its partners, members, directors, officers or shareholders, and Lessee shall look to the Premises, and to no other assets of Lessor, for the satisfaction of any liability of Lessor with respect to this Lease, and shall not seek recourse against Lessor's partners, members, directors, officers or shareholders, or any of their personal assets for such satisfaction.

21. **Time of Essence**. Time is of the essence with respect to the performance of all obligations to be performed or observed by the Parties under this Lease.

22. **No Prior or Other Agreements; Broker Disclaimer**. This Lease contains all agreements between the Parties with respect to any matter mentioned herein, and no other prior or contemporaneous agreement or understanding shall be effective. Lessor and

Lessee each represents and warrants to the Brokers that it has made, and is relying solely upon, its own investigation as to the nature, quality, character and financial responsibility of the other Party to this Lease and as to the use, nature, quality and character of the Premises. Brokers have no responsibility with respect thereto or with respect to any default or breach hereof by either Party.

23. **Notices**.

23.1 **Notice Requirements**. All notices required or permitted by this Lease or applicable law shall be in writing and may be delivered in person (by hand or by courier) or may be sent by regular, certified or registered mail or U.S. Postal Service Express Mail, with postage prepaid, or by facsimile transmission or by email, and shall be deemed sufficiently given if served in a manner specified in this Paragraph 23. The addresses noted adjacent to a Party's signature on this Lease shall be that Party's address for delivery or mailing of notices. Either Party may by written notice to the other specify a different address for notice, except that upon Lessee's taking possession of the Premises, the Premises shall constitute Lessee's address for notice. A copy of all notices to Lessor shall be concurrently transmitted to such party or parties at such addresses as Lessor may from time to time hereafter designate in writing.

23.2 **Date of Notice**. Any notice sent by registered or certified mail, return receipt requested, shall be deemed given on the date of delivery shown on the receipt card, or if no delivery date is shown, the postmark thereon. If sent by regular mail the notice shall be deemed given 72 hours after the same is addressed as required herein and mailed with postage prepaid. Notices delivered by United States Express Mail or overnight courier that guarantees next day delivery shall be deemed given 24 hours after delivery of the same to the Postal Service or courier. Notices delivered by hand, or transmitted by facsimile transmission or by email shall be deemed delivered upon actual receipt. If notice is received on a Saturday, Sunday or legal holiday, it shall be deemed received on the next business day.

24. **Waivers**.

(a) No waiver by Lessor of the Default or Breach of any term, covenant or condition hereof by Lessee, shall be deemed a waiver of any other term, covenant or condition hereof, or of any subsequent Default or Breach by Lessee of the same or of any other term, covenant or condition hereof. Lessor's consent to, or approval of, any act shall not be deemed to render unnecessary the obtaining of Lessor's consent to, or approval of, any subsequent or similar act by Lessee, or be construed as the basis of an estoppel to enforce the provision or provisions of this Lease requiring such consent.

(b) The acceptance of Rent by Lessor shall not be a waiver of any Default or Breach by Lessee. Any payment by Lessee may be accepted by Lessor on account of monies or damages due Lessor, notwithstanding any qualifying statements or conditions made by Lessee in connection therewith, which such statements and/or conditions shall be of no force or effect whatsoever unless specifically agreed to in writing by Lessor at or before the time of deposit of such payment.

(c) THE PARTIES AGREE THAT THE TERMS OF THIS LEASE SHALL GOVERN WITH REGARD TO ALL MATTERS RELATED THERETO AND HEREBY WAIVE THE PROVISIONS OF ANY PRESENT OR FUTURE STATUTE TO THE EXTENT THAT SUCH STATUTE IS INCONSISTENT WITH THIS LEASE.

25. **Disclosures Regarding The Nature of a Real Estate Agency Relationship**.

(a) When entering into a discussion with a real estate agent regarding a real estate transaction, a Lessor or Lessee should from the outset understand what type of agency relationship or representation it has with the agent or agents in the transaction. Lessor and Lessee acknowledge being advised by the Brokers in this transaction, as follows:

(i) *Lessor's Agent*. A Lessor's agent under a listing agreement with the Lessor acts as the agent for the Lessor only. A Lessor's agent or subagent has the following affirmative obligations: *To the Lessor*: A fiduciary duty of utmost care, integrity, honesty, and loyalty in dealings with the Lessor. *To the Lessee and the Lessor:* a. Diligent exercise of reasonable skills and care in performance of the agent's duties. b. A duty of honest and fair dealing and good faith. c. A duty to disclose all facts known to the agent materially affecting the value or desirability of the property that are not known to, or within the diligent attention and observation of, the Parties. An agent is not obligated to reveal to either Party any confidential information obtained from the other Party which does not involve the affirmative duties set forth above.

(ii) *Lessee's Agent*. An agent can agree to act as agent for the Lessee only. In these situations, the agent is not the Lessor's agent, even if by agreement the agent may receive compensation for services rendered, either in full or in part from the Lessor. An agent acting only for a Lessee has the following affirmative obligations. *To the Lessee:* A fiduciary duty of utmost care, integrity, honesty, and loyalty in dealings with the Lessee. *To the Lessee and the Lessor* a. Diligent exercise of reasonable skills and care in performance of the agent's duties. b. A duty of honest and fair dealing and good faith. c. A duty to disclose all facts known to the agent materially affecting the value or desirability of the property that are not known to, or within the diligent attention and observation of, the Parties. An agent is not obligated to reveal to either Party any confidential information obtained from the other Party which does not involve the affirmative duties set forth above.

(iii) *Agent Representing Both Lessor and Lessee*. A real estate agent, either acting directly or through one or more associate licenses, can legally be the agent of both the Lessor and the Lessee in a transaction, but only with the knowledge and consent of both the Lessor and the Lessee. In a dual agency situation, the agent has the following affirmative obligations to both the Lessor and the Lessee: a. A fiduciary duty of utmost care, integrity, honesty and loyalty in the dealings with either Lessor or the Lessee. b. Other duties to the Lessor and the Lessee as stated above in subparagraphs (i) or (iii). In representing both Lessor and Lessee, the agent may not without the express permission of the respective Party, disclose to the other Party that the Lessor will accept rent in an amount less than that indicated in the listing or that the Lessee is willing to pay a higher rent than that offered. The above duties of the agent in a real estate transaction do not relieve a Lessor or Lessee from the responsibility to protect

their own interests. Lessor and Lessee should carefully read all agreements to assure that they adequately express their understanding of the transaction. A real estate agent is a person qualified to advise about real estate. If legal or tax advice is desired, consult a competent professional.

(b) Brokers have no responsibility with respect to any default or breach hereof by either Party. The Parties agree that no lawsuit or other legal proceeding involving any breach of duty, error or omission relating to this Lease may be brought against Broker more than one year after the Start Date and that the liability (including court costs and attorneys' fees), of any Broker with respect to any such lawsuit and/or legal proceeding shall not exceed the fee received by such Broker pursuant to this Lease; provided, however, that the foregoing limitation on each Broker's liability shall not be applicable to any gross negligence or willful misconduct of such Broker.

(c) Lessor and Lessee agree to identify to Brokers as "**Confidential**" any communication or information given Brokers that is considered by such Party to be confidential.

26. **No Right To Holdover**. Lessee has no right to retain possession of the Premises or any part thereof beyond the expiration or termination of this Lease. In the event that Lessee holds over, then the Base Rent shall be increased to 150% of the Base Rent applicable immediately preceding the expiration or termination. Holdover Base Rent shall be calculated on monthly basis. Nothing contained herein shall be construed as consent by Lessor to any holding over by Lessee.

27. **Cumulative Remedies**. No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

28. **Covenants and Conditions; Construction of Agreement**. All provisions of this Lease to be observed or performed by Lessee are both covenants and conditions. In construing this Lease, all headings and titles are for the convenience of the Parties only and shall not be considered a part of this Lease. Whenever required by the context, the singular shall include the plural and vice versa. This Lease shall not be construed as if prepared by one of the Parties, but rather according to its fair meaning as a whole, as if both Parties had prepared it.

29. **Binding Effect; Choice of Law**. This Lease shall be binding upon the parties, their personal representatives, successors and assigns and be governed by the laws of the State in which the Premises are located. Any litigation between the Parties hereto concerning this Lease shall be initiated in the county in which the Premises are located.

30. **Subordination; Attornment; Non-Disturbance**.

30.1 **Subordination**. This Lease and any Option granted hereby shall be subject and subordinate to any ground lease, mortgage, deed of trust, or other hypothecation or security device (collectively, "**Security Device**"), now or hereafter placed upon the Premises, to any and all advances made on the security thereof, and to all renewals, modifications, and extensions thereof. Lessee agrees that the holders of any such Security Devices (in this Lease together referred to as "**Lender**") shall have no liability or obligation to perform any of the obligations of Lessor under this Lease. Any Lender may elect to have this Lease and/or any Option granted hereby superior to the lien of its Security Device by giving written notice thereof to Lessee, whereupon this Lease and such Options shall be deemed prior to such Security Device, notwithstanding the relative dates of the documentation or recordation thereof.

30.2 **Attornment**. In the event that Lessor transfers title to the Premises, or the Premises are acquired by another upon the foreclosure or termination of a Security Device to which this Lease is subordinated (i) Lessee shall, subject to the non-disturbance provisions of Paragraph 30.3, attorn to such new owner, and upon request, enter into a new lease, containing all of the terms and provisions of this Lease, with such new owner for the remainder of the term hereof, or, at the election of the new owner, this Lease will automatically become a new lease between Lessee and such new owner, and (ii) Lessor shall thereafter be relieved of any further obligations hereunder and such new owner shall assume all of Lessor's obligations, except that such new owner shall not: (a) be liable for any act or omission of any prior lessor or with respect to events occurring prior to acquisition of ownership; (b) be subject to any offsets or defenses which Lessee might have against any prior lessor, (c) be bound by prepayment of more than one month's rent, or (d) be liable for the return of any security deposit paid to any prior lessor which was not paid or credited to such new owner.

30.3 **Non-Disturbance**. With respect to Security Devices entered into by Lessor after the execution of this Lease, Lessee's subordination of this Lease shall be subject to receiving a commercially reasonable non-disturbance agreement (a "**Non-Disturbance Agreement**") from the Lender which Non-Disturbance Agreement provides that Lessee's possession of the Premises, and this Lease, including any options to extend the term hereof, will not be disturbed so long as Lessee is not in Breach hereof and attorns to the record owner of the Premises. Further, within 60 days after the execution of this Lease, Lessor shall, if requested by Lessee, use its commercially reasonable efforts to obtain a Non-Disturbance Agreement from the holder of any pre-existing Security Device which is secured by the Premises. In the event that Lessor is unable to provide the Non-Disturbance Agreement within said 60 days, then Lessee may, at Lessee's option, directly contact Lender and attempt to negotiate for the execution and delivery of a Non-Disturbance Agreement.

30.4 **Self-Executing**. The agreements contained in this Paragraph 30 shall be effective without the execution of any further documents; provided, however, that, upon written request from Lessor or a Lender in connection with a sale, financing or refinancing of the Premises, Lessee and Lessor shall execute such further writings as may be reasonably required to separately document any subordination, attornment and/or Non-Disturbance Agreement provided for herein.

31. **Attorneys' Fees**. If any Party or Broker brings an action or proceeding involving the Premises whether founded in tort, contract or equity, or to declare rights hereunder, the Prevailing Party (as hereafter defined) in any such proceeding, action, or appeal thereon, shall be entitled to reasonable attorneys' fees. Such fees may be awarded in the same suit or recovered in a separate suit, whether or not such action or proceeding is pursued to decision or judgment. The term, "**Prevailing Party**" shall include, without

limitation, a Party or Broker who substantially obtains or defeats the relief sought, as the case may be, whether by compromise, settlement, judgment, or the abandonment by the other Party or Broker of its claim or defense. The attorneys' fees award shall not be computed in accordance with any court fee schedule, but shall be such as to fully reimburse all attorneys' fees reasonably incurred. In addition, Lessor shall be entitled to attorneys' fees, costs and expenses incurred in the preparation and service of notices of Default and consultations in connection therewith, whether or not a legal action is subsequently commenced in connection with such Default or resulting Breach ($200 is a reasonable minimum per occurrence for such services and consultation).

32. **Lessor's Access; Showing Premises; Repairs**. Lessor and Lessors agents shall have the right to enter the Premises at any time, in the case of an emergency, and otherwise at reasonable times after reasonable prior notice for the purpose of showing the same to prospective purchasers, lenders, or tenants, and making such alterations, repairs, improvements or additions to the Premises as Lessor may deem necessary or desirable and the erecting, using and maintaining of utilities, services, pipes and conduits through the Premises and/or other premises as long as there is no material adverse effect on Lessee's use of the Premises. All such activities shall be without abatement of rent or liability to Lessee.

33. **Auctions**. Lessee shall not conduct, nor permit to be conducted, any auction upon the Premises without Lessor's prior written consent. Lessor shall not be obligated to exercise any standard of reasonableness in determining whether to permit an auction.

34. **Signs**. Lessor may place on the Premises ordinary "**For Sale**" signs at any time and ordinary "**For Lease**" signs during the last 6 months of the term hereof. Except for ordinary "**For Sublease**" signs which may be placed only on the Premises, Lessee shall not place any sign upon the Project without Lessor's prior written consent. All signs must comply with all Applicable Requirements.

35. **Termination; Merger**. Unless specifically stated otherwise in writing by Lessor, the voluntary or other surrender of this Lease by Lessee, the mutual termination or cancellation hereof, or a termination hereof by Lessor for Breach by Lessee, shall automatically terminate any sublease or lesser estate in the Premises; provided, however, that Lessor may elect to continue any one or all existing subtenancies. Lessor's failure within 10 days following any such event to elect to the contrary by written notice to the holder of any such lesser interest, shall constitute Lessors election to have such event constitute the termination of such interest.

36. **Consents**. All requests for consent shall be in writing. Except as otherwise provided herein, wherever in this Lease the consent of a Party is required to an act by or for the other Party, such consent shall not be unreasonably withheld or delayed. Lessor's actual reasonable costs and expenses (including but not limited to architects', attorneys', engineers' and other consultants' fees) incurred in the consideration of, or response to, a request by Lessee for any Lessor consent, including but not limited to consents to an assignment, a subletting or the presence or use of a Hazardous Substance, shall be paid by Lessee upon receipt of an invoice and supporting documentation therefor. Lessor's consent to any act, assignment or subletting shall not constitute an acknowledgment that no Default or Breach by Lessee of this Lease exists, nor shall such consent be deemed a waiver of any then existing Default or Breach, except as may be otherwise specifically stated in writing by Lessor at the time of such consent. The failure to specify herein any particular condition to Lessor's consent shall not preclude the imposition by Lessor at the time of consent of such further or other conditions as are then reasonable with reference to the particular matter for which consent is being given. In the event that either Party disagrees with any determination made by the other hereunder and reasonably requests the reasons for such determination, the determining party shall furnish its reasons in writing and in reasonable detail within 10 business days following such request.

37. **Guarantor**.

37.1 **Execution**. The Guarantors, if any, shall each execute a guaranty in the form most recently published by the AIR Commercial Real Estate Association.

37.2 **Default**. It shall constitute a Default of the Lessee if any Guarantor fails or refuses, upon request to provide: (a) evidence of the execution of the guaranty, including the authority of the party signing on Guarantor's behalf to obligate Guarantor, and in the case of a corporate Guarantor, a certified copy of a resolution of its board of directors authorizing the making of such guaranty, (b) current financial statements, (c) an Estoppel Certificate, or (d) written confirmation that the guaranty is still in effect.

38. **Quiet Possession**. Subject to payment by Lessee of the Rent and performance of all of the covenants, conditions and provisions on Lessee's part to be observed and performed under this Lease, Lessee shall have quiet possession and quiet enjoyment of the Premises during the term hereof.

39. **Options**. If Lessee is granted any option, as defined below, then the following provisions shall apply.

39.1 **Definition**. "**Option**" shall mean: (a) the right to extend or reduce the term of or renew this Lease or to extend or reduce the term of or renew any lease that Lessee has on other property of Lessor; (b) the right of first refusal or first offer to lease either the Premises or other property of Lessor; (c) the right to purchase, the right of first offer to purchase or the right of first refusal to purchase the Premises or other property of Lessor.

39.2 **Options Personal To Original Lessee**. Any Option granted to Lessee in this Lease is personal to the original Lessee, and cannot be assigned or exercised by anyone other than said original Lessee and only while the original Lessee is in full possession of the Premises and, if requested by Lessor, with Lessee certifying that Lessee has no intention of thereafter assigning or subletting.

39.3 **Multiple Options**. In the event that Lessee has any multiple Options to extend or renew this Lease, a later Option cannot be exercised unless the prior Options have been validly exercised.

39.4 **Effect of Default on Options**.

(a) Lessee shall have no right to exercise an Option: (i) during the period commencing with the giving of any notice of Default and continuing until said Default is cured, (ii) during the period of time any Rent is unpaid (without regard to whether

notice thereof is given Lessee), (iii) during the time Lessee is in Breach of this Lease, or (iv) in the event that Lessee has been given 3 or more notices of separate Default, whether or not the Defaults are cured, during the 12 month period immediately preceding the exercise of the Option.

(b) The period of time within which an Option may be exercised shall not be extended or enlarged by reason of Lessee's inability to exercise an Option because of the provisions of Paragraph 39.4(a).

(c) An Option shall terminate and be of no further force or effect, notwithstanding Lessee's due and timely exercise of the Option, if, after such exercise and prior to the commencement of the extended term or completion of the purchase, (i) Lessee fails to pay Rent for a period of 30 days after such Rent becomes due (without any necessity of Lessor to give notice thereof), or (ii) if Lessee commits a Breach of this Lease.

40. **Security Measures**. Lessee hereby acknowledges that the Rent payable to Lessor hereunder does not include the cost of guard service or other security measures, and that Lessor shall have no obligation whatsoever to provide same. Lessee assumes all responsibility for the protection of the Premises, Lessee, its agents and invitees and their property from the acts of third parties.

41. **Reservations**. Lessor reserves the right: (i) to grant, without the consent or joinder of Lessee, such easements, rights and dedications that Lessor deems necessary, (ii) to cause the recordation of parcel maps and restrictions, and (Hi) to create and/or install new utility raceways, so long as such easements, rights, dedications, maps, restrictions, and utility raceways do not unreasonably interfere with the use of the Premises by Lessee. Lessee agrees to sign any documents reasonably requested by Lessor to effectuate such rights.

42. **Performance Under Protest**. If at any time a dispute shall arise as to any amount or sum of money to be paid by one Party to the other under the provisions hereof, the Party against whom the obligation to pay the money is asserted shall have the right to make payment "under protest" and such payment shall not be regarded as a voluntary payment and there shall survive the right on the part of said Party to institute suit for recovery of such sum. If it shall be adjudged that there was no legal obligation on the part of said Party to pay such sum or any part thereof, said Party shall be entitled to recover such sum or so much thereof as it was not legally required to pay. A Party who does not initiate suit for the recovery of sums paid "under protest" within 6 months shall be deemed to have waived its right to protest such payment.

43. **Authority; Multiple Parties; Execution**.

(a) If either Party hereto is a corporation, trust, limited liability company, partnership, or similar entity, each individual executing this Lease on behalf of such entity represents and warrants that he or she is duly authorized to execute and deliver this Lease on its behalf. Each Party shall, within 30 days after request, deliver to the other Party satisfactory evidence of such authority.

(b) If this Lease is executed by more than one person or entity as "**Lessee**", each such person or entity shall be jointly and severally liable hereunder. It is agreed that any one of the named Lessees shall be empowered to execute any amendment to this Lease, or other document ancillary thereto and bind all of the named Lessees, and Lessor may rely on the same as if all of the named Lessees had executed such document.

(c) This Lease may be executed by the Parties in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument.

44. **Conflict**. Any conflict between the printed provisions of this Lease and the typewritten or handwritten provisions shall be controlled by the typewritten or handwritten provisions.

45. **Offer**. Preparation of this Lease by either party or their agent and submission of same to the other Party shall not be deemed an offer to lease to the other Party. This Lease is not intended to be binding until executed and delivered by all Parties hereto.

46. **Amendments**. This Lease may be modified only in writing, signed by the Parties in interest at the time of the modification. As long as they do not materially change Lessee's obligations hereunder, Lessee agrees to make such reasonable non-monetary modifications to this Lease as may be reasonably required by a Lender in connection with the obtaining of normal financing or refinancing of the Premises.

47. **Waiver of Jury Trial**. THE PARTIES HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING INVOLVING THE PROPERTY OR ARISING OUT OF THIS AGREEMENT.

48. **Arbitration of Disputes**. An Addendum requiring the Arbitration of all disputes between the Parties and/or Brokers arising out of this Lease ☐ is ☐ is not attached to this Lease.

49. **Accessibility; Americans with Disabilities Act**.

(a) The Premises: ☐ have not undergone an inspection by a Certified Access Specialist (CASp). ☐ have undergone an inspection by a Certified Access Specialist (CASp) and it was determined that the Premises met all applicable construction-related accessibility standards pursuant to California Civil Code §55.51 et seq. ☐ have undergone an inspection by a Certified Access Specialist (CASp) and it was determined that the Premises did not meet all applicable construction-related accessibility standards pursuant to California Civil Code §55.51 et seq.

(b) Since compliance with the Americans with Disabilities Act (ADA) is dependent upon Lessee's specific use of the Premises, Lessor makes no warranty or representation as to whether or not the Premises comply with ADA or any similar legislation. In the event that Lessee's use of the Premises requires modifications or additions to the Premises in order to be in ADA compliance, Lessee agrees to make any such necessary modifications and/or additions at Lessee's expense.

LESSOR AND LESSEE HAVE CAREFULLY READ AND REVIEWED THIS LEASE AND EACH TERM AND PROVISION CONTAINED HEREIN, AND BY THE EXECUTION OF THIS LEASE SHOW THEIR INFORMED AND VOLUNTARY CONSENT THERETO. THE PARTIES HEREBY AGREE THAT, AT THE TIME THIS LEASE IS EXECUTED, THE TERMS OF THIS LEASE ARE COMMERCIALLY REASONABLE AND EFFECTUATE THE INTENT AND PURPOSE OF LESSOR AND LESSEE WITH RESPECT TO THE PREMISES.

ATTENTION: NO REPRESENTATION OR RECOMMENDATION IS MADE BY THE AIR COMMERCIAL REAL ESTATE ASSOCIATION OR BY ANY BROKER AS TO THE LEGAL SUFFICIENCY, LEGAL EFFECT, OR TAX CONSEQUENCES OF THIS LEASE OR THE TRANSACTION TO WHICH IT RELATES. THE PARTIES ARE URGED TO:

1. SEEK ADVICE OF COUNSEL AS TO THE LEGAL AND TAX CONSEQUENCES OF THIS LEASE.

2. RETAIN APPROPRIATE CONSULTANTS TO REVIEW AND INVESTIGATE THE CONDITION OF THE PREMISES. SAID INVESTIGATION SHOULD INCLUDE BUT NOT BE LIMITED TO: THE POSSIBLE PRESENCE OF HAZARDOUS SUBSTANCES, THE ZONING OF THE PREMISES, THE STRUCTURAL INTEGRITY, THE CONDITION OF THE ROOF AND OPERATING SYSTEMS, COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT AND THE SUITABILITY OF THE PREMISES FOR LESSEE'S INTENDED USE.

WARNING: IF THE PREMISES ARE LOCATED IN A STATE OTHER THAN CALIFORNIA, CERTAIN PROVISIONS OF THE LEASE MAY NEED TO BE REVISED TO COMPLY WITH THE LAWS OF THE STATE IN WHICH THE PREMISES ARE LOCATED.

The parties hereto have executed this Lease at the place and on the dates specified above their respective signatures.

Executed at:	Fremont, CA	Executed at:	Fremont, CA
On:	March 23, 2017	On:	March 23, 2017
By LESSOR:		**By LESSEE:**	
D&J Construction, Inc.		ACM Research, Inc.	
By:	/s/ Tammy Eliseian	By:	/s/ Lillian Chien
Name Printed:	Tammy Eliseian	Name Printed:	Lillian Chien
Title:	President	Title:	Procurement and office manager
By:		By:	
Name Printed:		Name Printed:	
Title:		Title:	
Address:	3390 Seldon Ct., Fremont, CA 94539	Address:	42307 Osgood Rd. Unit I, Fremont, CA 94539
Telephone:	(510) 657-7171	Telephone:	(510) 445-3700
Facsimile:	( )	Facsimile:	(572) 445-3708
Email:	tammy@joncethomas.com	Email:	lillian.chien@amrsch.com
Email:	gaela@dj-propertymanagement.com	Email:	
Federal ID No.		Federal ID No.	
BROKER:		**BROKER:**	
Att:		Att:	
Title:		Title:	
Address:		Address:	
Telephone:	( )	Telephone:	( )
Facsimile:	( )	Facsimile:	( )
Email:		Email:	
Federal ID No.		Federal ID No.	
Broker/Agent BRE License #:		Broker/Agent BRE License #:	

NOTICE: These forms are often modified to meet changing requirements of law and industry needs. Always write or call to make sure you are utilizing the most current form: AIR Commercial Real Estate Association, 500 N Brand Blvd, Suite 900, Glendale, CA 91203. Telephone No. (213) 687-8777. Fax No.: (213) 687-8616.

AIR COMMERCIAL REAL ESTATE ASSOCIATION

GUARANTY OF LEASE

WHEREAS, D&J Construction, Inc., hereinafter "Lessor", and ACM Research, Inc., hereinafter "Lessee", are about to execute a document entitled "Lease" dated March 22 , 2017 concerning the premises commonly known as 42307 Osgood Rd., Unit I, Fremont, CA 94539 wherein Lessor will lease the premises to Lessee, and

WHEREAS, Lillian Chien hereinafter "Guarantors" have a financial interest in Lessee, and

WHEREAS, Lessor would not execute the Lease if Guarantors did not execute and deliver to Lessor this Guaranty of Lease.

NOW THEREFORE, in consideration of the execution of said Lease by Lessor and as a material inducement to Lessor to execute said Lease, Guarantors hereby jointly, severally, unconditionally and irrevocably guarantee the prompt payment by Lessee of all rents and all other sums payable by Lessee under said Lease and the faithful and prompt performance by Lessee of each and every one of the terms, conditions and covenants of said Lease to be kept and performed by Lessee.

It is specifically agreed by Lessor and Guarantors that: (i) the terms of the foregoing Lease may be modified by agreement between Lessor and Lessee, or by a course of conduct, and (ii) said Lease may be assigned by Lessor or any assignee of Lessor without consent or notice to Guarantors and that this Guaranty shall guarantee the performance of said Lease as so modified.

This Guaranty shall not be released, modified or affected by the failure or delay on the part of Lessor to enforce any of the rights or remedies of the Lessor under said Lease.

No notice of default by Lessee under the Lease need be given by Lessor to Guarantors, it being specifically agreed that the guarantee of the undersigned is a continuing guarantee under which Lessor may proceed immediately against Lessee and/or against Guarantors following any breach or default by Lessee or for the enforcement of any rights which Lessor may have as against Lessee under the terms of the Lease or at law or in equity.

Lessor shall have the right to proceed against Guarantors following any breach or default by Lessee under the Lease without first proceeding against Lessee and without previous notice to or demand upon either Lessee or Guarantors.

Guarantors hereby waive (a) notice of acceptance of this Guaranty. (b) demand of payment, presentation and protest, (c) all right to assert or plead any statute of limitations relating to this Guaranty or the Lease, (d) any right to require the Lessor to proceed against the Lessee or any other Guarantor or any other person or entity liable to Lessor, (e) any right to require Lessor to apply to any default any security deposit or other security it may hold under the Lease, (f) any right to require Lessor to proceed under any other remedy Lessor may have before proceeding against Guarantors, (g) any right of subrogation that Guarantors may have against Lessee.

Guarantors do hereby subordinate all existing or future indebtedness of Lessee to Guarantors to the obligations owed to Lessor under the Lease and this Guaranty.

If a Guarantor is married, such Guarantor expressly agrees that recourse may be had against his or her separate property for all of the obligations hereunder.

The obligations of Lessee under the Lease to execute and deliver estoppel statements and financial statements, as therein provided, shall be deemed to also require the Guarantors to do and provide the same to Lessor. The failure of the Guarantors to provide the same to Lessor shall constitute a default under the Lease.

The term "Lessor" refers to and means the Lessor named in the Lease and also Lessor's successors and assigns. So long as Lessor's interest in the Lease, the leased premises or the rents, issues and profits therefrom, are subject to any mortgage or deed of trust or assignment for security, no acquisition by Guarantors of the Lessor's interest shall affect the continuing obligation of Guarantors under this Guaranty which shall nevertheless continue in full force and effect for the benefit of the mortgagee, beneficiary, trustee or assignee under such mortgage, deed of trust or assignment and their successors and assigns.

The term "Lessee" refers to and means the Lessee named in the Lease and also Lessee's successors and assigns.

Any recovery by Lessor from any other guarantor or insurer shall first be credited to the portion of Lessee's indebtedness to Lessor which exceeds the maximum liability of Guarantors under this Guaranty.

No provision of this Guaranty or right of the Lessor can be waived, nor can the Guarantors be released from their obligations except in writing signed by the Lessor.

Any litigation concerning this Guaranty shall be initiated in a state court of competent jurisdiction in the county in which the leased premises are located and the Guarantors consent to the jurisdiction of such court. This Guaranty shall be governed by the laws of the State in which the leased

premises are located and for the purposes of any rules regarding conflicts of law the parties shall be treated as if they were all residents or domiciles of such State.

In the event any action be brought by said Lessor against Guarantors hereunder to enforce the obligation of Guarantors hereunder, the unsuccessful party in such action shall pay to the prevailing party therein a reasonable attorney's fee. The attorney's fee award shall not be computed in accordance with any court fee schedule, but shall be such as to full reimburse all attorney's fees reasonably incurred.

If any Guarantor is a corporation, partnership, or limited liability company, each individual executing this Guaranty on said entity's behalf represents and warrants that he or she is duly authorized to execute this Guaranty on behalf of such entity.

If this Form has been filled in, it has been prepared for submission to your attorney for his approval. No representation or recommendation is made by the AIR Commercial Real Estate Association, the real estate broker or its agents or employees as to the legal sufficiency, legal effect, or tax consequences of this Form or the transaction relating thereto.

Executed at:	Fremont , CA	Lillian Chien
On:	3/23/2017	
Address:	42307 Osgood Rd., Unit I, Fremont CA 94539	/s/ Lillian Chien
		"GUARANTORS"

Exhibit 10.02

Contract Registration No.:

Shanghai Zhangjiang Group Co., Ltd.

Housing Lease Contract

between

Shanghai Zhangjiang Group Co., Ltd.

("**Party A**" or "**Lessor**")

And

ACM Research (Shanghai), Inc.

("**Party B**" or "**Lessee**")

Date: September 6, 2016

Housing Lease Contract
(Agreed Terms)

THIS CONTRACT is made and entered into by and between:

Party A: Shanghai Zhangjiang Group Co., **Ltd**.

Address: Building 16, No. 1387, Zhangdong Road, Shanghai 201203

Tel.: 021-68796879

Party B: ACM Research (**Shanghai**), **Inc**.

Business License No.: 310000400423859 (Pudong)

Address: Building 4, No. 1690 Cailun Rd, Zhangjiang Hi-tech Park, Pudong New Area, Shanghai 201203

Tel.: 021-50808868

Legal Representative: Hui Wang ID Card/Passport No.: 466923702

Contact Information:

I. Basis for this Contract

1.1 This Housing Lease Contract ("**Contract**") is made and entered into by Party A and Party B through mutual negotiation in respect of the lease of the Premises (as defined below). All the provisions of this Part constitute the contractual terms and conditions under the Housing Lease Contract.

II. Information on Party B

2.1 Party B is an enterprise which engages in manufacturing integrated circuit equipment within Zhangjiang Hi-tech Park ("**Zhangjiang Hi-tech Park**" or "**Park**").

2.2 Party B warrants that it shall conduct its operational activities according to law and complete and timely secure all necessary registrations, record-filings and administrative licenses with and from the competent administrative authorities (including the industrial and commercial administration bureau, health bureau, environmental protection authority, fire fighting authority, culture authority, public security organ, etc.) therefor. Party A shall not be responsible for any failure on the part of Party B to obtain the said operational licenses, or make any compensation therefor in whatever form to Party B (including but not limited to the costs of fitting-out, decoration and promotion of the Premises incurred by Party B). If Party B fails to secure the said registrations, record-filings or licenses, thus causing the impracticable fulfillment of this Contract, Party B shall be solely responsible for all losses arising therefrom.

III. Premises to be Leased

3.1 Location and Area of the Premises: Party A shall lease its house located at Floors 1-5, Building 4, No. 1690 Cailun Rd, Zhangjiang Hi-tech Park, Zhangjiang, Shanghai (the "**Premises**" or "**Leased Premises**") to Party B for use. It is acknowledged that the actually measured built-up area of the Premises is 5,900.28 square meters in total, for which no dispute shall be made and such Premises shall be used as the place where Party B's projects are to be conducted. By accepting the delivery of the Premises, Party B shall be deemed to have agreed upon the compliance of rental area of such Leased Premises with this Contract.

3.2 Party B agrees to pay off the rent or occupancy fees and other rental-related expenses as agreed hereunder.

3.3 Use of Public Area and Public Facilities: during the Lease Term, Party B shall have the right to make reasonable use of the public areas and public facilities outside the Leased Premises so as to get into or out of the Leased Premises, which shall be deemed as an extension of the right to use the Leased Premises. The exercise of the said right by Party B shall not be for commercial purpose, nor shall create any unreasonable hindrance upon others' rights; besides, Party B shall obey the management directions given by Party A or its designated management service provider.

3.4 Infrastructures of the Premises:

The electronic power capability of 100w per square meter will be available within the Premises, within which Party B shall use the power. The phone line access service shall be arranged by Property Management Company by applying to the telecommunications department subject to the standard of each 60 square meters for each user. The floor bearing capacity is 250kg per square meter. If Party B requires the infrastructures with the specification beyond the said data, thus requiring the increase of configuration capacity, Party B shall make a written application to Party A in advance and pay off relevant rectification fees. The annual maximum water consumption of Party B shall not exceed 4 cubic meters per square meter. Otherwise, Party B shall pay for the excessive water consumption in accordance with the applicable charging standards developed by the competent authority.

IV. Use of the Premises

4.1 The Premises shall be leased from Party A for the sole purpose of Party B's production and operation, which shall be subject to the provisions of the State and Shanghai municipality regarding the use of the Premises as well as the rules and regulations of Property Management Company.

V. Lease Term and Delivery of the Premises

5.1 Party A shall lease the Premises defined herein to Party B for a period of 26 months, calculated from November 1, 2015 to December 31, 2017.

5.2 Considering that Party A and Party B are renewing the lease of the Premises and Party B is actually occupying and using the Premises, Party A and Party B hereby acknowledge that the parties hereto shall not separately handle the housing handover formalities.

VI. Rent

6.1 The rent for the Leased Premises defined herein shall be charged at the rate of RMB 2.0 Yuan per square meter per day (inclusive of 5% VAT). Prior to execution of this Contract, Party A has specifically informed Party B and Party B acknowledges that: such Premises is "an old real property project" in accordance with the *Resolution on Comprehensively Implementing the Pilot Proposal for the Change from Business Tax to Value-Added Tax* considered and adopted by the executive meeting of the State Council and the *Circular of the State Administration of Taxation of the Ministry of Finance regarding Comprehensively Implementing the Pilot Proposal for the Change from Business Tax to Value-Added Tax*, for which the rent of the Premises shall be subject to the VAT calculated by simple calculation method (i.e. the VAT shall be calculated at the rate of 5%); in case of any new provision subsequently promulgated by the tax authority, causing that the said simple calculation method no longer applies to this old real property project, the rent shall be adjusted in a manner which will not reduce the tax-excluded rent actually charged by Party A.

VII. Performance Bond

7.1 Party B shall, within sixty (60) days upon effectiveness of this Contract, pay Party A RMB 1,076,801.10 as the performance bond hereunder. It is acknowledged that the performance bond of RMB 100,000 already paid to Party A under the Housing Lease Contract (No. 14-0429) between Party A and Party B shall be automatically transferred into the performance bond to be paid hereunder; then, Party B is required to pay off the difference (i.e. RMB 976,801.10) to Party A upon effectiveness of this Contract.

VIII. Registration with the Industrial and Commercial Administration Bureau

8.1 Party B understands and acknowledges that the lease of the Premises by Party A is conditional upon the fact that Party B completes the industrial and commercial registration procedures. If Party B moves out of Zhangjiang Hi-tech Park during the Lease Term, Party A shall have the right to unilaterally cancel this Contract without any liability and Party B shall be solely responsible for all losses thus incurred.

IX. Daily Liquidated Damages

9.1 Unless otherwise agreed herein, the defaulting party shall bear the liquidated damages of RMB 2,000 on a daily basis for its breach of this Contract (other than the payment obligation set out herein).

X. Precedence

10.1 The contractual terms and conditions under this Contract and those standard terms and conditions detailed below shall be legally binding and jointly constitute the Housing Lease Contract. In case of any inconsistency between the contractual terms and conditions under this Contract and those standard terms and conditions detailed below, the former shall prevail.

XI. Effectiveness

11.1 This Contract shall be written in Chinese and made in four counterparts, with Party A and Party B holding two respectively and shall take effect upon signatures of Party A and Party B.

Housing Lease Contract
(Standard Terms)

I. General Provisions

1.1 Party A and Party B, intending to be legally bound, hereby enter into the Housing Lease Contract in respect of the lease of the Premises (as defined below) through mutual negotiation in accordance with the *Contract Law of the People's Republic of China*, the *Regulations of Shanghai Municipality for the Lease of Premises* and other applicable provisions and by reference to the current practices within China and of each development area in Shanghai.

1.2 The parties hereto must act in accordance with the applicable laws, regulation and rules of the People's Republic of China, Shanghai Municipality and Pudong New Area and subject to this Contract.

II. Contractual Documents

2.1 The following documents shall constitute an integral part of this Contract and shall have the same legal force with the text of this Contract;

2.1.1 Floor Plan of the Premises leased hereunder, to be provided by Party A (Appendix I);

2.1.2 Certificate showing Party B is legally incorporated and validly existing, i.e. a copy of Party B's Business License, to be provided by Party B (Appendix II);

2.1.3 Letter of Undertaking on Production Safety (Appendix III) and Letter of Undertaking on Fire Safety (Appendix IV), to be issued by Party B.

III. Legal Status of the Parties

3.1 Party A is a business entity established with the approval of the Chinese government, which engages in the land development and operational management of Zhangjiang Hi-tech Park, Shanghai and is qualified as a legal person in China.

Party A shall lease out the Premises as the owner/operational manager of the Premises.

3.2 Please refer to the contractual terms and conditions for the information on Party B.

IV. Premises to be Leased

4.1 Please refer to the contractual terms and conditions for details.

V. Use of the Premises

5.1 Please refer to the contractual terms and conditions for details.

VI. Lease Term and Delivery of the Premises

6.1 Please refer to the contractual terms and conditions for details.

VII. Rent and Payment

7.1 Rent: please refer to the contractual terms and conditions for details.

7.2 Payment of Rent:

7.2.1 It is acknowledged that Party B shall, prior to December 31, 2016, pay Party A the rent of RMB 3,594,253.60 for the period from November 1, 2015 to September 30, 2016.

7.2.2 For the period subsequent to October 1, 2016, the rent due and payable by Party B shall be paid by Party B on a monthly basis, and shall be paid to Party A within ten (10) days prior to commencement of each payment cycle.

7.2.3 Party B shall, prior to December 31, 2017, pay Party A the rent due to Party A amounting to RMB 8,883,622 for the period from February 1, 2012 to October 31, 2015 and partial decoration allowance of RMB 4,192,402; in case of any failure on the part of Party B to make the said payment, Party B shall bear the corresponding breaching liabilities subject to the provisions of Housing Lease Contract previously concluded by Party A and Party B.

7.2.4 Party B shall pay the rent, performance bond and relevant sums to Party A's designated account subject to this Contract, i.e.:

Account Name: Shanghai Zhangjiang Group Co., Ltd.

Account Bank: Industrial and Commercial Bank of China Shanghai Branch Keyuan Sub-branch

Account No.: 1001 1949 0901 4461 067

7.2.5 VAT Invoice: Party B shall, within three (3) days upon execution of this Contract, provide Party A with the details for issuing the VAT invoice. If Party B is a small-scale taxpayer, Party A shall provide Party B with a general VAT invoice upon receipt of the rent from Party B; if Party B is a general taxpayer, Party A shall provide Party B with a special VAT invoice (VAT rate is 5%) upon receipt of the rent from Party B. In case of any change to Party B's details for issuing the VAT invoice during the performance of this Contract, Party B shall notify the same to Party A within five (5) working days subsequent to such change and submit a document issued by tax authority evidencing its updated taxpayer information to Party A. Otherwise, Party A shall have the right to issue the invoice as per the original invoicing information.

VIII. Performance Bond

8.1 Amount of Performance Bond: Please refer to the contractual terms and conditions for details.

8.2 Party A shall have the right to deduct the sums, expenses, liquidated damages, compensation or late fees payable or due by Party B under this Contract from the performance bond. If such performance bond cannot cover the losses incurred to Party A, Party A may make further claim against Party B. In no event shall Party B require to set the performance bond against the rent or any other expense payable and due.

8.3 If Party A has the right to make the said deduction or set-off from or against the said performance bond as set out herein, and such performance bond is insufficient, Party B shall, within fifteen (15) days upon receipt of written notice from Party A indicating such insufficiency, pay off the said insufficiency. Otherwise, Party A shall have the right to cancel this Contract with immediate effect.

8.4 When this Contract terminates upon its expiry or is cancelled in advance, Party A shall refund the performance bond (without interest) to Party B within thirty (30) days after Party B restores the Premises into the original condition and surrenders the same to Party A, completes the surrender procedures, pays off the rent due and other payables (including but not limited to property management fee, water fee, electricity fee, gas fee, telecommunications fee, late fee, liquidated damages and damages) arising during the Lease Term, cancels the utility projects activated by Party B itself and pays off the utility fees and goes through the formalities as to migration or deregistration of registered address.

IX. Property Management

9.1 Party B shall bear and pay the property management fee to the Property Management Company in accordance with the terms and conditions of the Property Management Contract executed by Party A and the Property Management Company in charge of the Premises. Party B shall abide by the provisions of the Property Management Convention.

9.2 The utility fees such as the fees and charges for water, electricity, gas, telecommunications, etc. incurred by Party B during the Lease Term shall be calculated and charged in accordance with the charging standards of competent governmental department, Property Management Contract and Property Management Convention. If Party A issues the VAT invoices as to such utility fees directly to Party B, Party B shall bear the value-added tax arising thereby.

9.3 The charges for parking space used by Party B shall be calculated and paid off in accordance with the Property Management Convention. Party B acknowledges that the Property Management Company shall have the right to amend the Property Management Convention and adjust the charging standard for parking space as the case may be, provided that the charges for parking space shall not be beyond the charging standard approved or recorded by the pricing bureau.

X. Restrictions on Sublease or Under-lease

10.1 Without Party A’s consent, Party B shall not sublease, partially under-lease, rent out or share with any third party the Premises or conduct any activity other than Party B’s operational activities therein. If Party B conducts the said activity without Party A’s consent, Party A shall have the right to cancel this Contract with immediate effect and pursue the legal liabilities for breach of this Contract against Party B.

10.2 Party A, Party B and the sub-lessee shall separately execute a tripartite agreement in respect of any sublease or under-lease approved by Party A.

XI. Fitting-out and Installation

11.1 Party B shall divide, decorate and / partially reconstruct the Leased Premises and install any equipment, pipeline and other facilities in accordance with the following provisions:

11.1.1 Party B shall not conduct the said activities unless Party A's prior written consent is obtained, and, if any of the said activities involves the part belonging to the adjoining tenant, the consent of such adjoining tenant shall also be required. The said activities shall be conducted in a manner which will not affect the normal use of adjoining tenant of such tenant's house;

11.1.2 Party B shall not damage the building structure of the Leased Premises and the building where such Premises locate. Party A and Property Management Company shall have the right to supervise and inspect Party B and require Party B to rectify any noncompliance timely. In case of any breach of this Article, Party B shall make resolution and restore the Premises into the original conditions at its sole costs and expenses. Party B has the right to conduct the fitting-out of the Premises;

11.1.3 Party B must report and apply for the approval as to the fitting-out of the Premises to competent governmental department in advance and shall secure the review and approval of competent governmental department as to the fire prevention and environmental protection of the Premises in accordance with the laws, regulations and rules of the State, Shanghai municipality and Pudong New Area regarding construction, fire prevention, environmental protection and industrial hygiene.

Party A shall assist Party B in handling relevant review and approval formalities with competent governmental department. Party A shall not be responsible for any delay or loss arising out of the refusal or delay of competent governmental department to grant an approval upon such fitting-out.

11.2 Party B shall solely bear the financial and legal responsibilities for any and all property losses or personal injuries (if any) arising out of such fitting-out.

11.3 Party B shall make compensation for any and all losses of Party A or third party arising out of such interior fitting-out, division, reconstruction or installation of or for the Premises, and shall undertake the joint liabilities for any and all losses of Party A or third party incurred by the construction unit engaged by Party B.

XII. Restrictions on the Use of the Leased Premises

12.1 Restrictions on the Use of Leased Premises:

12.1.1 Party B shall not change the intended purpose of the Premises, nor shall use the Leased Premises or any part thereof for residential purpose or other purpose or raise animals within the Premises;

12.1.2 Party B shall not occupy the part beyond the Leased Premises for whatever reasons without Party A's consent;

12.1.3 Party B shall not permit or allow the occurrence of any event or placement of any article within the Leased Premises which may cause any hindrance or interference to other adjoining tenant, Party A, Party A's customers or any right thereof, nor shall disturb other tenants in whatever manner;

12.1.4 Party B shall not place any logo or advertisement on the exterior wall or roof of Leased Premises, nor shall place the same facing the glass curtain wall within the Premises or conduct any activity, either commercial or noncommercial, under Party A's name;

12.1.5 Party B shall not transfer, donate, invest, enter into a cooperation in respect of, value and mortgage, pledge or otherwise dispose of the right to lease the Leased Premises;

12.1.6 Unless the special fire prevention approval is obtained for the dangerous articles and Party A's consent is also secured, Party B shall not store the flammable, explosive, toxic, hazardous, radioactive, contaminated materials or those articles which may produce excessive sound or irritating odor within the Leased Premises; during the Lease Term, Party B shall not produce any excessive sound or irritating odor, nor shall pollute the surroundings and the environment of Zhangjiang Hi-tech Park in whatever form;

12.1.7 Party B shall not create any danger or threat in whatever form to the surroundings, the assets within Zhangjiang Hi-tech Park and personal safety;

12.1.8 Party B shall not use the Leased Premises for any illegal or immoral activity.

12.2 Where Party B commits any of the said prohibited activities, Party A shall have the right to cancel this Contract in advance and withdraw the Leased Premises without refunding the performance bond already paid by Party B and pursue other breaching liabilities against Party B; where Party B breaches the said Article 12.1.6, Party A shall have the right to take necessary cleaning and remedial measures or make a report to relevant department without giving prior notice, for which Party B shall solely bear all responsibilities, expenses and losses arising thereby.

12.3 If any third party has recourse against Party A or Party B due to any of the said prohibited activities conducted by Party B, Party B shall be solely responsible for all direct losses incurred to such third party; if Party A is required by the court or arbitration institution to bear responsibilities to third party due to any of the said prohibited activities conducted by Party B, Party A shall have the right to recover against Party B for its direct losses thus incurred. If necessary, Party B shall assist Party A in taking proper measures against the recourse from such third party.

12.4 Party B shall not damage the supporting facilities within the Premises in whatever manner, and, in the event of any such damage, shall make repair at its sole costs and expenses. If Party B fails to make timely repair, Party A may make such repair by itself or via a third party at Party B's sole costs and expenses. Unless otherwise agreed herein, the supporting facilities referred to herein shall include the interfaces for availability of electricity, water and telecommunications, rainwater drainage and sewage discharge, parking space, roads, elevators, stair aisle, etc. within the Park.

12.5 Party B shall not construct any additional building (structure) on the exterior wall and roof of the Leased Premises without any consent. Otherwise, the competent governmental department, Party A and Property Management Company shall have the right to require Party B to dismantle such additional building (structure) immediately and require Party B to bear all costs and compensate for all losses thus

incurred. Where Party B rejects to dismantle such additional building (structure), the competent governmental department, Party A and Property Management Company shall have the right to engage a third party to dismantle it at Party B's sole costs and expenses. The public part related to the Premises and the environment within such Park shall be managed subject to the Property Management Convention. Party B shall use the Leased Premises in a manner which is compliant with the Property Management Convention.

12.6 Party B undertakes that, Party B and its agents, employees, servants, contractors, customers and visitors shall, at any time during the Lease Term, abide by all current and future laws, regulations and rules governing the Leased Premises or use thereof, governmental regulations or management rules, this Contract and relevant agreements. Otherwise, Party B must bear all financial and administrative liabilities for any and all losses thus incurred to Party A. Party B hereby undertakes and agrees to use the Leased Premises in good faith subject to this Contract so as to maintain and improve the good reputation of Party A and such Premises. To this end, Party B shall do its best endeavors to supervise the acts of its agents, employees, servants, contractors, customers and visitors within the Leased Premises and such Premises.

XIII. Maintenance and Works related to Supporting Facilities of the Premises

13.1 It is acknowledged that, Party A shall only bear the following overhaul costs incurred due to ordinary wear and tear of the Leased Premises during the Lease Term:

The overhaul shall apply to material damage to the structure of main body of the building, which affects the safety of the use thereof, renovation, seismic reinforcement, removal and reinforcement due to material damage to structure of main body (foundation, wall, column, beam, floor, roof, etc.) of the house, waterproof or insulation works due to damage to the roof covering of the whole building, repair due to abscission of outer wall surface layer which affects the safety and normal use, repair or renovation to security system, fire prevention system, high and low voltage power distribution system, public facilities and pipe networks which indeed belongs to the scope of overhaul to be conducted by Party A.

13.2 Except for the said overhaul works, Party B shall, during the Lease Term, be responsible for the maintenance and repair related to the Leased Premises and the facilities, equipment, furnishings, electronic appliances, etc. attached thereto at its own costs and expenses. During the Lease Term, Party B shall retain the ownership of the equipment, furnishings and electronic appliances added and replaced by Party B itself at its own costs and expenses. Unless otherwise agreed herein or by the parties hereto at that time, Party B shall, within thirty (30) days upon terminations of this Contract, remove the said equipment, furnishings and electronic appliances out of the Leased Premises. Otherwise, Party B shall be deemed to have abandoned the ownership thereof and Party A shall have the right to dispose of such equipment, furnishings and electronic appliances at its own discretion without any liability.

13.3 Party A shall have the right to inspect the Leased Premises by giving a prior written notice to Party B. If Party B is discovered to have failed to properly repair or maintain the Leased Premises, Party A shall have the right to require Party B to make rectification. Where Party B rejects or delays to make such rectification, Party A shall have the right to repair and maintain the Leased Premises on its own at Party B's sole costs and expenses, and in addition, Party A shall have the right to deduct the said costs and expenses from the performance bond already paid by Party B.

13.4 Party B shall conduct physical management over the fixed assets provided by Party A and shall repair and maintain the same excluding those which should be overhauled by Party A hereunder.

13.5 Party B shall not dispose of the fixed assets provided by Party A without any consent. No change, removal or alteration of such fixed assets shall be made unless Party A's written consent is obtained.

13.6 Where Party A intends to conduct some works related to supporting facilities within the Leased Premises, Party A shall notify the same to Party B in advance and Party B shall provide certain assistance therefor. Party A shall make repairs at its own expenses in the event of any damage to Party B's machine or equipment due to the said works.

XIV. Party B's Obligation related to Production Safety

14.1 Party B shall deal with the safety, security, fire protection and anti-theft affairs related to the Leased Premises, and shall take reasonable preventive measures to avoid the fire and other tremendous accidents. In the event of any similar event, Party B shall bear all its losses and compensate for all losses thus incurred to Party A or other third party.

14.2 Where the governmental department finds upon inspection that the Leased Premises may cause safety, health or fire hazards for Party B's reason, Party B shall make a timely rectification. Otherwise, Party A shall make such rectification for Party B at Party B's sole costs and expenses. Party A may deduct the said costs and expenses from the performance bond already by Party B and shall notify Party B to make supplement to such performance bond; if Party A cannot make such rectification for Party B, Party A shall have the right to suspend the use of the Premises until and unless the aforesaid hazards are eliminated and Party B shall compensate for all losses thus incurred to Party A, Party B or other third party.

14.3 Where Party B breaches any provision of the Letter of Undertaking on Production Safety or Letter of Undertaking on Fire Safety, thus causing production safety accident or fire safety accident, Party A shall have the right to terminate this Contract immediately without refunding the performance bond already paid by Party B. Where Party A decides not to terminate this Contract with immediate effect, Party A shall also have the right to require the liquidated damages equivalent to the performance bond from Party B.

XV. Industrial and Commercial Registration

15.1 Party B shall, within thirty (30) days upon expiry of the Lease Term or termination of this Contract, apply to the relevant industrial and commercial authority and other departments for change of registered address, and shall, within ninety (90) days upon expiry of the Lease Term or termination of this Contract, complete the industrial and commercial registration formalities related to removal out of the address of the Premises hereunder. Otherwise, Party B shall bear the breaching liabilities and pay the liquidated damages to Party A (liquidated damages = daily liquidated damages agreed hereunder * number of calendar days from the 90th day upon expiry or termination of this Contract to the date when Party B actually completes the industrial and commercial registration formalities related to removal out of the address of the Premises hereunder).

XVI. Renewal, Termination and Unilateral Termination of this Contract in advance

16.1 Where Party B intends to renew this Contract upon expiry of the Lease Term, Party B shall submit a written application and relevant documents to Party A no later than three (3) months prior to the Lease Term and then execute a renewal contract with Party A through mutual negotiation. Where no agreement is concluded prior to the last month during the Lease Term, it shall be deemed that Party B will not renew this Contract. At that time, Party A shall have the right to make preparations for leasing out the Premises to another lessee, including but not limited to leading the potential lessee to visit such Leased Premises and conduct reasonable inspection over the Leased Premises at some time or any other reasonable time previously agreed with Party B, for which Party B shall provide cooperation, provided that Party B's normal operation shall not be in any way affected.

16.2 If Party B intends not to renew this Contract upon expiry of the Lease Term, Party B shall notify the same in writing to Party A no later than three (3) months prior to expiry of the Lease Term. Should Party B fail to submit a written application for renewal within the agreed time limit, it shall be deemed that Party B will not renew this Contract.

16.3 Where either party requires to terminate this Contract in advance without statutory reason or contractual basis, such party shall notify the same to the other party in writing three (3) months in advance and bear the liquidated damages equivalent to 3-month rent without any other breaching liability therefor and then this Contract shall terminate on the termination date indicated in the said notice.

16.4 At the time of expiry of the Lease Term or termination of this Contract, Party A shall have the right to withdraw the whole Leased Premises and Party B shall return the same to Party A on schedule. Should Party A fail to withdraw the Leased Premises as agreed hereunder at the time of expiry of the Lease Term or termination of this Contract for the reasons attributable to Party B, Party B shall pay Party A the rent or occupancy fees based on the market price (no less than 1.5 times the original rent) prevailing at the time of such failure in addition to the liquidated damages.

XVII. Surrender and Restoration

17.1 Obligation to restore the Premises:

17.1.1 At the time of expiry of the Lease Term or termination of this Contract, Party B shall restore the Leased Premises into the same condition of such Premises as delivered to Lessee, or, if the conditions of such Premises as delivered to Lessee cannot be determinable, to rough condition, by removing the furnishings and ancillary facilities (if any) added by Party B.

17.1.2 Should Party B reject to restore the Leased Premises into the same condition of such Premises as delivered to Lessee, Party A shall have the right to restore the Premises by itself or engage a third party to do so at Party B's sole costs and expenses. Party A has the right to deduct the said costs and expenses from the performance bond already by Party B. Where such performance bond cannot cover the said costs and expenses, Party B shall separately pay Party A the difference arising therefrom.

17.2 Party B shall, within fifteen (15) days upon expiry of the Lease Term or termination of this Contract, empty the Leased Premises and complete the surrender procedures.

When the Leased Premises are surrendered, both parties hereto shall jointly inspect the Leased Premises and the facilities attached thereto and Party B shall make compensation for any damage thereto (excluding ordinary wear and tear) according to the purchase price.

17.3 Disposal of Additions and Derelict

Party B agrees that, after the Leased Premises are surrendered to Party A, Party A shall make no compensation or indemnification in whatever form as to the additions made by Party B. Party A shall question Party B about whether to abandon the ownership of and right to access the articles, facilities, equipment, etc. (if any) left by Party B within the Premises. Should Party A fail to reach Party B via the contact information listed herein or should Party B fail to make a clear reply in this regard or should Party B still fail to collect such articles, facilities, equipment, etc. upon receipt of a reminder notice from Party A regardless of the fact that Party B has indicated that it will not abandon the said ownership and access right, Party B shall be automatically deemed to have abandoned such ownership of and right to access such articles, facilities, equipment, etc., of which Party A may dispose at Party A's sole discretion and all losses thus incurred to Party B or any third party shall be borne by Party B. In this regard, Party B shall have no recourse against Party A; if any third party makes a claim against Party A due to Party A's disposal of such articles, facilities and equipment, Party B shall compensate for all losses thus incurred to Party A. Where, upon expiry or sooner termination of this Contract, Party B fails to empty the Premises and assist in going through the surrender procedures regardless of the fact that it hasn't conducted its operational business within the Leased Premises, Party A shall have the right to move Party B's articles to another place so that the Premises is rentable. Should Party B fail to go through the surrender procedures for more than three (3) months, Party A shall have the right to sell or otherwise dispose of Party B's articles.

XVIII. Breaching Liability and Exclusions

18.1 It is agreed that, during the Lease Term, neither party shall be responsible for the termination of this Contract under any of the following circumstances:

18.1.1 If the right to use the land where the Premises locate is withdrawn by the State in advance according to law;

18.1.2 If the Premises are subject to expropriation or requisition according to law for public interests;

18.1.3 If the Premises are to be demolished by law due to urban construction demand;

18.1.4 If the Premises suffer from any damage or loss for the reasons not attributable to Party A or Party B or are identified as dangerous building or cannot be repaired so that the Premises become rentable;

18.1.5 If the Premises are now being disposed of because such Premises have been subject to mortgage prior to the lease thereof as notified to Party B.

18.2 Under any of the following circumstances, Party A shall be deemed to have breached this Contract, except as otherwise specified herein:

18.2.1 If Party A fails to provide the Leased Premises within the time limit specified herein;

18.2.2 If Party A conducts any works within the Leased Premises without prior notice to Party B, thus causing any damage to Party B's equipment;

18.2.3 If Party A breaches other provisions of this Contract.

18.3 Under any of the following circumstances, Party B shall be deemed to have breached this Contract, except as otherwise specified herein:

18.3.1 If Party B causes any damage to various supporting facilities;

18.3.2 If Party B changes the intended purpose of the Premises or alters the building structure, which affects others' normal use of or damages the Premises;

18.3.3 If Party B fails to surrender the Premises to Party A as agreed upon expiry of the Lease Term or early termination of this Contract;

18.3.4 If Party B fails to migrate its registered address out of the Leased Premises timely as agreed upon termination of this Contract;

18.3.5 If Party B fails to pay off the rent and other expenses on schedule;

18.3.6 If Party B fails to conduct the fitting-out of the Premises and enter the Premises as agreed;

18.3.7 If Party B breaches other provisions of this Contract.

18.4 Either party which defaults under this Contract shall pay the liquidated damages to the non-defaulting party. Unless otherwise agreed hereunder, the defaulting party shall bear the liquidated damages on a daily basis (Please refer to the contractual terms and conditions for details) for its default under this Contract (other than the payment obligation set out herein); the number of days during which such default lasts refers to the period from the actual occurrence of such default to the date when such default is rectified; amount of liquidated damages = daily liquidated damages * the number of days during which such default lasts.

18.5 Should Party B fail to pay off the rent and other expenses on schedule, Party B shall pay the liquidated damages equivalent to 1‰ of the sums due but unpaid for each delay day. Where such failure lasts for more than sixty (60) days, Party A shall have the right to cancel this Contract and withdraw the Leased Premises without refunding the performance bond and at the same time, Party B shall bear other corresponding breaching liabilities. Should Party B fail to pay off the rent or utility fee for more than sixty (60) days, Party A shall have the right to notify the Property Management Company to suspend the availability of water, electricity, gas, telecommunications, etc. immediately and Party B shall solely bear all losses (if any) thus incurred to Party B or the sub-lessee.

18.6 Where such liquidated damages cannot cover the financial losses incurred to the non-defaulting party due to the breach by either party, the defaulting party shall make the compensation for the difference arising therefrom, which shall be calculated at actuals and agreed by both parties hereto according to the severity of such financial losses, or otherwise determined by a professional third party jointly designated by Party A and Party B.

18.7 The liquidated damages and compensation shall be paid no later than ten (10) days after the defaulting party is informed of such payment thereof; if the default is continuing on or subsequent to the payment date of such liquidated damages and compensation, such liquidated damages and compensation shall be paid off no later than the end of the month when the default is continuing. In case of any breach by Party B, Party A shall have the right to first deduct corresponding liquidated damages or compensation from the performance bond already paid by Party B, and Party B shall pay Party A the difference (if any) arising therefrom pursuant to this Contract. The payment of liquidated damages and compensation shall be made in RMB.

18.8 Party B acknowledges that Party A shall not bear compensation and other legal responsibilities to Party B (including Party B's employees, agents, servants, contractors, visitors, etc.) and any third party including the sub-lessee(s) for any and all losses caused by various events which have occurred for the reasons not attributable to Party A, including but not limited to:

18.8.1 Suspension of the availability of public facilities for necessary repair and maintenance of the building and for the reasons not attributable to Party A (including unexpected failure of facilities, including but not limited to air conditioner, power system, gas system, etc.);

18.8.2 Any financial loss of or any damage, disturbance or inconvenience to Party B or any other third party due to any defect or failure of the elevators, escalators, fire protection equipment, security equipment, air conditioners or other equipment;

18.8.3 Any financial loss of or damage to Party B or any other third party due to the failure or suspension or interruption of water, electricity, gas and telecommunications systems caused by force majeure events or competent electricity, power, water and telecommunications authorities or due to ordinary maintenance of systems, lines, facilities and equipment, or for the reasons not attributable to Party A;

18.8.4 Any financial loss of or damage to Party B or any other third party arising out of water overflow or leakage, smoke, fire or leakage of any other substances or articles caused for the reasons not attributable to Party A;

18.8.5 Any financial loss of or damage to Party B or any other third party arising out of the penetration of rain or any other kind of water into any part of the Leased Premises caused for the reasons not attributable to Party A;

18.8.6 Any financial loss of or damage to Party B or any other third party arising out of the mice, termites, cockroaches and other insect pests regardless of the fact that Party A or the Property Management Company has taken necessary safeguarding measures;

18.8.7 Any financial loss of or damage to Party B or any other third party arising out of the theft, robbery and other malicious trespass;

18.8.8 Any other financial loss of or damage to Party B or any other third party for the reasons not attributable to Party A.

XIX. Miscellaneous

19.1 No Waiver: Party B understands and agrees that, if Party A accepts the rent in the event of any default on the part of Party B under this Contract, it shall not operate as a waiver by Party A of such default. Where Party B pays or Party A accepts the rent or other sums less than the amount specified herein, it shall not constitute Party B's approval upon such underpayment, nor shall affect Party A's right to recover the rent or sums in arrears and other rights which Party A is entitled to under this Contract and at law. In addition, no failure to exercise or delay by Party A in exercising any of its right hereunder shall be construed as a waiver of such right. No waiver by Party A of any of its rights shall be effective unless made in writing and signed by Party A.

19.2 Force Majeure Events: Where either party is unable to perform this Contract as agreed due to any force majeure event during the Lease Term, such affected party shall immediately notify the same to the other party and shall, within fifteen (15) days upon occurrence of such force majeure event, provide the other party with the details thereof or valid certification documents justifying such failure to perform this Contract in whole or in part or such delay in performing this Contract. The parties hereto shall negotiate to decide to cancel this Contract, partially exempt the performance of this Contract or delay in performing this Contract according to the influence of such force majeure event upon the performance of this Contract. Such force majeure events shall include without limitation the war, strike, disturbances, epidemics, earthquakes, terrorist acts, fire, governmental acts or restrictions, typhoon and extreme bad weather and flood, etc.

19.3 Jurisdiction: Any dispute arising out of the performance of this Contract shall be resolved by the parties hereto through mutual negotiation. If no agreement is concluded through such negotiation, please lodge a lawsuit to the people's court where the Premises locate.

19.4 Notices: Any and all documents such as reminder notices given by either party hereunder may be sent via registered letter or EMS to the registered address or actual office address or the address indicated herein of the other party and shall be deemed to have been properly served on the next day after they are sent via registered letter or EMS, regardless of the fact that whether they are actually received by the recipient.

19.5 Partial Validity: Where any provision of this Contract is held invalid or illegal in any aspect, such invalidity or illegality shall not affect the validity and legality of other provisions hereof.

19.6 Standard Terms and Conditions and Contractual Terms and Conditions: The standard terms and conditions under this Contract and those contractual terms and conditions detailed above shall be legally binding and jointly constitute the Housing Lease Contract. Matters not covered herein shall be resolved by the parties hereto through mutual negotiation via a separate written agreement, which shall constitute an integral part of this Contract and shall have the same legal force with this Contract upon signatures of Party A and Party B.

19.7 Effectiveness: This Contract shall be written in Chinese and made in four counterparts, with Party A and Party B holding two respectively and shall take effect upon signatures of Party A and Party B

IT IS HEREBY ACKNOWLEDGED THAT:

AT THE TIME OF EXECUTION OF THIS CONTRACT, PARTY A HAS REMINDED PARTY B TO READ THE PROVISIONS REGARDING LIMIT OF LIABILITY OR RESTRICTIONS ON RIGHT AND MADE FULL INTERPRETATION AND CLARIFICATION WITH RESPECT TO THIS CONTRACT. THE AMENDMENT OR SUPPLEMENT MADE (IF ANY) BY THE PARTIES HERETO IS DETAILED UNDER THE CONTRACTUAL TERMS AND CONDITIONS OF THIS CONTRACT. UPON FULL REVIEW OF THIS CONTRACT AND DISCUSSION WITH PARTY A, PARTY B HAS NO QUESTION OR DISPUTE ABOUT ALL THE TERMS AND CONDITIONS OF THIS CONTRACT (INCLUDING STANDARD TERMS AND CONDITIONS AND CONTRACTUAL TERMS AND CONDITIONS) AND RELEVANT APPENDICES HERETO AND HAVE ACCURATELY AND CORRECTLY UNDERSTOOD THE LEGAL MEANINGS OF THE PROVISIONS REGARDING PARTY B'S RIGHTS, OBLIGATIONS AND RESPONSIBILITIES HEREUNDER.

FOR AND ON BEHALF OF PARTY A:

Party A: Shanghai Zhangjiang Group Co., Ltd. (Seal)

Authorized Representative: /s/ Shanghai Zhangjiang Group Co., Ltd.

Seal:

September 26, 2016

FOR AND ON BEHALF OF PARTY B:

Party B: ACM Research (Shanghai) Inc.

Authorized Representative: Hui Wang (Signature) /s/ Hui Wang

Seal:

Signed on: September 6, 2016

Signed in: Zhangjiang Hi-tech Park, Pudong New Area, Shanghai, China

Business License of Legal Entity

(Duplicate)

Uniform Social Credit Code: 91310000774331663A

China (Shanghai) Pilot Free Trade Zone **License No.:** 41000002201511260028

Name of company	ACM Research (Shanghai), Inc.
Type of company	Limited liability company (Sino-foreign joint venture)
Domicile	Building 4, No.1690 Cailun Road, China ((Shanghai) Pilot Free Trade Zone
Name of legal representative	HUI WANG
Registered capital	RMB 213.12495mn
Date of founding	May 17, 2005
Duration	May 17, 2005 to May 16, 2035
Business scope	Designing, production and processing of the electronic special equipment and their parts; selling of the Company's self-produced products; and provision of after-sales technical service and consulting service (subject to approvals from related authority, if required by law)

Registration authority:

Pilot Free Trade Zone Branch, Shanghai

Administration for Industry and Commerce
(seal)

November 26, 2015

13. We shall act in strict accordance with the principles of “three concurrences (i.e. the construction projects shall be designed, constructed and put into production and use simultaneously) in safety” of construction projects and shall not build or construct any structure during the Lease Term.

14. We shall participate in various safety activities and training organized by Shanghai Zhangjiang Group Co., Ltd.

15. We shall accept the safety inspection by Shanghai Zhangjiang Group Co., Ltd. and make timely rectification as to the inspection findings.

Shanghai Zhangjiang Group Co., Ltd. is kindly advised to supervise our fulfillment of the undertakings stated above. Should we fail to fulfill any of the above undertakings, we shall unconditionally and be willing to accept the punishment by safety management department and bear the breaching liabilities in accordance with the Housing Lease Contract concluded with your Company. In case of any safety accident, we shall be willing to bear relevant legal responsibilities and consequences arising therefrom and proactively make compensation for any and all losses thus incurred to your Company and third party.

Stated by: (Seal)

Legal Representative: (Signature)

/s/ Hui Wang

Date: September 6, 2016

Letter of Undertaking on Fire Safety

Shanghai Zhangjiang Group Co., Ltd.:

In order to ensure the fire safety and prevent fire accident, we hereby solemnly make the following undertakings:

I. We shall conscientiously maintain and carry out the system of fire safety responsibilities, define the responsible person of fire safety and fire safety manager and their respective duties and responsibilities, and enhance the fire safety management so as to avoid the occurrence of fire accident.

II. Any reconstruction, extension or decoration to the Premises by us shall be subject to the prior approval of fire authority, your Company and Property Management Company.

III. We shall regularly conduct the fire inspection to timely eliminate the fire hazards and conduct daily fire prevention patrol during business hours;

IV. We shall not use naked fire or use fire for construction within the Premises and shall act in strict accordance with the Operating Permit and shall apply for the Operating Permit(s) and take relevant measures for such special works related to fire, sealed space, temporary power, high-altitude operation or groundbreaking operation in strict accordance with the procedures.

V. No staff’s dormitory shall be arranged within the Premises. No personnel shall stay overnight within the Premises.

VI. We shall place the logos regarding the fire facilities, equipment and evacuation in strict accordance with the national regulations and frequently repair and maintain the same to ensure their intactness. We shall not destroy, divert, remove or disable the fire facilities and equipment without any consent and, in the event of any failure of fire hydrant and fire extinguisher and any damage to automatic fire extinguishing or automatic alarm system, shall timely make repairs or report the same to your Company or the Property Management Company designated by your Company.

VII. We shall not occupy or block the evacuation passage or close the fire exit to keep the evacuation passage and fire exit unblocked and shall not set any glass, mirror, etc. at the evacuation passage or fire exit which may be prone to make the evacuation misleading.

VIII. We shall enhance the management over the fire, electricity, oil and gas and shall not pull or connect the wires without previous permission, and shall not use, store and sell the inflammable and explosive dangerous chemicals within the Premises, or set off firecrackers within the Premises or the public area where the Premises locate.

IX. We shall not use any soft bag, carpet, sofa, curtain, etc. made of polyurethane foaming plastics and other combustible materials or without fire retarding treatment for the fitting-out of the Premises;

X. We shall develop and continuously improve our fire fighting and emergency evacuation and rescue plan and regularly conduct fire prevention education and fire evacuation drills so as to continuously improve the fire awareness, self-prevention and self-rescue knowledge and skills of our employees about guiding the visitors for evacuation.

XI. We shall diligently participate in various safety activities and training organized by Shanghai Zhangjiang Group Co., Ltd. and accept and assist in the safety inspection conducted by Shanghai Zhangjiang Group Co., Ltd.

XII. We shall designate special persons to be responsible for the fire hazards found out during the supervision inspection by the fire fighting department of public security organ, your safety inspection and our self-inspection and proactively input the funds, manpower and material resources to make rectification in strict accordance with the requirements;

XIII. In the event of fire accident, we shall immediately carry out fire fighting and rescue work and be responsible for safeguarding post-disaster scene and assist fire fighting department in investigating the reasons for such fire accident.

XIV. Should we fail to perform any of the above undertakings, we shall unconditionally and be willing to accept the punishment by fire fighting department and bear the breaching liabilities in accordance with the Housing Lease Contract concluded with your Company. In case of any fire accident, we shall be willing to bear relevant legal responsibilities and consequences arising therefrom and proactively make compensation for any and all losses thus incurred to your Company and third party.

Undertaker: (common seal)

Legal Representative: (signature) /s/ Hui Wang

Date: September 6, 2016

Exhibit 10.03

SECURITIES PURCHASE AGREEMENT

THIS SECURITIES PURCHASE AGREEMENT (this "*Agreement*") is made as of March 14, 2017 by and among ACM Research, Inc. ("*ACM*"), ACM Research (Shanghai), Inc., a wholly owned subsidiary of ACM ("*ACM Shanghai*"), and Shengxin (Shanghai) Management Consulting Limited Partnership ("*SMC*").

RECITALS

A. Contemporaneously with the execution and delivery of this Agreement, (i) SMC is delivering to ACM Shanghai 20,123,500 Chinese Renminbi ("*RMB*") for investment in ACM Shanghai (the "*Investment*"), (ii) ACM is issuing to SMC a warrant to purchase 1,192,504 shares (the "*Warrant Shares*") of Class A Common Stock of ACM, US$0.0001 par value per share (the "*Warrant*"), which shall be in the form attached as EXHIBIT A to this Agreement, and (iii) SMC is entering into ACM's Registration Rights Agreement dated as of March 10, 2017 (the "*Registration Rights Agreement*"), pursuant to which ACM will grant to SMC certain incidental, or piggyback, rights to offer and sell any or all of the Warrant Shares pursuant to a registration statement filed under the U.S. Securities Act of 1933.

B. ACM Shanghai and SMC wish to provide terms pursuant to which (i) in the event SMC exercises the Warrant in accordance with its terms, ACM Shanghai will repay the Investment to SMC, (ii) if SMC does not exercise the Warrant, ACM Shanghai will issue an equity interest to SMC in full satisfaction of the Investment, or (iii) if ACM Shanghai is precluded from issuing such equity interest to SMC as described below, ACM Shanghai will repay the Investment to SMC.

In consideration of the mutual covenants and agreements set forth in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Investment. Contemporaneously with the execution and delivery of this Agreement, SMC is delivering the Investment by transmission of a wire transfer to a bank account designated by ACM Shanghai.

2. Warrant. Contemporaneously with the execution and delivery of this Agreement, ACM and SMC are executing and delivering:

(a) the Warrant, which shall be exercisable to purchase the Warrant Shares for an aggregate amount in United States dollars ("*US$*") of $2,981,259.26; and

(b) an adoption agreement to the Registration Rights Agreement (the "*RRA Adoption Agreement*") pursuant to which SMC shall become a "Holder" under the Registration Rights Agreement with respect to any Warrant Shares acquired by SMC.

3. Issuance of Acquired Equity Interest Upon Warrant Termination.

3.1 Issuance Condition and Acquired Equity Interest. If and only if SMC does not exercise the Warrant by May 17, 2023, ACM Shanghai shall issue to SMC, in full satisfaction of the Investment, a percentage (the "*Acquired Equity Interest*") of the equity interests of ACM Shanghai (collectively, the "*Subsidiary Equity Interests*") equal to, immediately after the Share Closing:

$$\text{Acquired Equity Interest} = \frac{3.7769\%}{103.7769\% + \frac{Z}{1-Z}}$$

where "Z" is the net increase or decrease in Subsidiary Equity Interests between March 1, 2017 and the Share Closing, based on any additional Subsidiary Equity Interests issued, net of any Subsidiary Equity Interests redeemed or repurchased, by ACM Shanghai during that period. For purposes of clarity, and only as examples, if during the period from March 1, 2017 to the Share Closing (a) ACM Shanghai were to issue new Subsidiary Equity Interests representing 20% of the Subsidiary Equity Interests as of immediately before the Share Closing, the Acquired Equity Interest issuable to SMC would be 2.9329% (where "Z" equals 20%) and (b) ACM Shanghai did not issue, redeem or repurchase any Subsidiary Equity Interests, the Acquired Equity Interest issuable to SMC would be 3.6394% (where "Z" equals 0%).

3.2 Share Closing.

(a) Subject to the satisfaction (or waiver) of each of the conditions set forth in Sections 3.3 and 3.4, the application of the Investment to acquire the Acquired Equity Interest (the "*Share Closing*") shall take place at the corporate headquarters of ACM Shanghai at such time and on such date after May 17, 2023 as the parties mutually agree, but in no event later than August 17, 2023.

(b) At the Share Closing, (i) ACM Shanghai shall deliver the Acquired Equity Interest to SMC and (ii) SMC shall deliver to ACM Shanghai, to the extent ACM Shanghai responsibly requests, evidence as to the cancellation of the Investment and a letter of representations and other documentation as necessary or desirable to affirm compliance with applicable securities laws in connection with the issuance of the Acquired Equity Interest.

3.3 Conditions to ACM Shanghai's Obligation. The obligation of ACM Shanghai to deliver the Acquired Equity Interest to SMC at the Share Closing is subject to the fulfillment, at or before the Share Closing, of each of the following conditions, unless otherwise waived:

(a) ACM Shanghai shall have received the Required Equity Approval (as defined in Section 6.1), which shall remain in effect as of the Share Closing.

(b) SMC shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement, including Section 3.2(b)(ii), that are required to be performed or complied with by SMC as of or before the Share Closing.

(c) All authorizations, approvals or permits of any governmental authority or regulatory body that are required in connection with the lawful purchase and sale of the Acquired Equity Interest pursuant to this Agreement shall have been obtained and be effective as of the Share Closing.

3.4 Conditions to SMC's Obligations at Share Closing. The obligation of SMC to acquire the Acquired Equity Interest from ACM Shanghai at the Share Closing in full satisfaction of the Investment is subject to the fulfillment, on or before the date of the Share Closing, of each of the following conditions, unless otherwise waived:

(a) The representations and warranties of ACM Shanghai contained in Section 6 shall be true and correct in all material respects as of the Share Closing.

(b) ACM Shanghai shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement, including Section 3.2(b)(i), that are required to be performed or complied with by ACM Shanghai as of or before the Share Closing.

(c) All authorizations, approvals or permits of any governmental authority or regulatory body that are required in connection with the lawful issuance and sale of the Acquired Equity Interest pursuant to this Agreement shall have been obtained and be effective as of the Share Closing.

4. Repayment of Investment.

4.1 Repayment Conditions and Amount. If either:

(a) SMC exercises the Warrant in accordance with its terms or

(b) SMC does not exercise the Warrant by May 17, 2023 and the Share Closing is not completed by August 17, 2023 due to noncompliance with Section 3.3(a), 3.3(c) or 3.4(c),

then ACM Shanghai shall pay to SMC, in full satisfaction of the Investment, an amount in RMB (the "*Repayment Amount*") equal to US$2,981,259.26 multiplied by the lesser of (i) 6.75 and (ii) the average of the RMB Exchange Rates for the second, third and fourth business days preceding the Repayment Closing (as defined in Section 4.2(a)). For purposes of this Agreement, the term "*RMB Exchange Rate*" means, with respect to a specified date, the RMB-to-US$ exchange rate, as reported by safe.gov.cn, for such date.

4.2 Repayment Closing.

(a) Subject to Section (c), the payment of the Repayment Amount pursuant to Section 4.1 (the "*Repayment Closing*") shall be made at such time and on such date as the parties mutually agree, but in no event later than (i) the sixtieth day following the date of exercise of the Warrant or (ii) July 17, 2023, if the Warrant was not exercised by May 17, 2023.

(b) At the Repayment Closing, ACM Shanghai shall pay to SMC the aggregate purchase price set forth in Section 4.1 by transmission of a wire transfer to a bank account designated by SMC.

(c) The obligation of ACM Shanghai to pay the Repayment Amount to SMC at the Repayment Closing shall be subject to the requirement that all authorizations, approvals and permits of any governmental authority or regulatory body that are required in connection with such payment shall have been obtained and be effective as of the Repayment Closing.

5. Representations and Warranties of ACM. ACM hereby represents and warrants to SMC as of the date hereof as follows:

5.1 Organization and Good Standing. ACM is as of the date of this Agreement, and shall be as of any Repayment Closing, a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware.

5.2 Authorization. All corporate action required to be taken to authorize ACM to enter into and perform this Agreement, including the issuance of the Warrant and the execution of the RRA Adoption Agreement, has been taken as of the date of this Agreement and shall remain in effect as of any Repayment Closing. Each of this Agreement, the Warrant and the Registration Rights Agreement constitutes a valid and legally binding obligation of ACM, enforceable against ACM in accordance with its respective terms except as limited by (a) applicable bankruptcy, insolvency,

reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

5.3 Capitalization. As of the date of this Agreement,

(a) As of March 1, 2017, the capital stock of ACM consisted of three classes, each having a par value of $0.0001 per share, as follows:

(i) 100,000,000 shares were designated as Class A Common Stock, of which 8,031,820 shares were issued and outstanding;

(ii) 7,303,533 shares were designated as Class B Common Stock, of which 7,229,148 shares were issued and outstanding; and

(iii) 22,797,996 shares of Preferred Stock, of which: (a) 385,000 shares were designated as Series A Preferred Stock, all of which were issued and outstanding; (b) 1,572,000 shares were designated as Series B Preferred Stock, all of which were issued and outstanding; (c) 1,400,000 shares were designated as Series C Preferred Stock, 1,360,962 shares of which were issued and outstanding; (d) 4,800,000 shares were designated as Series D Preferred Stock, 1,326,642 shares of which were issued and outstanding, (e) 10,718,530 shares were designated as Series E Preferred Stock, none of which were issued or outstanding; and (f) 6,000,000 shares were designated as Series F Preferred Stock, 3,663,254 shares of which were issued and outstanding.

As of March 1, 2017, (A) each share of Series A Preferred Stock, Series B Preferred Stock and Series F Preferred Stock was convertible into 1.0000 shares of Class A Common Stock, (B) each share of Series C Preferred Stock was convertible into 1.0631 shares of Class A Common Stock, and (C) each share of Series D Preferred Stock was convertible into 1.3686 shares of Class A Common Stock. The issuance of the Warrant will result in an increase in the number of shares of Class A Common Stock into which each share of Series D Preferred Stock is convertible. All of the outstanding shares of capital stock have been duly authorized and are fully paid and non-assessable. True and complete copies of the certificate of incorporation and the bylaws of ACM, each as currently in effect, have been provided to SMC.

(b) As of March 1, 2017, options to purchase a total of 2,928,000 shares of Class A common stock and 6,763,000 shares of Class B common stock had been granted by ACM and were outstanding, and an additional 2,726,340 shares of Class A common stock had been reserved, and were available for issuance, under ACM's 2016 Omnibus Incentive Plan, a true and complete copy of which has been provided to SMC.

(c) As of March 1, 2017, ACM and one investor were discussing potential issuance of a warrant exercisable to purchase an aggregate of 4,998,508 shares of Series E Preferred Stock at an exercise price in US$ equal to RMB40,000,000 at the time of closing. If this warrant is issued, the holder will become party to the Registration Rights Agreement and the number of shares of Class A Common Stock into which each share of Series C Preferred Stock and Series D Preferred Stock is convertible will increase.

(d) As of March 1, 2017, ACM and one investor were discussing potential issuance of a warrant exercisable to purchase an aggregate of 800,000 shares of Class A Common Stock at an exercise price of US$2.50 per share. If this warrant is issued, the holder will become party to the Registration Rights Agreement and the number of shares of Class A Common Stock into which each share of Series D Preferred Stock is convertible will increase.

(e) As of March 1, 2017, there were no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal or similar rights) or agreements to purchase or acquire from ACM any shares of Class A Common Stock, Class B Common Stock or Preferred Stock, or any securities convertible into or exchangeable for shares of Class A Common Stock, Class B Common Stock or Preferred Stock, except for (i) the conversion privileges of Class B Common Stock, Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series F Preferred Stock, (ii) the options described in Section 5.3(b), and (iii) the Warrant and the warrants described in Sections 5.3(c) and 5.3(d).

5.4 Governmental Consents and Filings. Assuming the accuracy of the representations made by SMC in Section 7, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority is required on the part of ACM in connection with the issuance of the Warrant as of the date hereof, except for filings pursuant to Regulation D of the U.S. Securities Act of 1933, which will be made by ACM in a timely manner.

5.5 Compliance with Other Instruments. ACM is not in violation or default (a) of any provision of its certificate of incorporation or bylaws, (b) of any instrument, judgment, order, writ or decree, (c) under any note, indenture or mortgage, or (d) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of federal or state statute, rule or regulation applicable to ACM, the violation of which would have a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property or operating results of ACM. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated by this Agreement will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement or (ii) an event that results in the creation of any lien, charge or encumbrance upon any assets of ACM or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to ACM.

5.6 Legal Proceedings. There are no actions, suits, claims, investigations or other legal proceedings pending or, to the knowledge of ACM, threatened against or by ACM that challenge or seek to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement.

6. Representations and Warranties of ACM Shanghai. ACM Shanghai hereby represents and warrants to SMC that:

6.1 Authorization. All action required to be taken to authorize ACM Shanghai to enter into and perform this Agreement, including the issuance of the Acquired Equity Interest in accordance with Section3, has been taken as of the date of this Agreement and shall remain in effect as of the Share Closing or the Repayment Closing, as the case may be, *provided* that ACM Shanghai's issuance and delivery of the Acquired Equity Interest to SMC at the Share Closing is subject to the approval of the equity holders of ACM Shanghai (the "*Required Equity Approval* "). If SMC does not exercise the Warrant by May 17, 2023, ACM Shanghai shall thereafter use reasonable best efforts to obtain the Required Equity Approval. This Agreement constitutes as of the date of this Agreement, and shall constitute as of the Share Closing or the Repayment Closing, as the case may be, a valid and legally binding obligation of ACM Shanghai, enforceable against ACM Shanghai in accordance with its respective terms except as limited by (a) applicable bankruptcy, insolvency,

reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

6.2 Acquired Equity Interest. Subject to the receipt of the Required Equity Approval, all of the Acquired Equity Interest will be, upon issuance, validly authorized and issued, will not be issued in violation of any preemptive or similar rights of any equity holder of ACM Shanghai, and will be issued free and clear of all liens and charges.

6.3 Compliance with Other Instruments. ACM Shanghai is not in violation or default (a) of any provisions of its organizational documents, (b) of any instrument, judgment, order, writ or decree, (c) under any note, indenture or mortgage, or (d) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of any Chinese or U.S. statute, rule or regulation applicable to ACM Shanghai, the violation of which would have a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property or operating results of ACM Shanghai. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated by this Agreement will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement or (ii) an event that results in the creation of any lien, charge or encumbrance upon any assets of ACM Shanghai or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to ACM Shanghai.

6.4 Legal Proceedings. There are no actions, suits, claims, investigations or other legal proceedings pending or, to the knowledge of ACM Shanghai, threatened against or by ACM Shanghai that challenge or seek to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement.

7. Representations and Warranties of SMC. SMC hereby represents and warrants to ACM that:

7.1 Authorization. All action required to be taken to authorize SMC to enter into and perform this Agreement, including the acquisition of the Warrant and the acquisition of the Acquired Equity Interest in accordance with Section 4, as applicable, has been take as of the date of this Agreement and shall remain in effect as of the Share Closing or the Repayment Closing, as the case may be. Each of (a) this Agreement as of the date hereof and as of the Share Closing or the Repayment Closing, as the case may be, (b) the Warrant as of the date hereof, and (c) the Registration Rights Agreement as of the date hereof constitutes and shall constitute a valid and legally binding obligation of SMC, enforceable against SMC in accordance with its respective terms except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (ii) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

7.2 Governmental Consents and Filings. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any national, provincial or local governmental authority of the People's Republic of China is required on the part of ACM, ACM Shanghai or SMC in connection with the consummation of the transactions contemplated by this Agreement to be completed as of the date hereof or the Closing, except for filings by ACM with respect to the offering and sale of the Warrant and the Warrant Shares, which shall be the responsibility of ACM (subject to the accuracy of the representations made by SMC in this Section 7) and for such other actions as shall have been made by SMC in a timely manner as of the time of the Closing.

7.3 Compliance with Other Instruments. SMC is not in violation or default (a) of any provisions of its organizational documents, (b) of any instrument, judgment, order, writ or decree, (c) under any note, indenture or mortgage, or (d) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of any Chinese or U.S. statute, rule or regulation applicable to SMC, the violation of which would have a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property or operating results of SMC. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated by this Agreement will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement or (ii) an event that results in the creation of any lien, charge or encumbrance upon any assets of SMC or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to SMC.

7.4 Legal Proceedings. There are no actions, suits, claims, investigations or other legal proceedings pending or, to the knowledge of SMC, threatened against or by SMC that challenge or seek to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement.

7.5 Purchase Entirely for Own Account. SMC is acquiring the Warrant for investment for its own account, not as a nominee or agent and not with a view to the resale or distribution of any interest in the Warrant. SMC has no present intention of selling, granting any participation in or otherwise distributing any interest in the Warrant. SMC does not presently have any contract, undertaking, agreement or arrangement with any individual or entity to sell, transfer or grant participations to either such individual or entity or any third party, with respect to the Warrant.

7.6 Disclosure of Information. SMC has had an opportunity to discuss with ACM's management the business, management and financial affairs of ACM and ACM Shanghai and the terms and conditions of the offering of the Warrant, and SMC has had an opportunity to review ACM Shanghai's facilities. The foregoing, however, does not limit or modify the representations and warranties of ACM in Section 5 of this Agreement or the right of SMC to rely thereon.

7.7 Restricted Securities. SMC understands that the Warrant has not been, and will not be, registered under the U.S. Securities Act, by reason of a specific exemption from the registration provisions of the U.S. Securities Act that depends upon, among other things, the bona fide nature of the investment intent and the accuracy of SMC's representations as expressed in this Section 7. SMC understands that the Warrant is, and the Warrant Shares will be, "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to those laws, SMC must hold the Warrant, the Warrant Shares indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available, including a transfer outside of the United States in an offshore transaction in compliance with Rule 904 under the U.S. Securities Act of 1933 (if applicable). SMC acknowledges that ACM has no obligation to register or qualify for resale the Warrant or, except as set forth in the Registration Rights Agreement, the Warrant Shares. SMC further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including the time and manner of sale, the holding period for the Warrant, and on requirements relating to ACM that are outside of SMC's control and that ACM is under no obligation, and may not be able, to satisfy.

7.8 No Public Market. SMC understands that no public market now exists for the Warrant, the Warrant Shares or the Acquired Equity Interest, and that ACM has made no assurances that a public market will ever exist for the Warrant, the Warrant Shares or the Acquired Equity Interest, and that the Warrant, the Warrant Shares and the Acquired Equity Interest may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except as set forth herein.

7.9 Legends. SMC understands that the Warrant and any securities issued in respect of the Warrant may be notated with the following legend, together with any other legend required by the securities laws of any state to the extent such laws are applicable to the Warrant represented by the certificate, instrument, or book entry so legended:

"THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION OF THE U.S. SECURITIES ACT OF 1933."

7.10 Investor Status. SMC (a) is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the U.S. Securities Act of 1933 and (b) is not a U.S. person as defined in Regulation S under the U.S. Securities Act of 1933 and the Warrant has not been offered or sold within the United States as defined under the U.S. Securities Act of 1933. At the time of the origination of discussion regarding the offer and sale of the Acquired Equity Interest and the date of the execution and delivery of this Agreement, the Purchaser was at all times outside of the United States. SMC has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to receive the Warrant or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Warrant, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale, or transfer of the Warrant, and (v) SMC's receipt and continued beneficial ownership of the Warrant will not violate any applicable securities or other laws of SMC's jurisdiction.

7.11 No General Solicitation. Neither SMC, nor any of its officers, directors, employees, agents, stockholders or partners, has either directly or indirectly (a) engaged in any general solicitation or (b) published any advertisement in connection with the offering and issuance of the Warrant.

8. Miscellaneous.

8.1 Survival. Unless otherwise set forth in this Agreement, the representations and warranties of each party contained in this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of the other parties.

8.2 Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

8.3 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware.

8.4 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

8.5 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

8.6 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt and: (a) personal delivery to the party to be notified; (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day; (c) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (d) one business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on the signature page, or to such e-mail address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 8.6. If notice is given to ACM or ACM Shanghai, a copy shall also be sent to Mark L. Johnson at K&L Gates LLP, State Street Financial Center, One Lincoln Street, Boston, Massachusetts 02111.

8.7 Attorneys' Fees. If any action at law or in equity (including arbitration) is necessary to enforce or interpret the terms of any of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

8.8 Amendments and Waivers. Any term of this Agreement may be amended or waived only with the written consent of the parties.

8.9 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

8.10 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to a party under this Agreement, upon any breach or default of another party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of a party of any breach or default under this Agreement, or any waiver on the part of a party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to a party, shall be cumulative and not alternative.

8.11 Entire Agreement. This Agreement, together with the Registration Rights Agreement and the Warrant, constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

8.12 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of the State of Delaware and to the jurisdiction of the U.S. District

Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the U.S. District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE WARRANT, THE SHARES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

ACM RESEARCH, INC.

By: /s/ Hui Wang
Name: Hui Wang
Title: CEO
Address: 42307 Osgood Road, Suite I
Fremont, CA 94539 USA

ACM RESEARCH (SHANGHAI), INC.

By: /s/ Hui Wang
Name: Hui Wang
Title: CEO
Address: Building 4, No.1690
Cai Lun Road
Zhangjiang High Tech Park
Shanghai, P.R. China 201203

SHENGXIN (SHANGHAI) MANAGEMENT CONSULTING LIMITED PARTNERSHIP

By: /s/ Jian Wang
Name: Jian Wang
Title: General Partner
Address: Rm. 210-32, 2nd Fl., Building 1,
38 Debao Rd.
Pilot Free Trade Zone
Shanghai, China.

EXHIBIT A

WARRANT

THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION OF THE U.S. SECURITIES ACT OF 1933.

ACM RESEARCH, INC.

WARRANT TO PURCHASE CLASS A COMMON STOCK

Certificate No. A-2 **Original Issue Date: March 14, 2017**

FOR VALUE RECEIVED, ACM Research, Inc., a Delaware corporation (the "*Company*"), certifies that Shengxin (Shanghai) Management Consulting Limited Partnership or its registered assigns (the "*Holder*") is entitled to purchase from the Company a total of 1,192,504 shares (the "*Warrant Shares*") of the Company's Class A Common Stock, $0.0001 par value per share ("*Class A Shares*"), at a purchase price per share of $2.50 (subject to adjustment as provided in this Warrant, the "*Exercise Price*"), all subject to the terms, conditions and adjustments set forth below in this Warrant.

1. Definitions. As used in this Warrant, the following terms have the respective meanings set forth below:

"*Aggregate Exercise Price*" means $2,981,259.26.

"*Business Day*" means any day other than (a) a Saturday or Sunday or (b) any day on which either the Federal Reserve Bank of New York or the Federal Reserve Bank of San Francisco is closed.

"*Exercise Period*" has the meaning set forth in Section 2.

"*IPO*" means the initial public offering of Class A Shares pursuant to a registration statement on Form S-1 filed with the Securities and Exchange Commission.

"*Original Issue Date*" means the Original Issue Date set forth above.

"*Person*" means any individual, sole proprietorship, partnership, limited liability company, corporation, joint venture, trust, incorporated organization or government or department or agency thereof.

This "*Warrant*" means this Warrant and all warrants issued upon division or combination of, or in substitution for, this Warrant.

2. Term. This Warrant may be exercised on any Business Day during the period (the "*Exercise Period*") beginning immediately after the closing of the IPO and ending as of 5 P.M., Eastern daylight saving time, on May 17, 2023.

3. Exercise.

(a) Manner of Exercise. This Warrant may be exercised, on one occasion, in either of the following manners:

(i) Cash Exercise. The Holder may exercise this Warrant for all, but not less than all, of the Warrant Shares by (i) surrendering this Warrant to the Company at the Company's then principal executive offices and (ii) paying the Aggregate Exercise Price by wire transfer of immediately available funds to an account designated in writing by the Company.

(ii) Cashless Exercise. The Holder may exercise this Warrant in full by instructing the Company to withhold, in payment of the Aggregate Exercise Price, a number of Warrant Shares then issuable upon exercise of this Warrant equal to the quotient (rounded upward to the nearest whole share) of (A) the Aggregate Exercise Price divided by (B) the average of the closing prices of the Class A Shares for the five trading days immediately preceding the date of exercise.

(b) Delivery of Stock Certificates. Upon compliance by the Holder with the provisions of Section 3(a), the Company shall, within ten Business Days following the Exercise Time, execute (or cause to be executed) and deliver (or cause to be delivered) to the Holder a certificate representing (i) in the case of an exercise in accordance with Section 3(a)(i), all of the Warrant Shares or (ii) in the case of an exercise in accordance with Section 3(a)(ii), all of the Warrant Shares not withheld in payment of the Aggregate Exercise Price. The stock certificate so delivered shall be registered in the name of the Holder or, subject to compliance with Section 9, such other Person's name as shall be designated by the Holder in writing. This Warrant shall be deemed to have been exercised and such certificate representing Warrant Shares shall be deemed to have been issued, and the Holder or any other Person so designated to be named therein shall be deemed to have become a holder of record of such Warrant Shares for all purposes, as of 5 P.M., Eastern time, on the date of exercise.

(c) Representations of the Company. With respect to the exercise of this warrant, the Company represents, covenants and agrees:

(i) this Warrant is, and any Warrant issued in substitution for or replacement of this Warrant will be upon issuance, duly authorized and validly issued;

(ii) at all times during the Exercise Period, the Company will reserve and keep available out of its authorized but unissued Class A Shares or other securities constituting Warrant Shares, solely for the purpose of issuance upon the exercise of this Warrant, the maximum number of Warrant Shares issuable upon the exercise of this Warrant; and

(iii) the Warrant Shares will be, upon issuance, and the Company will take all such actions as may be necessary or appropriate in order that the Warrant Shares are, validly issued, fully paid and non-assessable, issued without violation of any preemptive or similar rights of any stockholder of the Company and free and clear of all taxes, liens and charges.

4. Adjustment to Exercise Price and Number of Warrant Shares. In order to prevent dilution of the purchase rights granted under this Warrant, the Exercise Price and the number of Warrant Shares shall be subject to adjustment from time to time as provided in this Section 4 (in each case, after taking into consideration any prior adjustments pursuant to this Section 4).

(a) Dividend, Distribution, Subdivision or Combination of Class A Shares. If the Company shall, at any time or from time to time after the Original Issue Date:

(i) pay a dividend or make any other distribution upon any capital stock of the Company payable either in Class A Shares or in securities that are convertible into Class A Shares without payment of any consideration; or

(ii) subdivide (by any stock split, recapitalization or otherwise) outstanding Class A Shares into a greater number of shares;

the Exercise Price in effect immediately prior to any such dividend, distribution or subdivision shall be proportionately reduced and the number of Warrant Shares shall be proportionately increased. If the Company at any time combines (by combination, reverse stock split or otherwise) outstanding Class A Shares into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased and the number of Warrant Shares shall be proportionately decreased. Any adjustment under this Section 4(a) shall become effective at the close of business on the date the dividend, distribution, subdivision or combination becomes effective.

(b) Reorganization, Reclassification, Consolidation or Merger. In the event of any:

(i) capital reorganization of the Company;

(ii) reclassification of the stock of the Company (other than a change in par value or from par value to no par value or from no par value to par value or as a result of a stock dividend or subdivision, split-up or combination of shares);

(iii) consolidation or merger of the Company with or into another Person;

(iv) sale of all or substantially all of the Company's assets to another Person; or

(v) other similar transaction (other than any such transaction covered by Section 4(a)),

in each case that entitles the holders of Class A Shares to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Class A Shares, this Warrant shall, immediately after such reorganization, reclassification, consolidation, merger, sale or similar transaction, remain outstanding and shall thereafter, in lieu of or in addition to (as the case may be) the Warrant Shares then exercisable under this Warrant, be exercisable for the kind and number of shares of stock or other securities or assets of the Company or of the successor Person resulting from such transaction to which the Holder would have been entitled upon such reorganization, reclassification, consolidation, merger, sale or similar transaction if the Holder had exercised this Warrant in full immediately prior to the time of such reorganization, reclassification, consolidation, merger, sale or similar transaction and acquired the Warrant Shares as a result of such exercise (without taking into account any limitations or restrictions on the exercisability of this Warrant); and, in such case, appropriate adjustment (in form and substance satisfactory to the Holder) shall be made with respect to the Holder's rights under this Warrant to ensure that the provisions of this Section 4 shall thereafter be applicable, as nearly as possible, to this Warrant in relation to any shares of stock, securities or assets thereafter acquirable upon exercise of this Warrant (including, in the case of any consolidation, merger, sale or similar transaction in which the successor or purchasing Person is other than the Company, an immediate adjustment in the Exercise Price to the value per share for the Class A Shares reflected by the terms of such consolidation, merger, sale or similar transaction, and a corresponding immediate adjustment to the number of Warrant Shares without

regard to any limitations or restrictions on exercise, if the value so reflected is less than the Exercise Price in effect immediately prior to such consolidation, merger, sale or similar transaction). The provisions of this Section 4(b) shall similarly apply to successive reorganizations, reclassifications, consolidations, mergers, sales or similar transactions. The Company shall not effect any such reorganization, reclassification, consolidation, merger, sale or similar transaction unless, prior to the consummation thereof, the successor Person (if other than the Company) resulting from such reorganization, reclassification, consolidation, merger, sale or similar transaction, shall assume, by written instrument substantially similar in form and substance to this Warrant and satisfactory to the Holder, the obligation to deliver to the Holder such shares of stock, securities or assets that, in accordance with the foregoing provisions, such Holder shall be entitled to receive upon exercise of this Warrant. Notwithstanding anything to the contrary contained in this Warrant, with respect to any corporate event or other transaction contemplated by the provisions of this Section 4(b), the Holder shall have the right to elect, prior to the consummation of such event or transaction, to give effect to the exercise rights contained in Section 2 instead of giving effect to the provisions contained in this Section 4(b).

(c) Certificate as to Adjustment. The Company shall furnish to the Holder:

(i) within ten Business Days following any adjustment of the Exercise Price, a certificate of an executive officer setting forth in reasonable detail such adjustment and the facts upon which it is based and certifying the calculation thereof; and

(ii) within ten Business Days following receipt by the Company of a written request by the Holder, a certificate of an executive officer certifying the Exercise Price then in effect and the number of Warrant Shares or the amount, if any, of other shares of stock, securities or assets then issuable upon exercise of this Warrant.

5. Restriction on Transfer of Warrant. Neither this Warrant nor any right of the Holder under this Warrant is transferable by the Holder without the prior written consent of the Company.

6. Lock-Up.

(a) The Holder agrees that it will not, without the prior written consent of the lead managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the lead managing underwriter of the IPO (such period not to exceed 180 calendar days, except that, to the extent requested by the lead managing underwriter to accommodate regulatory restrictions of the Financial Industry Regulatory Authority or any applicable securities exchange relating to the publication or other distribution of research reports or analyst recommendations and opinions, such period may be extended to a total of 215 calendar days), (i) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of the Company held immediately prior to the effectiveness of the registration statement for the initial public offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such capital stock, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of capital stock or other securities, in cash or otherwise. The foregoing provisions of this Section 6(a) shall not apply to the sale of any shares to an underwriter in an initial public offering, and shall only be applicable to the Holder if all directors of the Company (other than a director

designated by the Holder or its affiliates) enter into similar arrangements. The underwriters in connection with the initial public offering are intended third-party beneficiaries of this Section 6(a) and shall have the right, power and authority to enforce the provisions of this Warrant as though they were a party to this Warrant. The Holder further agrees, if requested by the underwriters of the initial public offering, to execute an agreement that is consistent with this Section 6(a) or that is necessary to give further effect to this Warrant.

(b) In order to enforce the covenant set forth in Section 6(a), the Company may impose stop-transfer instructions with respect to the shares of capital stock of the Company held by the Holder (and transferees and assignees of the Holder) until the end of such restricted period.

7. Not Deemed Stockholder. Prior to the issuance of the Warrant Shares, the Holder shall not be entitled to vote or receive dividends or be deemed the holder of shares of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, as such, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise.

8. Replacement on Loss. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and upon delivery of an indemnity reasonably satisfactory to it (it being understood that a written indemnification agreement or affidavit of loss of the Holder shall be a sufficient indemnity) and, in case of mutilation, upon surrender of such Warrant for cancellation to the Company, the Company at its own expense shall execute and deliver to the Holder, in lieu of this Warrant, a new Warrant of like tenor and exercisable for an equivalent number of Warrant Shares as the Warrant so lost, stolen, mutilated or destroyed, *provided* that, in the case of mutilation, no indemnity shall be required if this Warrant in identifiable form is surrendered to the Company for cancellation

9. Compliance with Securities Laws. The Holder, by acceptance of this Warrant, agrees to comply in all respects with the provisions of this Section 9 and the restrictive legend requirements set forth on the face of this Warrant and further agrees that such Holder shall not offer, sell or otherwise dispose of this Warrant or any Warrant Shares to be issued upon exercise of this Warrant except under circumstances that will not result in a violation of the Securities Act of 1933 or of the securities laws of any other applicable jurisdiction. All Warrant Shares shall be stamped or imprinted with a legend in substantially the following forms:

THESE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION OF THE U.S. SECURITIES ACT OF 1933.

THE COMPANY HAS MORE THAN ONE CLASS OF STOCK AUTHORIZED TO BE ISSUED. THE COMPANY WILL FURNISH WITHOUT CHARGE TO THE HOLDER UPON WRITTEN REQUEST A COPY OF THE FULL TEXT OF THE PREFERENCES, VOTING POWERS, QUALIFICATIONS AND SPECIAL AND RELATIVE RIGHTS OF THE SHARES OF EACH CLASS OF STOCK AUTHORIZED TO BE ISSUED BY THE COMPANY AS SET FORTH IN THE CERTIFICATE OF INCORPORATION OF THE COMPANY.

10. Warrant Register. The Company shall keep and properly maintain at its principal executive offices books for the registration and any transfers of this Warrant. The Company may deem and treat the Person in whose name this Warrant is registered on such register as the Holder of this Warrant for all purposes, and the Company shall not be affected by any notice to the contrary, except any assignment, division, combination or other transfer of the Warrant effected in accordance with the provisions of this Warrant.

11. General.

(a) Notices. All notices, requests, consents, claims, demands, waivers and other communications in connection or accordance with this Warrant shall be in writing and shall be deemed to have been given: (i) when delivered by hand (with written confirmation of receipt); (ii) when received by the addressee if sent by a nationally recognized overnight courier (receipt requested); (iii) on the date sent by e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient; or (iv) on the tenth Business Day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid. Such communications must be sent to the respective parties at the addresses indicated below (or at such other address for a party as shall be specified in a notice given in accordance with this Section 11(a)).

If to the Company:	ACM Research, Inc. 42307 Osgood Road Suite I Fremont, CA 94539 E-mail: min.xu@acmrcsh.com Attention: Chief Financial Officer
with a copy to:	K&L Gates LLP One Lincoln Street Boston, MA 02111 E-mail: mark.johnson@klgates.com Attention: Mark L. Johnson
If to the Holder:	Shengxin (Shanghai) Management Consulting Limited Partnership Rm. 210-32, 2nd Fl. Building 1, 38 Debao Rd., Pilot Free Trade Zone, Shanghai,China E-mail: jian.wang@acmrsch.com Attention: Jian Wang

(b) Entire Agreement. This Warrant, together with the Securities Purchase Agreement, dated as of the Original Issue Date, between the Company and the Holder, constitute the sole and entire agreement of the parties to this Warrant with respect to the subject matter contained in this Warrant, and supersede all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

(c) Severability. If any term or provision of this Warrant is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Warrant or invalidate or render unenforceable such term or provision in any other jurisdiction.

(d) Amendment and Modification; Waiver. Except as otherwise provided in this Warrant, this Warrant may only be amended, modified or supplemented by an agreement in writing signed by the Company and the Holder. No waiver by the Company or the Holder of any of the provisions of this Warrant shall be effective unless explicitly set forth in writing and signed

by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Warrant shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege of this Warrant preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

(e) Successors and Assigns. This Warrant and the rights evidenced by this Warrant shall be binding upon and shall inure to the benefit of the parties to this Warrant and the successors of the Company and the successors and permitted assigns of the Holder. Each such successor or permitted assign of the Holder shall be deemed to be the Holder for all purposes of this Warrant.

(f) No Third-Party Beneficiaries. This Warrant is for the sole benefit of the Company and its successors and the Holder and its successors and permitted assigns. Nothing in this Warrant, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

(g) Submission to Jurisdiction; Waiver of Jury Trial.

(i) Any legal suit, action or proceeding arising out of or based upon this Warrant or the transactions contemplated by this Warrant may be instituted in the federal courts of the United States of America or the courts of the State of Delaware in, and each party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by certified or registered mail to such party's address set forth in this Warrant shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or any proceeding in such courts and irrevocably waive and agree not to plead or claim in any such court that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(ii) EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS WARRANT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS WARRANT OR THE TRANSACTIONS CONTEMPLATED BY THIS WARRANT.

(h) Governing Law. This Warrant shall be governed by and construed in accordance with the internal laws of the State of Delaware without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of Delaware.

(i) Interpretation. For purposes of this Agreement:

(i) headings used in this Agreement are for convenience of reference only and shall not, for any purpose, be deemed a part of this Agreement;

(ii) any references herein to a Section refer to a Section of this Agreement, unless specified otherwise;

(iii) the words "include," "includes" and "including" as used herein shall not be construed so as to exclude any other thing not referred to or described;

(iv) the word "or" is not exclusive;

(v) the definition given for any term in this Agreement shall apply equally to both the singular and plural forms of the term defined;

(vi) whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms;

(vii) unless the context otherwise requires, references herein to a statute means such statute as amended from time to time and includes any successor legislation thereto and any rules and regulations promulgated thereunder; and

(viii) this Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

(j) Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed an original, but both of which together shall be deemed to be one and the same agreement. A signed copy of this Warrant delivered by e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Warrant.

IN WITNESS WHEREOF, the Company has duly executed this Warrant on the Original Issue Date.

ACM RESEARCH, INC.

By: /s/ Hui Wang
Name: Hui Wang
Title: CEO

Accepted and agreed:

SHENGXIN (SHANGHAI) MANAGEMENT CONSULTING LIMITED PARTNERSHIP

BY: Jian Wang, General Partner

BY: /s/ Jian Wang
Name: Jian Wang
Title: General Partner

THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION OF THE U.S. SECURITIES ACT OF 1933.

ACM RESEARCH, INC.

WARRANT TO PURCHASE CLASS A COMMON STOCK

Certificate No. A-2 **Original Issue Date: March 14, 2017**

FOR VALUE RECEIVED, ACM Research, Inc., a Delaware corporation (the "*Company*"), certifies that Shengxin (Shanghai) Management Consulting Limited Partnership or its registered assigns (the "*Holder*") is entitled to purchase from the Company a total of 1,192,504 shares (the "*Warrant Shares*") of the Company's Class A Common Stock, $0.0001 par value per share ("*Class A Shares*"), at a purchase price per share of $2.50 (subject to adjustment as provided in this Warrant, the "*Exercise Price*"), all subject to the terms, conditions and adjustments set forth below in this Warrant.

1. Definitions. As used in this Warrant, the following terms have the respective meanings set forth below:

"*Aggregate Exercise Price*" means $2,981,259.26.

"*Business Day*" means any day other than (a) a Saturday or Sunday or (b) any day on which either the Federal Reserve Bank of New York or the Federal Reserve Bank of San Francisco is closed.

"*Exercise Period*" has the meaning set forth in Section 2.

"*IPO*" means the initial public offering of Class A Shares pursuant to a registration statement on Form S-1 filed with the Securities and Exchange Commission.

"*Original Issue Date*" means the Original Issue Date set forth above.

"*Person*" means any individual, sole proprietorship, partnership, limited liability company, corporation, joint venture, trust, incorporated organization or government or department or agency thereof.

This "*Warrant*" means this Warrant and all warrants issued upon division or combination of, or in substitution for, this Warrant.

2. Term. This Warrant may be exercised on any Business Day during the period (the "*Exercise Period*") beginning immediately after the closing of the IPO and ending as of 5 P.M., Eastern daylight saving time, on May 17, 2023.

3. Exercise.

(a) Manner of Exercise. This Warrant may be exercised, on one occasion, in either of the following manners:

(i) Cash Exercise. The Holder may exercise this Warrant for all, but not less than all, of the Warrant Shares by (i) surrendering this Warrant to the Company at the Company's then principal executive offices and (ii) paying the Aggregate Exercise Price by wire transfer of immediately available funds to an account designated in writing by the Company.

(ii) Cashless Exercise. The Holder may exercise this Warrant in full by instructing the Company to withhold, in payment of the Aggregate Exercise Price, a number of Warrant Shares then issuable upon exercise of this Warrant equal to the quotient (rounded upward to the nearest whole share) of (A) the Aggregate Exercise Price divided by (B) the average of the closing prices of the Class A Shares for the five trading days immediately preceding the date of exercise.

(b) Delivery of Stock Certificates. Upon compliance by the Holder with the provisions of Section 3(a), the Company shall, within ten Business Days following the Exercise Time, execute (or cause to be executed) and deliver (or cause to be delivered) to the Holder a certificate representing (i) in the case of an exercise in accordance with Section 3(a)(i), all of the Warrant Shares or (ii) in the case of an exercise in accordance with Section 3(a)(ii), all of the Warrant Shares not withheld in payment of the Aggregate Exercise Price. The stock certificate so delivered shall be registered in the name of the Holder or, subject to compliance with Section 9, such other Person's name as shall be designated by the Holder in writing. This Warrant shall be deemed to have been exercised and such certificate representing Warrant Shares shall be deemed to have been issued, and the Holder or any other Person so designated to be named therein shall be deemed to have become a holder of record of such Warrant Shares for all purposes, as of 5 P.M., Eastern time, on the date of exercise.

(c) Representations of the Company. With respect to the exercise of this warrant, the Company represents, covenants and agrees:

(i) this Warrant is, and any Warrant issued in substitution for or replacement of this Warrant will be upon issuance, duly authorized and validly issued;

(ii) at all times during the Exercise Period, the Company will reserve and keep available out of its authorized but unissued Class A Shares or other securities constituting Warrant Shares, solely for the purpose of issuance upon the exercise of this Warrant, the maximum number of Warrant Shares issuable upon the exercise of this Warrant; and

(iii) the Warrant Shares will be, upon issuance, and the Company will take all such actions as may be necessary or appropriate in order that the Warrant Shares are, validly issued, fully paid and non-assessable, issued without violation of any preemptive or similar rights of any stockholder of the Company and free and clear of all taxes, liens and charges.

4. Adjustment to Exercise Price and Number of Warrant Shares. In order to prevent dilution of the purchase rights granted under this Warrant, the Exercise Price and the number of Warrant Shares shall be subject to adjustment from time to time as provided in this Section 4 (in each case, after taking into consideration any prior adjustments pursuant to this Section 4).

(a) Dividend, Distribution, Subdivision or Combination of Class A Shares. If the Company shall, at any time or from time to time after the Original Issue Date:

(i) pay a dividend or make any other distribution upon any capital stock of the Company payable either in Class A Shares or in securities that are convertible into Class A Shares without payment of any consideration; or

(ii) subdivide (by any stock split, recapitalization or otherwise) outstanding Class A Shares into a greater number of shares;

the Exercise Price in effect immediately prior to any such dividend, distribution or subdivision shall be proportionately reduced and the number of Warrant Shares shall be proportionately increased. If the Company at any time combines (by combination, reverse stock split or otherwise) outstanding Class A Shares into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased and the number of Warrant Shares shall be proportionately decreased. Any adjustment under this Section 4(a) shall become effective at the close of business on the date the dividend, distribution, subdivision or combination becomes effective.

(b) Reorganization, Reclassification, Consolidation or Merger. In the event of any:

(i) capital reorganization of the Company;

(ii) reclassification of the stock of the Company (other than a change in par value or from par value to no par value or from no par value to par value or as a result of a stock dividend or subdivision, split-up or combination of shares);

(iii) consolidation or merger of the Company with or into another Person;

(iv) sale of all or substantially all of the Company's assets to another Person; or

(v) other similar transaction (other than any such transaction covered by Section 4(a)),

in each case that entitles the holders of Class A Shares to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Class A Shares, this Warrant shall, immediately after such reorganization, reclassification, consolidation, merger, sale or similar transaction, remain outstanding and shall thereafter, in lieu of or in addition to (as the case may be) the Warrant Shares then exercisable under this Warrant, be exercisable for the kind and number of shares of stock or other securities or assets of the Company or of the successor Person resulting from such transaction to which the Holder would have been entitled upon such reorganization, reclassification, consolidation, merger, sale or similar transaction if the Holder had exercised this Warrant in full immediately prior to the time of such reorganization, reclassification, consolidation, merger, sale or similar transaction and acquired the Warrant Shares as a result of such exercise (without taking into account any limitations or restrictions on the exercisability of this Warrant); and, in such case, appropriate adjustment (in form and substance satisfactory to the Holder) shall be made with respect to the Holder's rights under this Warrant to ensure that the provisions of this Section 4 shall thereafter be applicable, as nearly as possible, to this Warrant in relation to any shares of stock, securities or assets thereafter acquirable upon exercise of this Warrant (including, in the case of any consolidation, merger, sale or similar transaction in which the successor or purchasing Person is other than the Company, an immediate adjustment in the Exercise Price to the value per share for the Class A Shares reflected by the terms of such consolidation, merger, sale or similar transaction, and a corresponding immediate adjustment to the number of Warrant Shares without

regard to any limitations or restrictions on exercise, if the value so reflected is less than the Exercise Price in effect immediately prior to such consolidation, merger, sale or similar transaction). The provisions of this Section 4(b) shall similarly apply to successive reorganizations, reclassifications, consolidations, mergers, sales or similar transactions. The Company shall not effect any such reorganization, reclassification, consolidation, merger, sale or similar transaction unless, prior to the consummation thereof, the successor Person (if other than the Company) resulting from such reorganization, reclassification, consolidation, merger, sale or similar transaction, shall assume, by written instrument substantially similar in form and substance to this Warrant and satisfactory to the Holder, the obligation to deliver to the Holder such shares of stock, securities or assets that, in accordance with the foregoing provisions, such Holder shall be entitled to receive upon exercise of this Warrant. Notwithstanding anything to the contrary contained in this Warrant, with respect to any corporate event or other transaction contemplated by the provisions of this Section 4(b), the Holder shall have the right to elect, prior to the consummation of such event or transaction, to give effect to the exercise rights contained in Section 2 instead of giving effect to the provisions contained in this Section 4(b).

(c) Certificate as to Adjustment. The Company shall furnish to the Holder:

(i) within ten Business Days following any adjustment of the Exercise Price, a certificate of an executive officer setting forth in reasonable detail such adjustment and the facts upon which it is based and certifying the calculation thereof; and

(ii) within ten Business Days following receipt by the Company of a written request by the Holder, a certificate of an executive officer certifying the Exercise Price then in effect and the number of Warrant Shares or the amount, if any, of other shares of stock, securities or assets then issuable upon exercise of this Warrant.

5. Restriction on Transfer of Warrant. Neither this Warrant nor any right of the Holder under this Warrant is transferable by the Holder without the prior written consent of the Company.

6. Lock-Up.

(a) The Holder agrees that it will not, without the prior written consent of the lead managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the lead managing underwriter of the IPO (such period not to exceed 180 calendar days, except that, to the extent requested by the lead managing underwriter to accommodate regulatory restrictions of the Financial Industry Regulatory Authority or any applicable securities exchange relating to the publication or other distribution of research reports or analyst recommendations and opinions, such period may be extended to a total of 215 calendar days), (i) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of the Company held immediately prior to the effectiveness of the registration statement for the initial public offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such capital stock, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of capital stock or other securities, in cash or otherwise. The foregoing provisions of this Section 6(a) shall not apply to the sale of any shares to an underwriter in an initial public offering, and shall only be applicable to the Holder if all directors of the Company (other than a director

designated by the Holder or its affiliates) enter into similar arrangements. The underwriters in connection with the initial public offering are intended third-party beneficiaries of this Section 6(a) and shall have the right, power and authority to enforce the provisions of this Warrant as though they were a party to this Warrant. The Holder further agrees, if requested by the underwriters of the initial public offering, to execute an agreement that is consistent with this Section 6(a) or that is necessary to give further effect to this Warrant.

(b) In order to enforce the covenant set forth in Section 6(a), the Company may impose stop-transfer instructions with respect to the shares of capital stock of the Company held by the Holder (and transferees and assignees of the Holder) until the end of such restricted period.

7. Not Deemed Stockholder. Prior to the issuance of the Warrant Shares, the Holder shall not be entitled to vote or receive dividends or be deemed the holder of shares of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, as such, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise.

8. Replacement on Loss. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and upon delivery of an indemnity reasonably satisfactory to it (it being understood that a written indemnification agreement or affidavit of loss of the Holder shall be a sufficient indemnity) and, in case of mutilation, upon surrender of such Warrant for cancellation to the Company, the Company at its own expense shall execute and deliver to the Holder, in lieu of this Warrant, a new Warrant of like tenor and exercisable for an equivalent number of Warrant Shares as the Warrant so lost, stolen, mutilated or destroyed, *provided* that, in the case of mutilation, no indemnity shall be required if this Warrant in identifiable form is surrendered to the Company for cancellation

9. Compliance with Securities Laws. The Holder, by acceptance of this Warrant, agrees to comply in all respects with the provisions of this Section 9 and the restrictive legend requirements set forth on the face of this Warrant and further agrees that such Holder shall not offer, sell or otherwise dispose of this Warrant or any Warrant Shares to be issued upon exercise of this Warrant except under circumstances that will not result in a violation of the Securities Act of 1933 or of the securities laws of any other applicable jurisdiction. All Warrant Shares shall be stamped or imprinted with a legend in substantially the following forms:

THESE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION OF THE U.S. SECURITIES ACT OF 1933.

THE COMPANY HAS MORE THAN ONE CLASS OF STOCK AUTHORIZED TO BE ISSUED. THE COMPANY WILL FURNISH WITHOUT CHARGE TO THE HOLDER UPON WRITTEN REQUEST A COPY OF THE FULL TEXT OF THE PREFERENCES, VOTING POWERS, QUALIFICATIONS AND SPECIAL AND RELATIVE RIGHTS OF THE SHARES OF EACH CLASS OF STOCK AUTHORIZED TO BE ISSUED BY THE COMPANY AS SET FORTH IN THE CERTIFICATE OF INCORPORATION OF THE COMPANY.

10. Warrant Register. The Company shall keep and properly maintain at its principal executive offices books for the registration and any transfers of this Warrant. The Company may deem and treat the Person in whose name this Warrant is registered on such register as the Holder of this Warrant for all purposes, and the Company shall not be affected by any notice to the contrary, except any assignment, division, combination or other transfer of the Warrant effected in accordance with the provisions of this Warrant.

11. General.

(a) Notices. All notices, requests, consents, claims, demands, waivers and other communications in connection or accordance with this Warrant shall be in writing and shall be deemed to have been given: (i) when delivered by hand (with written confirmation of receipt); (ii) when received by the addressee if sent by a nationally recognized overnight courier (receipt requested); (iii) on the date sent by e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient; or (iv) on the tenth Business Day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid. Such communications must be sent to the respective parties at the addresses indicated below (or at such other address for a party as shall be specified in a notice given in accordance with this Section 11(a)).

If to the Company:	ACM Research, Inc. 42307 Osgood Road Suite I Fremont, CA 94539 E-mail: min.xu@acmrcsh.com Attention: Chief Financial Officer
with a copy to:	K&L Gates LLP One Lincoln Street Boston, MA 02111 E-mail: mark.johnson@klgates.com Attention: Mark L. Johnson
If to the Holder:	Shengxin (Shanghai) Management Consulting Limited Partnership Rm. 210-32, 2nd Fl. Building 1, 38 Debao Rd., Pilot Free Trade Zone, Shanghai, China E-mail: jian.wang@acmrsch.com Attention: Jian Wang

(b) Entire Agreement. This Warrant, together with the Securities Purchase Agreement, dated as of the Original Issue Date, between the Company and the Holder, constitute the sole and entire agreement of the parties to this Warrant with respect to the subject matter contained in this Warrant, and supersede all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

(c) Severability. If any term or provision of this Warrant is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Warrant or invalidate or render unenforceable such term or provision in any other jurisdiction.

(d) Amendment and Modification; Waiver. Except as otherwise provided in this Warrant, this Warrant may only be amended, modified or supplemented by an agreement in writing signed by the Company and the Holder. No waiver by the Company or the Holder of any of the provisions of this Warrant shall be effective unless explicitly set forth in writing and signed

by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Warrant shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege of this Warrant preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

(e) Successors and Assigns. This Warrant and the rights evidenced by this Warrant shall be binding upon and shall inure to the benefit of the parties to this Warrant and the successors of the Company and the successors and permitted assigns of the Holder. Each such successor or permitted assign of the Holder shall be deemed to be the Holder for all purposes of this Warrant.

(f) No Third-Party Beneficiaries. This Warrant is for the sole benefit of the Company and its successors and the Holder and its successors and permitted assigns. Nothing in this Warrant, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

(g) Submission to Jurisdiction; Waiver of Jury Trial.

(i) Any legal suit, action or proceeding arising out of or based upon this Warrant or the transactions contemplated by this Warrant may be instituted in the federal courts of the United States of America or the courts of the State of Delaware in, and each party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by certified or registered mail to such party's address set forth in this Warrant shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or any proceeding in such courts and irrevocably waive and agree not to plead or claim in any such court that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(ii) EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS WARRANT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS WARRANT OR THE TRANSACTIONS CONTEMPLATED BY THIS WARRANT.

(h) Governing Law. This Warrant shall be governed by and construed in accordance with the internal laws of the State of Delaware without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of Delaware.

(i) Interpretation. For purposes of this Agreement:

(i) headings used in this Agreement are for convenience of reference only and shall not, for any purpose, be deemed a part of this Agreement;

(ii) any references herein to a Section refer to a Section of this Agreement, unless specified otherwise;

(iii) the words "include," "includes" and "including" as used herein shall not be construed so as to exclude any other thing not referred to or described;

(iv) the word "or" is not exclusive;

(v) the definition given for any term in this Agreement shall apply equally to both the singular and plural forms of the term defined;

(vi) whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms;

(vii) unless the context otherwise requires, references herein to a statute means such statute as amended from time to time and includes any successor legislation thereto and any rules and regulations promulgated thereunder; and

(viii) this Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

(j) Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed an original, but both of which together shall be deemed to be one and the same agreement. A signed copy of this Warrant delivered by e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Warrant.

IN WITNESS WHEREOF, the Company has duly executed this Warrant on the Original Issue Date.

ACM RESEARCH, INC.

By: /s/ Hui Wang
Name: Hui Wang
Title: CEO

Accepted and agreed:

SHENGXIN (SHANGHAI) MANAGEMENT CONSULTING LIMITED PARTNERSHIP

BY: Jian Wang, General Partner

BY: /s/ Jian Wang
Name: Jian Wang
Title: General Partner

SECURITIES PURCHASE AGREEMENT

THIS SECURITIES PURCHASE AGREEMENT (this *"Agreement"*) is made as of August 31, 2017 (the *"Agreement Date")* by and among ACM Research, Inc. (*"ACM"),* Shanghai Pudong High-tech Investment Co., Ltd. *("PDHTI"),* and PUDONG SCIENCE AND TECHNOLOGY (CAYMAN) CO.,LTD., a wholly owned subsidiary of PDHTI *("Purchaser").*

WHEREAS, ACM desires to sell, and PDHTI and Purchaser desire that Purchaser purchase on the terms set forth herein, a total of 3,358,728 shares of Class A Common Stock of ACM, US$0.0001 par value per share (the *"ACM Shares");*

WHEREAS, PDHTI desires to sell, and ACM desires to purchase all of the equity interests of ACM Research (Shanghai), Inc. *("ACM Shanghai")* held by PDHTI (the *"ACM Shanghai Equity")* on the terms and subject to the conditions set forth herein and in the Cooperation Framework Agreement (the *"Framework Agreement"),* entered into as of June 12, 2017, among ACM, PDHTI, ACM Shanghai and Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd.;

Whereas, ACM and Shanghai Pudong Technology Investment Co., Ltd. (上海浦东科技投资有限公 司) and other parties thereto entered into the Investment Contract for ACM Research (Shanghai), Inc. (the "Investment Contract") dated as of October 21, 2009;

Whereas, in connection with the Investment Contract, ACM and PDHTI entered into the ACM Research Inc. Share Option Agreement (the "Share Option Agreement"), pursuant to which ACM granted PDHTI the right to purchase 3,358,728 shares of Series E Preferred Stock of ACM, $0.0001 par value per share, and certain registration rights with respect thereto (collectively, the "Series E Rights");

Whereas, ACM, Shanghai Venture Capital Limited (上海创业投资有限公司) , Shanghai Zhangjiang (Group) Co., Ltd. and Shanghai Pudong Technology Investment Co., Ltd. (上海浦东科技投资有限公司) entered into a joint venture contract dated as of October 21, 2009 (the "Joint Venture Contract");

Whereas, the parties to the Share Option Agreement desire, to the extent set forth herein, to waive the Series E Rights and to accept the rights, obligations and covenants of this Agreement in lieu of their rights, obligations and covenants under the Share Option Agreement and the parties desire to enter into this Agreement to set forth their agreements and understandings regarding the matters as set forth in this Agreement.

Whereas, ACM Shanghai Equity held by Shanghai Pudong Technology Investment Co., Ltd (上海 浦东科技投资有限公司) is transferred to PDHTI without consideration in 2015. Now, Therefore, in consideration of the mutual covenants and agreements set forth in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and subject to the rules and regulations of the Shanghai United Assets and Equity Exchange (the *"SUAEE"),* ACM, PDHTI and Purchaser agree as follows:

1. Purchase and Sale ACM Shanghai Equity.

1.1 SUAEE Listing. Subject to the terms and conditions stated in the Framework Agreement, PDHTI shall use its best efforts to list, on or before September 5, 2017 (the date of such listing, the *"Listing Date"),* an offer to sell all of the ACM Shanghai Equity with the SUAEE.

1.2 Waiver of Rights. Prior to the Listing Date, pursuant to the disclosure requirements under the Framework Agreement and of SUAEE, (i) PDHTI shall waive its right under the Joint Venture Contract to appoint one board director of ACM Shanghai and (ii) ACM and PDHTI, together with other parties thereto, shall amend the relevant provisions of the Joint Venture Contract and the articles of association of ACM Shanghai (the *"Articles of Association")* with respect thereto.

1.3 Absence of Bids. If PDHTI has listed the offer to sell ACM Shanghai Equity according to the Framework Agreement but no one (including ACM) bids to purchase ACM Shanghai Equity before the completion of the auction process, PDHTI's rights, obligations and privileges under the Joint Venture Contract, the Articles of Association, the Investment Contract and the Share Option Agreement, shall be automatically resumed and reinstated upon the expiration of the auction period, including without limitation the waiver of rights contained in Section 1.2. Each of ACM and ACM Shanghai agrees to use its best efforts (within the requirements of applicable law) to take the actions necessary, and to request that the other relevant parties take the actions necessary, to reinstate such rights, including taking any action necessary to amend the Joint Venture Contract and the Articles of Association.

1.4 SUAEE Auction Process. ACM shall, within five business days from the Listing Date (including the Listing Date), register with SUAEE as a candidate transferee willing to accept the transfer of the ACM Shanghai Equity, and pay the transaction deposit as required by SUAEE to a SUAEE designated account and make a valid bid within the timeline prescribed by SUAEE to purchase the ACM Shanghai Equity for the higher of the following (a) an aggregate purchase price, payable in RMB, of US$8,396,820.00, multiplied by the average of the US$-to-RMB exchange rates, as reported by China Foreign Exchange Trade System at www.chinamoney.com.cn, for the Closing Date, or (b) the value of ACM Shanghai Equity, as determined by the assessment agency designated by PDHTI pursuant to the Framework Agreement. If ACM is the winning bidder in the SUAEE auction of the ACM Shanghai Equity, the parties shall use their best efforts to complete the purchase and sale of the ACM Shanghai Equity, subject to the rules and regulations of the SUAEE, within ten days of the completion of the auction process.

2. Purchase and Sale of the ACM Shares.

2.1 Purchase Price. ACM shall sell all of the ACM Shares to Purchaser at a purchase price of $2.50 per share (US$ 8,396,820 in the aggregate), payable in US$.

2.2 Closing; Delivery.

(a) Subject to the satisfaction of each of the conditions set forth in Section 2.3 and Section 2.4, the purchase and sale of the ACM Shares (the *"Closing"*, the date of the Closing, *"Closing Date")* shall take place at the corporate headquarters of ACM on September 8, 2017 at such time as mutually agreed upon by PDHTI, Purchaser and ACM (or at such later date and time as such parties mutually agree).

(b) At the Closing, ACM shall deliver to Purchaser a certificate evidencing the ACM Shares, free and clear of all liens, pledges, security interests, charges, claims, encumbrances, agreements, options, voting trusts, proxies and other arrangements or restrictions of any kind or nature *("Encumbrances")* and a copy of the stock register for ACM's Class A Common Stock as to be in effect immediately after the Closing in order to reflect the issuance to Purchaser of ACM Shares at the Closing, against payment at the Closing of the aggregate purchase price set forth in Section 2.1 (the *"Purchase Price")* by transmission of a wire transfer to the bank account designated by ACM and specified in Schedule 2.

2.3 Conditions to Purchaser's Obligations at Closing. The obligation of Purchaser to purchase the ACM Shares from ACM at the Closing is subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

(a) The representations and warranties of ACM contained in Section 3 shall be true and correct in all material respects as of the Closing.

(b) ACM shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by ACM as of or before the Closing.

(c) All authorizations, approvals or permits of any governmental authority or regulatory body that are required in connection with the lawful issuance and sale of the ACM Shares pursuant to this Agreement shall be obtained and effective as of the Closing.

(d) ACM shall have duly executed and delivered an adoption agreement (the *"Adoption Agreement")*, in substantially the form provided in the Registration Rights Agreement by and among ACM and certain of its stockholders (the *"Registration Rights Agreement")*, pursuant to which Purchaser shall become a "Holder" under the Registration Rights Agreement with respect to the ACM Shares.

2.4 Conditions to ACM's Obligations at Closing. The obligation of ACM to sell the ACM Shares to Purchaser at the Closing is subject to the fulfillment, at or before the Closing, of each of the following conditions, unless otherwise waived:

(a) The representations and warranties of PDHTI and Purchaser contained in Section 4 shall be true and correct in all material respects as of the Closing.

(b) Each of PDHTI and Purchaser shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by PDHTI or Purchaser, as applicable, as of or before the Closing.

(c) All authorizations, approvals or permits of any governmental authority or regulatory body that are required in connection with the lawful purchase and sale of the ACM Shares pursuant to this Agreement shall be obtained by PDHTI and Purchaser and shall be effective as of the Closing.

3. Representations and Warranties of ACM. ACM hereby represents and warrants to PDHTI and Purchaser, as of the date hereof and as of the Closing, as follows:

3.1 Authorization. All corporate action required to be taken to authorize ACM to enter into and perform this Agreement, including issuance and sale of the ACM Shares and authorization of the execution of the Adoption Agreement, has been taken as of the date of this Agreement and shall remain in effect as of the Closing. Each of this Agreement, the Registration Rights Agreement, the Framework Agreement, and any other agreements to which ACM is a party, constitutes as of the date of this Agreement (if executed as of the date hereof), and shall constitute as of the Closing, a valid and legally binding obligation of ACM, enforceable against ACM in accordance with its respective terms except as limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

3.2 Capitalization. As of July 10, 2017, the capital stock of ACM consisted of 130,110,529 shares designated as three classes, each having a par value of $0.0001 per share, as follows:

(a) 100,000,000 shares were designated as Class A Common Stock, of which 8,031,820 shares were issued and outstanding;

(b) 7,303,533 shares were designated as Class B Common Stock, of which 7,229,148 shares were issued and outstanding; and

(c) 22,797,996 shares of Preferred Stock, of which (i) 385,000 shares were designated as Series A Preferred Stock, all of which were issued and outstanding; (ii) 1,572,000 shares were designated as Series B Preferred Stock, all of which were issued and outstanding; (iii) 1,360,962 shares were designated as Series C Preferred Stock, all of which were issued and outstanding; (iv) 2,659,975 shares were designated as Series D Preferred Stock, 1,326,642 shares of which were issued and outstanding, (v) 10,718,530 shares were designated as Series E Preferred Stock, none of which were issued or outstanding; and (vi) 6,000,000 shares were designated as Series F Preferred Stock, 3,663,254 shares of which were issued and outstanding.

The issuance and sale of the ACM Shares pursuant to this Agreement will not result in any anti-dilutive adjustment to the conversion price of any series of preferred stock of ACM.

3.3 Governmental Consents and Filings. Assuming the accuracy of the representations made by PDHTI and Purchaser in Section 4, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority of the United States of America is required on the part of ACM in connection with the issuance of the ACM Shares, except for any filings made pursuant to the U.S. Securities Act of 1933, which have been or will be made by ACM in a timely manner.

3.4 Compliance with Other Instruments. ACM is not in violation or default (a) of any provision of its certificate of incorporation or bylaws, (b) of any instrument, judgment, order, writ or decree, (c) under any note, indenture or mortgage, or (d) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of U.S. federal or state statute, rule or regulation applicable to ACM, the violation of which would have a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property or operating results of ACM. The execution, delivery and performance of this Agreement and the consummation of the transaction contemplated by this Agreement will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement or (ii) an event that results in the creation of any lien, charge or encumbrance upon any assets of ACM or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to ACM.

3.5 Legal Proceedings. There are no actions, suits, claims, investigations or other legal proceedings pending or, to the knowledge of ACM, threatened against or by ACM that challenge or seek to prevent, enjoin or otherwise delay the transaction contemplated by this Agreement. ACM has not received any written notice of any order, writ, judgment, injunction or decree of, or pending or threatened investigation by, any government agency against ACM that could be reasonably expected to materially and adversely affect the business, properties, prospects or financial condition of ACM.

3.6 Intellectual Property. ACM owns or possesses or believes it can acquire on commercially reasonable terms sufficient legal rights to all ACM Intellectual Property (as defined below) without any known conflict with, or infringement of, the rights of others. To the knowledge of ACM, no product marketed or sold (or proposed to be marketed or sold) by ACM violates or will violate any license or infringes or will infringe any intellectual property rights of any other party. Other than with respect to commercially available software products under standard end-user object code license agreements, there are no outstanding options, licenses, agreements, claims, encumbrances or shared ownership interests of any kind relating to the ACM Intellectual Property, nor is ACM bound by or a party to any options, licenses or agreements of any kind with respect to the patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses, information, proprietary rights and processes of any other Person. For purposes of this Section 3.6, ACM shall be deemed to have "knowledge" of a patent right if ACM has actual knowledge of the patent right or would be found to be on notice of such patent right as determined by reference to United States patent laws. "*ACM Intellectual Property*" means all patents, patent applications, trademarks, trademark applications, service marks, service mark applications, tradenames, copyrights, trade secrets, domain names, mask works, information and proprietary rights and processes, similar or other intellectual property rights, subject matter of any of the foregoing, tangible embodiments of any of the foregoing, licenses in, to and under any of the foregoing, and any and all such cases that are owned or used by ACM in the conduct of ACM's business as now conducted.

3.7 Permits. ACM has all franchises, permits, licenses and any similar authority necessary for the conduct of its business as now being conducted by it, the lack of which could materially and adversely affect the business, properties, prospects or financial condition of ACM and believes it can obtain, without undue burden or expense, any similar authority for the conduct of its business as planned to be conducted. ACM is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

3.8 Use of the Purchase Price. ACM shall use the entire Purchase Price in its purchase of the ACM Shanghai Equity in accordance with the Framework Agreement, unless ACM fails to win the bid if it bid to purchase the ACM Shanghai Equity pursuant to the Framework Agreement.

4. Representations and Warranties of PDHTI and Purchaser. Each of PDHTI and Purchaser, jointly and severally, hereby represents and warrants to ACM, as of the date hereof and as of the Closing, as follows:

4.1 Authorization. All corporate action required to be taken to authorize PDHTI and Purchaser to enter into and perform this Agreement has been taken as of the date of this Agreement and shall remain in effect as of the Closing. Each of this Agreement, the Framework Agreement, and any other agreements to which PDHTI is a party, constitutes as of the date of this Agreement (if executed as of the date hereof), and shall constitute as of the Closing, a valid and legally binding obligation of PDHTI enforceable against PDHTI in accordance with its respective terms except as limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies. Each of this Agreement and any other agreements to which Purchaser is a party, constitutes as of the date of this Agreement (if executed as of the date hereof), and shall constitute as of the Closing, a valid and legally binding obligation of Purchaser enforceable against Purchaser in accordance with its respective terms except as limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

4.2 Governmental Consents and Filings. Except for as may be required by the SUAEE, the State-owned Assets Supervision and Administration Authority of the People's Republic of China, the Ministry of Commerce of the People's Republic of China, the National Development and Reform Commission of the People's Republic of China and the State Administration Bureau of Foreign Exchange of the People's Republic of China, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any national, provincial or local governmental authority of the People's Republic of China is required on the part of PDHTI or Purchaser as of the Closing, in connection with the transaction contemplated by this Agreement.

4.3 Compliance with Other Instruments. The execution, delivery and performance of this Agreement and the consummation of the transaction contemplated by this Agreement will not result in any violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either:

(a) default (i) of any provision of its formation document or bylaws, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of any national, provincial or local governmental authority of the People's Republic of China applicable to PDHTI or Purchaser; or

(b) an event that results in the creation of any lien, charge or encumbrance upon any assets of PDHTI or Purchaser or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to PDHTI or Purchaser.

4.4 Legal Proceedings. There are no actions, suits, claims, investigations or other legal proceedings pending or, to the knowledge of PDHTI or Purchaser, threatened against or by PDHTI or Purchaser that challenge or seek to prevent, enjoin or otherwise delay the transaction contemplated by this Agreement. Neither PDHTI nor Purchaser has received any written notice of any order, writ, judgment, injunction or decree of, or pending or threatened investigation by, any government agency against PDHTI or Purchaser that could be reasonably expected to materially and adversely affect the business, properties, prospects or financial condition of PDHTI or Purchaser, as applicable.

4.5 Purchase Entirely for Own Account. Purchaser is acquiring the ACM Shares for investment for its own account, not as a nominee or agent and not with a view to the resale or distribution of any interest in the ACM Shares. Purchaser has no present intention of selling, granting any participation in or otherwise distributing any interest in the ACM Shares. Purchaser does not presently have any contract, undertaking, agreement or arrangement with any individual or entity to sell, transfer or grant participations to either such individual or entity or any third party, with respect to the ACM Shares.

4.6 Disclosure of Information. PDHTI and Purchaser have had an opportunity to discuss with ACM's management ACM's business, management and financial affairs and the terms and conditions of the offering of the ACM Shares, and PDHTI and Purchaser have had an opportunity to review ACM's facilities. The foregoing, however, does not limit or modify the representations and warranties of ACM in Section 3 or the right of PDHTI or Purchaser to rely thereon.

4.7 Restricted Securities. Each of PDHTI and Purchaser understands that the offering and sale of the ACM Shares have not been, and will not be, registered under the U.S. Securities Act of 1933 by reason of a specific exemption from the registration provisions of such Act that depends upon, among other things, the bona fide nature of the investment intent and the accuracy of PDHTI's

and Purchaser's representations as expressed in this Section 4. Each of PDHTI and Purchaser understands that the ACM Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to those laws, Purchaser must hold the AMC Shares indefinitely unless they are registered with the U.S. Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. Each of PDHTI and Purchaser acknowledges that ACM has no obligation to register or qualify for resale the ACM Shares, except as set forth in the Registration Rights Agreement. Each of PDHTI and Purchaser further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including the time and manner of sale, the holding period for the ACM Shares, and on requirements relating to ACM that are outside of the control of PDHTI and Purchaser and that ACM is under no obligation, and may not be able, to satisfy.

4.8 No Public Market. Each of PDHTI and Purchaser understands that (a) no public market now exists for the ACM Shares, (b) ACM makes no assurances that a public market will ever exist for the ACM Shares and (c) the ACM Shares may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons.

4.9 Legends. Each of PDHTI and Purchaser understands that the ACM Shares may be notated with the following legend, together with any other legend required by the securities laws of any state to the extent such laws are applicable to the ACM Shares represented by the certificate, instrument, or book entry so legended:

> "THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AND (A) HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF OR (B) IT IS NOT A U.S. PERSON AND IS ACQUIRING THIS SECURITY IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH RULE 904 UNDER THE U.S. SECURITIES ACT OF 1933. NO SUCH TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO ACM RESEARCH, INC. THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE U.S. SECURITIES ACT OF 1933."

4.10 Investor Status. Purchaser (a) is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the U.S. Securities Act of 1933 or (b) is not a "U.S. person" as defined in Regulation S under the U.S. Securities Act of 1933 and the ACM Shares have not been offered or sold within the United States as defined under the U.S. Securities Act of 1933. PDHTI and Purchaser have satisfied themselves as to the full observance of the laws of Purchaser's jurisdiction in connection with any invitation to receive the ACM Shares or any use of this Agreement, including (i) the legal requirements within Purchaser's jurisdiction for the purchase of the ACM Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the ACM Shares, and (v) Purchaser's receipt and continued beneficial ownership of the ACM Shares will not violate any applicable securities or other laws of Purchaser's jurisdiction.

4.11 No General Solicitation. Neither PDHTI nor Purchaser, nor any of their respective officers, directors, employees, agents, stockholders or partners, has either directly or indirectly (a) engaged in any general solicitation or (b) published any advertisement in connection with the offering and issuance of the ACM Shares.

5. Sale of ACM Shares.

5.1 In addition to the terms defined elsewhere in this Agreement, the following terms used in this Agreement shall be construed to have the meanings set forth or referenced below.

(a) "*Affiliate*" means, with respect to any specified Person, any other Person that, directly or indirectly, controls, is controlled by, or is under common control with such Person, including any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person. The term "control" (including, with correlative meaning, the terms "controlled by" and "under common control with") as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise, including each Person that serves as a director, officer, partner, executor or trustee of such specified Person.

(b) "*Person*" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

(c) "*Proposed Purchaser Transfer*" means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer or encumbering of any ACM Shares, including any additional shares issued connection with any stock split, stock dividend, recapitalization, reorganization, or the like (or any interest therein) proposed by Purchaser.

(d) "*Proposed Purchaser Transfer Notice*" means written notice from Purchaser setting forth the terms and conditions of a Proposed Purchaser Transfer.

(e) "*Prospective Transferee*" means any Person to whom Purchaser proposes to make a Proposed Purchaser Transfer.

5.2 Purchaser has the right to sell all or part of ACM Shares pursuant to the applicable laws and this Agreement, subject to ACM's right of first refusal which is specified in this Section 5 below, *provided* that Purchase shall not transfer any ACM Shares to any entity listed on SCHEDULE 1. The restrictions in this Section 5 shall terminate upon the consummation of the ACM's first underwritten public offering of Class A Common Stock of ACM registered under the U.S. Securities Act of 1933.

5.3 Purchaser hereby unconditionally and irrevocably grants to ACM a right of first refusal to purchase all, but not less than all, of any ACM Shares that Purchaser may propose to transfer in a Proposed Purchaser Transfer *("Proposed Transfer Shares")*, at the same price and on the same terms and conditions as those offered to the Prospective Transferee.

5.4 If Purchaser proposes to make a Proposed Purchaser Transfer, Purchaser must deliver a Proposed Purchaser Transfer Notice to ACM not later than thirty days prior to the consummation of such Proposed Purchaser Transfer. Such Proposed Purchaser Transfer Notice shall contain the material terms and conditions (including price and form of consideration) of the Proposed Purchaser Transfer, the identity of the Prospective Transferee and the intended date of the Proposed Purchaser Transfer. To exercise its right of first refusal under this Section 5, ACM must deliver a written notice to Purchaser that ACM intends to exercise its right of first refusal as to all of the Proposed Transfer Shares with respect to the Proposed Purchaser Transfer within fifteen days after delivery of the Proposed Purchaser Transfer Notice (the *"ROFR Notice Period").*

5.5 If ACM does not exercise its right of first refusal in accordance with Section 5.4, Purchaser shall have the option to sell to the Prospective Transferee all, but not less than all, of the offered Proposed Transfer Shares on terms and conditions substantially similar to (and in no event more favorable than) the terms and conditions set forth in the Proposed Purchaser Transfer Notice, it being understood and agreed that (a) any future Proposed Purchaser Transfer shall remain subject to the terms and conditions of this Agreement, including this Section 5, and (b) such sale shall be consummated within one hundred and twenty days after receipt of the Proposed Purchaser Transfer Notice by ACM and, if such sale is not consummated within such one hundred and twenty day period, such sale shall again become subject to the right of first refusal on the terms set forth in this Section 5.

5.6 If the consideration proposed to be paid for the Proposed Transfer Shares is in property, services or other non-cash consideration, the fair market value of the consideration shall be as determined by an independent assessment agency agreed upon by PDHTI and ACM. If ACM cannot for any reason pay for the Proposed Transfer Shares in the same form of non-cash consideration, ACM may pay the cash value equivalent thereof, as determined by an independent assessment agency agreed upon by PDHTI and ACM. Any fees and expenses of an assessment agency incurred pursuant to this Section 5.6 shall be split evenly between PDHTI and ACM. The closing of the purchase of Proposed Transfer Shares by ACM shall take place, and all payments from ACM shall have been delivered to Purchaser, by the later of (a) the date specified in the Proposed Purchaser Transfer Notice as the intended date of the Proposed Purchaser Transfer and (b) thirty days after delivery of the Proposed Purchaser Transfer Notice.

5.7 Any Proposed Purchaser Transfer not made in compliance with the requirements of this Agreement shall be null and void ab initio, shall not be recorded on the books of ACM or its transfer agent, and shall not be recognized by ACM. ACM and Purchaser acknowledge and agree that any breach of this Section 5 would result in substantial harm to the other party for which monetary damages alone could not adequately compensate. Therefore, the parties hereto unconditionally and irrevocably agree that any non-breaching party hereto shall be entitled to seek protective orders, injunctive relief, and other remedies available at law or in equity (including seeking specific performance or the rescission of purchases, sales and other transfers of Proposed Transfer Shares not made in strict compliance with this Agreement).

5.8 If Purchaser becomes obligated to sell any Proposed Transfer Shares to ACM under this Section 5 and fails to deliver such Proposed Transfer Shares in accordance with the terms of this Section 5, ACM may, at its option, in addition to all other remedies it may have, send to Purchaser the purchase price for such Proposed Transfer Shares as is herein specified and request that ACM effect such transfer on ACM's books any certificates, instruments, or book entry representing the Proposed Transfer Shares to be sold. For the avoidance of doubt, if Purchaser's failure to deliver such Proposed Transfer Shares in accordance with the terms of this Section 5 is due to the fault or negligence of ACM, this Section 5.8 shall not apply.

5.9 Notwithstanding anything to the contrary herein, the provisions of this Section 5.3 shall not apply to a transfer of Proposed Transfer Shares made to an Affiliate of Purchaser, *provided* that Purchaser shall deliver prior written notice to ACM of such pledge, gift or transfer and such shares of Proposed Transfer Shares shall at all times remain subject to the terms and restrictions set forth in this Agreement and such transferee shall, as a condition to such issuance, deliver a counterpart signature page to this Agreement as confirmation that such transferee shall be bound by all the terms and conditions of this Section 5 (but only with respect to the securities so transferred to the transferee), including the obligations with respect to Proposed Purchaser Transfers of such Proposed Transfer Shares.

6. Miscellaneous.

6.1 Termination. If any of the Closing Conditions specified in Section 2.3 and Section 2.4 fails to be satisfied or waived on or before September 20, 2017 (or such later date as may be mutually agreed upon in writing by ACM, PDHTI and Purchaser), this Agreement shall automatically terminate and be of no further force and effect, except that Sections 6.2 through 6.13, together with any related definitions included elsewhere in this Agreement, shall survive the termination of this Agreement and the termination of this Agreement shall not affect any rights any party has with respect to the breach of this Agreement by another party prior to such termination.

6.2 Survival. Unless otherwise set forth in this Agreement, the representations and warranties of each party contained in this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of the other party.

6.3 Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

6.4 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware.

6.5 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.6 Construction. For the purpose of this Agreement:

(a) the titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement; unless otherwise indicated, any references in this Agreement to a Section refer to a Section of this Agreement;

(b) the words “include” and “including” as used in this Agreement shall not be construed so as to exclude any other thing not referred to or described;

(c) the word “or” is not exclusive;

(d) this Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing an instrument to be drafted; and

(e) all share and share-related information with respect to the ACM Shares (including the Purchase Price per share) shall be subject to equitable adjustment in the event of any stock dividend, stock split, reverse stock split or the like at the request of ACM’s underwriters.

6.7 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt and: (a) personal delivery to the party to be notified; (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day; (c) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (d) one business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on the signature page, or to such e-mail address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 6.7.

6.8 Attorneys' Fees. If any action at law or in equity (including arbitration) is necessary to enforce or interpret the terms of any of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

6.9 Amendments and Waivers. Any term of this Agreement may be amended or waived only with the written consent of PDHTI, Purchaser and ACM.

6.10 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

6.11 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to either party under this Agreement, upon any breach or default of the other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of either party of any breach or default under this Agreement, or any waiver on the part of either party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to either party, shall be cumulative and not alternative.

6.12 Entire Agreement. This Agreement, together with the Framework Agreement, the Registration Rights Agreement, amended joint venture contract and amended articles of association of ACM Shanghai pursuant to Section 1.2 hereof, the Commitment of Performance issued by ACM to PDHTI and Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd.dated as of August 19, 2017 and the Third Party Agreement signed by ACM, PDHTI and Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. dated as of August 19, 2017, constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

6.13 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to Singapore International Arbitration Centre for the purpose of any dispute arising out of or based upon this Agreement; and (b) agree not to commence any suit, action, dispute or other proceeding arising out of or based upon this Agreement except in Singapore International Arbitration Centre in accordance with the preceding clause (a).

6.14 Termination of Share Option Agreement. Upon the Closing, all provisions of, rights granted and covenants made in the Share Option Agreement with respect to the Series E Rights are hereby waived, released and superseded in their entirety and shall have no further force or effect.

[Signature page follows]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

ACM RESEARCH, INC.

By: /s/ David H. Wang
David H. Wang
President and Chief Executive Officer

Address:
42307 Osgood Road, Suite I
Fremont, CA 94539 USA

SHANGHAI PUDONG HIGH-TECH INVESTMENT CO., LTD.

By: /s/ Shanghai Pudong High-tech Investment Co., Ltd.
Name:
Title:

Address:

PUDONG SCIENCE AND TECHNOLOGY (CAYMAN) CO., LTD.

By: /s/ Pudong Science and Technology (Cayman) Co., Ltd.
Name:
Title:

Address:

SCHEDULE 1

Prohibited Transferees

Lam Research Corp.

DNS Electronics LLC

Tokyo Electron Ltd.

SEMES Co. Ltd.

Mujin Electronics Co., Ltd.

Beijing Sevenstar Science & Technology Co., Ltd.

SCHEDULE 2

Wire Transfer Information

Upon the Closing, Purchaser shall pay the Purchase Price in a lump sum to the following bank account of ACM:

Account Name:

Routing number:

Check account number:

Name of the Bank:

SWIFT Code for USD:

Swift Code for Foreign currency:

Exhibit 10.06

SECURITIES PURCHASE AGREEMENT

THIS SECURITIES PURCHASE AGREEMENT (this *"Agreement")* is made as of August [31], 2017 (the *"Agreement Date")* by and among ACM Research, Inc. *("ACM")*, Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. *("ZSTVC")*, and Zhangjiang AJ Company Limited, a wholly owned subsidiary of ZSTVC *("Purchaser").*

WHEREAS, ACM desires to sell, and ZSTVC and Purchaser desire that Purchaser purchase on the terms set forth herein, a total of 2,361,294 shares of Class A Common Stock of ACM, US$0.0001 par value per share (the *"ACM Shares")*;

WHEREAS, ZSTVC desires to sell, and ACM desires to purchase all of the equity interests of ACM Research (Shanghai), Inc. *("ACM Shanghai")* held by ZSTVC (the *"ACM Shanghai Equity")* on the terms and subject to the conditions set forth herein and in the Cooperation Framework Agreement (the *"Framework Agreement")*, entered into as of June 12, 2017, among ACM, ZSTVC, ACM Shanghai and Shanghai Pudong New Industry Investment Co., Ltd.;

WHEREAS**,** ACM and Shanghai Zhangjiang (Group) Co., Ltd. and other parties thereto entered into the Investment Contract for ACM Research (Shanghai), Inc. (the *"Investment Contract")* dated as of August 21, 2008;

WHEREAS, in connection with the Investment Contract, ACM and ZSTVC entered into the ACM Research Inc. Share Option Agreement (the *"Share Option Agreement")*, pursuant to which ACM granted ZSTVC the right to purchase 2,361,294 shares of Series E Preferred Stock of ACM, $0.0001 par value per share, and certain registration rights with respect thereto (collectively, the *"Series E Rights");*

WHEREAS, ACM, Shanghai Zhangjiang (Group) Co., Ltd., and other parties thereto, entered into a joint venture contract dated as of October 21, 2009 (the *"Joint Venture Contract");*

WHEREAS, on February 21, 2012, the government of Pudong New Area approves the transfer of ACM Shanghai Equity and the interests thereto from Shanghai Zhangjiang (Group) Co., Ltd. to ZSTVC without consideration; and

WHEREAS, the parties to the Share Option Agreement desire, to the extent set forth herein, to waive the Series E Rights and to accept the rights, obligations and covenants of this Agreement in lieu of their rights, obligations and covenants under the Share Option Agreement and the parties desire to enter into this Agreement to set forth their agreements and understandings the matters as set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and subject to the rules and regulations of the Shanghai United Assets and Equity Exchange (the *"SUAEE")*, ACM, ZSTVC and Purchaser agree as follows:

1. Purchase and Sale ACM Shanghai Equity.

1.1 SUAEE Listing. Subject to the terms and conditions stated in the Framework Agreement, ZSTVC shall use its best efforts to list, on or before [September 5], 2017 (the date of such listing, the *"Listing Date")*, an offer to sell all of the ACM Shanghai Equity with the SUAEE.

1.2 Waiver of Rights. Prior to the Listing Date, pursuant to the disclosure requirements under the Framework Agreement and of SUAEE, (i) ZSTVC shall waive its right under the Joint Venture Contract to appoint one board director of ACM Shanghai and (ii) ACM and ZSTVC, together with other parties thereto, shall amend the relevant provisions of the Joint Venture Contract and the articles of association of ACM Shanghai (the *"Articles of Association")* with respect thereto.

1.3 Absence of Bids. If ZSTVC has listed the offer to sell ACM Shanghai Equity according to the Framework Agreement but no one (including ACM) bids to purchase ACM Shanghai Equity before the completion of the auction process, ZSTVC's rights, obligations and privileges under the Joint Venture Contract, the Articles of Association, the Investment Contract and the Share Option Agreement, shall be automatically resumed and reinstated upon the expiration of the auction period, including without limitation the waiver of rights contained in Section 1.2. Each of ACM and ACM Shanghai agrees to use its best efforts (within the requirements of applicable law) to take the actions necessary, and to request that the other relevant parties take the actions necessary, to reinstate such rights, including taking any action necessary to amend the Joint Venture Contract and the Articles of Association.

1.4 SUAEE Auction Process. ACM shall, within five business days from the Listing Date (including the Listing Date), register with SUAEE as a candidate transferee willing to accept the transfer of the ACM Shanghai Equity, and pay the transaction deposit as required by SUAEE to a SUAEE designated account and make a valid bid within the timeline prescribed by SUAEE to purchase the ACM Shanghai Equity for the higher of the following (a) an aggregate purchase price, payable in RMB, of US$5,903,235.00, multiplied by the average of the US$-to-RMB exchange rates, as reported by China Foreign Exchange Trade System at www.chinamoney.com.cn, for the Closing Date, or (b) the value of ACM Shanghai Equity, as determined by the assessment agency designated by ZSTVC pursuant to the Framework Agreement. If ACM is the winning bidder in the SUAEE auction of the ACM Shanghai Equity, the parties shall use their best efforts to complete the purchase and sale of the ACM Shanghai Equity, subject to the rules and regulations of the SUAEE, within ten days of the completion of the auction process.

2. Purchase and Sale of the ACM Shares.

2.1 Purchase Price. ACM shall sell all of the ACM Shares to Purchaser at a purchase price of $2.50 per share (US$ 5,903,235 in the aggregate), payable in US$.

2.2 Closing; Delivery.

(a) Subject to the satisfaction of each of the conditions set forth in Section 2.3 and Section 2.4, the purchase and sale of the ACM Shares (the *"Closing"*, the date of the Closing, *"Closing Date")* shall take place at the corporate headquarters of ACM on September 8, 2017 at such time as mutually agreed upon by ZSTVC, Purchaser and ACM (or at such later date and time as such parties mutually agree).

(b) At the Closing, ACM shall deliver to Purchaser a certificate evidencing the ACM Shares, free and clear of all liens, pledges, security interests, charges, claims, encumbrances, agreements, options, voting trusts, proxies and other arrangements or restrictions of any kind or nature *("Encumbrances")* and a copy of the stock register for ACM's Class A Common Stock as to be in effect immediately after the Closing in order to reflect the issuance to Purchaser of ACM Shares at the Closing, against payment at the Closing of the aggregate purchase price set forth in Section 2.1 (the *"Purchase Price")* by transmission of a wire transfer to the bank account designated by ACM and specified in Schedule 2.

2.3 Conditions to Purchaser's Obligations at Closing. The obligation of Purchaser to purchase the ACM Shares from ACM at the Closing is subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

(a) The representations and warranties of ACM contained in Section 3 shall be true and correct in all material respects as of the Closing.

(b) ACM shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by ACM as of or before the Closing.

(c) All authorizations, approvals or permits of any governmental authority or regulatory body that are required in connection with the lawful issuance and sale of the ACM Shares pursuant to this Agreement shall be obtained and effective as of the Closing.

(d) ACM shall have duly executed and delivered an adoption agreement (the *"Adoption Agreement")*, in substantially the form provided in the Registration Rights Agreement by and among ACM and certain of its stockholders (the *"Registration Rights Agreement")*, pursuant to which Purchaser shall become a "Holder" under the Registration Rights Agreement with respect to the ACM Shares.

2.4 Conditions to ACM's Obligations at Closing. The obligation of ACM to sell the ACM Shares to Purchaser at the Closing is subject to the fulfillment, at or before the Closing, of each of the following conditions, unless otherwise waived:

(a) The representations and warranties of ZSTVC and Purchaser contained in Section 4 shall be true and correct in all material respects as of the Closing.

(b) Each of ZSTVC and Purchaser shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by ZSTVC or Purchaser, as applicable, as of or before the Closing.

(c) All authorizations, approvals or permits of any governmental authority or regulatory body that are required in connection with the lawful purchase and sale of the ACM Shares pursuant to this Agreement shall be obtained by ZSTVC and Purchaser and shall be effective as of the Closing.

3. Representations and Warranties of ACM. ACM hereby represents and warrants to ZSTVC and Purchaser, as of the date hereof and as of the Closing, as follows:

3.1 Authorization. All corporate action required to be taken to authorize ACM to enter into and perform this Agreement, including issuance and sale of the ACM Shares and authorization of the execution of the Adoption Agreement, has been taken as of the date of this Agreement and shall remain in effect as of the Closing. Each of this Agreement, the Registration Rights Agreement, the Framework Agreement, and any other agreements to which ACM is a party, constitutes as of the date of this Agreement (if executed as of the date hereof), and shall constitute as of the Closing, a valid and legally binding obligation of ACM, enforceable against ACM in accordance with its respective terms except as limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

3.2 Capitalization. As of July 10, 2017, the capital stock of ACM consisted of 130,110,529 shares designated as three classes, each having a par value of $0.0001 per share, as follows:

(a) 100,000,000 shares were designated as Class A Common Stock, of which 8,031,820 shares were issued and outstanding;

(b) 7,303,533 shares were designated as Class B Common Stock, of which 7,229,148 shares were issued and outstanding; and

(c) 22,797,996 shares of Preferred Stock, of which (i) 385,000 shares were designated as Series A Preferred Stock, all of which were issued and outstanding; (ii) 1,572,000 shares were designated as Series B Preferred Stock, all of which were issued and outstanding; (iii) 1,360,962 shares were designated as Series C Preferred Stock, all of which were issued and outstanding; (iv) 2,659,975 shares were designated as Series D Preferred Stock, 1,326,642 shares of which were issued and outstanding, (v) 10,718,530 shares were designated as Series E Preferred Stock, none of which were issued or outstanding; and (vi) 6,000,000 shares were designated as Series F Preferred Stock, 3,663,254 shares of which were issued and outstanding.

The issuance and sale of the ACM Shares pursuant to this Agreement will not result in any anti-dilutive adjustment to the conversion price of any series of preferred stock of ACM.

3.3 Governmental Consents and Filings. Assuming the accuracy of the representations made by ZSTVC and Purchaser in Section 4, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority of the United States of America is required on the part of ACM in connection with the issuance of the ACM Shares, except for any filings made pursuant to the U.S. Securities Act of 1933, which have been or will be made by ACM in a timely manner.

3.4 Compliance with Other Instruments. ACM is not in violation or default (a) of any provision of its certificate of incorporation or bylaws, (b) of any instrument, judgment, order, writ or decree, (c) under any note, indenture or mortgage, or (d) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of U.S. federal or state statute, rule or regulation applicable to ACM, the violation of which would have a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property or operating results of ACM. The execution, delivery and performance of this Agreement and the consummation of the transaction contemplated by this Agreement will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement or (ii) an event that results in the creation of any lien, charge or encumbrance upon any assets of ACM or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to ACM.

3.5 Legal Proceedings. There are no actions, suits, claims, investigations or other legal proceedings pending or, to the knowledge of ACM, threatened against or by ACM that challenge or seek to prevent, enjoin or otherwise delay the transaction contemplated by this Agreement. ACM has not received any written notice of any order, writ, judgment, injunction or decree of, or pending or threatened investigation by, any government agency against ACM that could be reasonably expected to materially and adversely affect the business, properties, prospects or financial condition of ACM.

3.6 Intellectual Property. ACM owns or possesses or believes it can acquire on commercially reasonable terms sufficient legal rights to all ACM Intellectual Property (as defined below) without any known conflict with, or infringement of, the rights of others. To the knowledge of ACM, no product marketed or sold (or proposed to be marketed or sold) by ACM violates or will violate any license or infringes or will infringe any intellectual property rights of any other party. Other than with respect to commercially available software products under standard end-user object code license agreements, there are no outstanding options, licenses, agreements, claims, encumbrances or shared ownership interests of any kind relating to the ACM Intellectual Property, nor is ACM bound by or a party to any options, licenses or agreements of any kind with respect to the patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses, information, proprietary rights and processes of any other Person. For purposes of this Section 3.6, ACM shall be deemed to have "knowledge" of a patent right if ACM has actual knowledge of the patent right or would be found to be on notice of such patent right as determined by reference to United States patent laws. *"ACM Intellectual Property"* means all patents, patent applications, trademarks, trademark applications, service marks, service mark applications, tradenames, copyrights, trade secrets, domain names, mask works, information and proprietary rights and processes, similar or other intellectual property rights, subject matter of any of the foregoing, tangible embodiments of any of the foregoing, licenses in, to and under any of the foregoing, and any and all such cases that are owned or used by ACM in the conduct of ACM's business as now conducted.

3.7 Permits. ACM has all franchises, permits, licenses and any similar authority necessary for the conduct of its business as now being conducted by it, the lack of which could materially and adversely affect the business, properties, prospects or financial condition of ACM and believes it can obtain, without undue burden or expense, any similar authority for the conduct of its business as planned to be conducted. ACM is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

3.8 Use of the Purchase Price. ACM shall use the entire Purchase Price in its purchase of the ACM Shanghai Equity in accordance with the Framework Agreement, unless ACM fails to win the bid if it bid to purchase the ACM Shanghai Equity pursuant to the Framework Agreement.

4. Representations and Warranties of ZSTVC and Purchaser. Each of ZSTVC and Purchaser, jointly and severally, hereby represents and warrants to ACM, as of the date hereof and as of the Closing, as follows:

4.1 Authorization. All corporate action required to be taken to authorize ZSTVC and Purchaser to enter into and perform this Agreement has been taken as of the date of this Agreement and shall remain in effect as of the Closing. Each of this Agreement, the Framework Agreement, and any other agreements to which ZSTVC is a party, constitutes as of the date of this Agreement (if executed as of the date hereof), and shall constitute as of the Closing, a valid and legally binding obligation of ZSTVC enforceable against ZSTVC in accordance with its respective terms except as limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies. Each of this Agreement and any other agreements to which Purchaser is a party, constitutes as of the date of this Agreement (if executed as of the date hereof), and shall constitute as of the Closing, a valid and legally binding obligation of Purchaser enforceable against Purchaser in accordance with its respective terms except as limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

4.2 Governmental Consents and Filings. Except for as may be required by the SUAEE, the State-owned Assets Supervision and Administration Authority of the People's Republic of China, the Ministry of Commerce of the People's Republic of China, the National Development and Reform Commission of the People's Republic of China and the State Administration Bureau of Foreign Exchange of the People's Republic of China, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any national, provincial or local governmental authority of the People's Republic of China is required on the part of ZSTVC or Purchaser as of the Closing, in connection with the transaction contemplated by this Agreement.

4.3 Compliance with Other Instruments. The execution, delivery and performance of this Agreement and the consummation of the transaction contemplated by this Agreement will not result in any violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either:

(a) default (i) of any provision of its formation document or bylaws, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of any national, provincial or local governmental authority of the People's Republic of China applicable to ZSTVC or Purchaser; or

(b) an event that results in the creation of any lien, charge or encumbrance upon any assets of ZSTVC or Purchaser or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to ZSTVC or Purchaser.

4.4 Legal Proceedings. There are no actions, suits, claims, investigations or other legal proceedings pending or, to the knowledge of ZSTVC or Purchaser, threatened against or by ZSTVC or Purchaser that challenge or seek to prevent, enjoin or otherwise delay the transaction contemplated by this Agreement. Neither ZSTVC nor Purchaser has received any written notice of any order, writ, judgment, injunction or decree of, or pending or threatened investigation by, any government agency against ZSTVC or Purchaser that could be reasonably expected to materially and adversely affect the business, properties, prospects or financial condition of ZSTVC or Purchaser, as applicable.

4.5 Purchase Entirely for Own Account. Purchaser is acquiring the ACM Shares for investment for its own account, not as a nominee or agent and not with a view to the resale or distribution of any interest in the ACM Shares. Purchaser has no present intention of selling, granting any participation in or otherwise distributing any interest in the ACM Shares. Purchaser does not presently have any contract, undertaking, agreement or arrangement with any individual or entity to sell, transfer or grant participations to either such individual or entity or any third party, with respect to the ACM Shares.

4.6 Disclosure of Information. ZSTVC and Purchaser have had an opportunity to discuss with ACM's management ACM's business, management and financial affairs and the terms and conditions of the offering of the ACM Shares, and ZSTVC and Purchaser have had an opportunity to review ACM's facilities. The foregoing, however, does not limit or modify the representations and warranties of ACM in Section 3 or the right of ZSTVC or Purchaser to rely thereon.

4.7 Restricted Securities. Each of ZSTVC and Purchaser understands that the offering and sale of the ACM Shares have not been, and will not be, registered under the U.S. Securities Act of 1933 by reason of a specific exemption from the registration provisions of such Act that depends upon, among other things, the bona fide nature of the investment intent and the accuracy of

ZSTVC's and Purchaser's representations as expressed in this Section 4. Each of ZSTVC and Purchaser understands that the ACM Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to those laws, Purchaser must hold the AMC Shares indefinitely unless they are registered with the U.S. Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. Each of ZSTVC and Purchaser acknowledges that ACM has no obligation to register or qualify for resale the ACM Shares, except as set forth in the Registration Rights Agreement. Each of ZSTVC and Purchaser further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including the time and manner of sale, the holding period for the ACM Shares, and on requirements relating to ACM that are outside of the control of ZSTVC and Purchaser and that ACM is under no obligation, and may not be able, to satisfy.

4.8 No Public Market. Each of ZSTVC and Purchaser understands that (a) no public market now exists for the ACM Shares, (b) ACM makes no assurances that a public market will ever exist for the ACM Shares and (c) the ACM Shares may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons.

4.9 Legends. Each of ZSTVC and Purchaser understands that the ACM Shares may be notated with the following legend, together with any other legend required by the securities laws of any state to the extent such laws are applicable to the ACM Shares represented by the certificate, instrument, or book entry so legended:

> "THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AND (A) HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF OR (B) IT IS NOT A U.S. PERSON AND IS ACQUIRING THIS SECURITY IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH RULE 904 UNDER THE U.S. SECURITIES ACT OF 1933. NO SUCH TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO ACM RESEARCH, INC. THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE U.S. SECURITIES ACT OF 1933."

4.10 Investor Status. Purchaser (a) is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the U.S. Securities Act of 1933 or (b) is not a "U.S. person" as defined in Regulation S under the U.S. Securities Act of 1933 and the ACM Shares have not been offered or sold within the United States as defined under the U.S. Securities Act of 1933. ZSTVC and Purchaser have satisfied themselves as to the full observance of the laws of Purchaser's jurisdiction in connection with any invitation to receive the ACM Shares or any use of this Agreement, including (i) the legal requirements within Purchaser's jurisdiction for the purchase of the ACM Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the ACM Shares, and (v) Purchaser's receipt and continued beneficial ownership of the ACM Shares will not violate any applicable securities or other laws of Purchaser's jurisdiction.

4.11 No General Solicitation. Neither ZSTVC nor Purchaser, nor any of their respective officers, directors, employees, agents, stockholders or partners, has either directly or indirectly (a) engaged in any general solicitation or (b) published any advertisement in connection with the offering and issuance of the ACM Shares.

5. Sale of ACM Shares.

5.1 In addition to the terms defined elsewhere in this Agreement, the following terms used in this Agreement shall be construed to have the meanings set forth or referenced below.

(a) *"Affiliate"* means, with respect to any specified Person, any other Person that, directly or indirectly, controls, is controlled by, or is under common control with such Person, including any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person. The term "control" (including, with correlative meaning, the terms "controlled by" and "under common control with") as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise, including each Person that serves as a director, officer, partner, executor or trustee of such specified Person.

(b) *"Person"* means any individual, corporation, partnership, trust, limited liability company, association or other entity.

(c) *"Proposed Purchaser Transfer"* means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer or encumbering of any ACM Shares, including any additional shares issued connection with any stock split, stock dividend, recapitalization, reorganization, or the like (or any interest therein) proposed by Purchaser.

(d) *"Proposed Purchaser Transfer Notice"* means written notice from Purchaser setting forth the terms and conditions of a Proposed Purchaser Transfer.

(e) *"Prospective Transferee"* means any Person to whom Purchaser proposes to make a Proposed Purchaser Transfer.

5.2 Purchaser has the right to sell all or part of ACM Shares pursuant to the applicable laws and this Agreement, subject to ACM's right of first refusal which is specified in this Section 5 below, *provided* that Purchase shall not transfer any ACM Shares to any entity listed on SCHEDULE 1. The restrictions in this Section 5 shall terminate upon the consummation of the ACM's first underwritten public offering of Class A Common Stock of ACM registered under the U.S. Securities Act of 1933.

5.3 Purchaser hereby unconditionally and irrevocably grants to ACM a right of first refusal to purchase all, but not less than all, of any ACM Shares that Purchaser may propose to transfer in a Proposed Purchaser Transfer (*"Proposed Transfer Shares")*, at the same price and on the same terms and conditions as those offered to the Prospective Transferee.

5.4 If Purchaser proposes to make a Proposed Purchaser Transfer, Purchaser must deliver a Proposed Purchaser Transfer Notice to ACM not later than thirty days prior to the consummation of such Proposed Purchaser Transfer. Such Proposed Purchaser Transfer Notice shall contain the material terms and conditions (including price and form of consideration) of the Proposed Purchaser Transfer, the identity of the Prospective Transferee and the intended date of the Proposed Purchaser Transfer. To exercise its right of first refusal under this Section 5, ACM must deliver a written notice to Purchaser that ACM intends to exercise its right of first refusal as to all of the Proposed Transfer Shares with respect to the Proposed Purchaser Transfer within fifteen days after delivery of the Proposed Purchaser Transfer Notice (the *"ROFR Notice Period").*

5.5 If ACM does not exercise its right of first refusal in accordance with Section 5.4, Purchaser shall have the option to sell to the Prospective Transferee all, but not less than all, of the offered Proposed Transfer Shares on terms and conditions substantially similar to (and in no event more favorable than) the terms and conditions set forth in the Proposed Purchaser Transfer Notice, it being understood and agreed that (a) any future Proposed Purchaser Transfer shall remain subject to the terms and conditions of this Agreement, including this Section 5, and (b) such sale shall be consummated within one hundred and twenty days after receipt of the Proposed Purchaser Transfer Notice by ACM and, if such sale is not consummated within such one hundred and twenty day period, such sale shall again become subject to the right of first refusal on the terms set forth in this Section 5.

5.6 If the consideration proposed to be paid for the Proposed Transfer Shares is in property, services or other non-cash consideration, the fair market value of the consideration shall be as determined by an independent assessment agency agreed upon by ZSTVC and ACM. If ACM cannot for any reason pay for the Proposed Transfer Shares in the same form of non-cash consideration, ACM may pay the cash value equivalent thereof, as determined by an independent assessment agency agreed upon by ZSTVC and ACM. Any fees and expenses of an assessment agency incurred pursuant to this Section 5.6 shall be split evenly between ZSTVC and ACM. The closing of the purchase of Proposed Transfer Shares by ACM shall take place, and all payments from ACM shall have been delivered to Purchaser, by the later of (a) the date specified in the Proposed Purchaser Transfer Notice as the intended date of the Proposed Purchaser Transfer and (b) thirty days after delivery of the Proposed Purchaser Transfer Notice.

5.7 Any Proposed Purchaser Transfer not made in compliance with the requirements of this Agreement shall be null and void ab initio, shall not be recorded on the books of ACM or its transfer agent, and shall not be recognized by ACM. ACM and Purchaser acknowledge and agree that any breach of this Section 5 would result in substantial harm to the other party for which monetary damages alone could not adequately compensate. Therefore, the parties hereto unconditionally and irrevocably agree that any non-breaching party hereto shall be entitled to seek protective orders, injunctive relief, and other remedies available at law or in equity (including seeking specific performance or the rescission of purchases, sales and other transfers of Proposed Transfer Shares not made in strict compliance with this Agreement).

5.8 If Purchaser becomes obligated to sell any Proposed Transfer Shares to ACM under this Section 5 and fails to deliver such Proposed Transfer Shares in accordance with the terms of this Section 5, ACM may, at its option, in addition to all other remedies it may have, send to Purchaser the purchase price for such Proposed Transfer Shares as is herein specified and request that ACM effect such transfer on ACM's books any certificates, instruments, or book entry representing the Proposed Transfer Shares to be sold. For the avoidance of doubt, if Purchaser's failure to deliver such Proposed Transfer Shares in accordance with the terms of this Section 5 is due to the fault or negligence of ACM, this Section 5.8 shall not apply.

5.9 Notwithstanding anything to the contrary herein, the provisions of this Section 5.3 shall not apply to a transfer of Proposed Transfer Shares made to an Affiliate of Purchaser, *provided* that Purchaser shall deliver prior written notice to ACM of such pledge, gift or transfer and such shares of Proposed Transfer Shares shall at all times remain subject to the terms and restrictions set forth in this Agreement and such transferee shall, as a condition to such issuance, deliver a counterpart signature page to this Agreement as confirmation that such transferee shall be bound by all the terms and conditions of this Section 5 (but only with respect to the securities so transferred to the transferee), including the obligations with respect to Proposed Purchaser Transfers of such Proposed Transfer Shares.

6. Miscellaneous.

6.1 Termination. If any of the Closing Conditions specified in Section 2.3 and Section 2.4 fails to be satisfied or waived on or before September 20, 2017 (or such later date as may be mutually agreed upon in writing by ACM, ZSTVC and Purchaser), this Agreement shall automatically terminate and be of no further force and effect, except that Sections 6.2 through 6.13, together with any related definitions included elsewhere in this Agreement, shall survive the termination of this Agreement and the termination of this Agreement shall not affect any rights any party has with respect to the breach of this Agreement by another party prior to such termination.

6.2 Survival. Unless otherwise set forth in this Agreement, the representations and warranties of each party contained in this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of the other party.

6.3 Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

6.4 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware.

6.5 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.6 Construction. For the purpose of this Agreement:

(a) the titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement; unless otherwise indicated, any references in this Agreement to a Section refer to a Section of this Agreement;

(b) the words “include” and “including” as used in this Agreement shall not be construed so as to exclude any other thing not referred to or described;

(c) the word “or” is not exclusive;

(d) this Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing an instrument to be drafted; and

(e) all share and share-related information with respect to the ACM Shares (including the Purchase Price per share) shall be subject to equitable adjustment in the event of any stock dividend, stock split, reverse stock split or the like at the request of ACM’s underwriters.

6.7 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt and: (a) personal delivery to the party to be notified; (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day; (c) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (d) one business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on the signature page, or to such e-mail address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 6.7.

6.8 Attorneys' Fees. If any action at law or in equity (including arbitration) is necessary to enforce or interpret the terms of any of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

6.9 Amendments and Waivers. Any term of this Agreement may be amended or waived only with the written consent of ZSTVC, Purchaser and ACM.

6.10 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

6.11 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to either party under this Agreement, upon any breach or default of the other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of either party of any breach or default under this Agreement, or any waiver on the part of either party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to either party, shall be cumulative and not alternative.

6.12 Entire Agreement. This Agreement, together with the Framework Agreement, the Registration Rights Agreement, amended joint venture contract and amended articles of association of ACM Shanghai pursuant to Section 1.2 hereof, the Commitment of Performance issued by ACM to ZSTVC and Shanghai Pudong Newly Developed Industry Investment Co., Ltd. dated as of [August 19, 2017] and the Third Party Agreement signed by ACM, ZSTVC and Shanghai Pudong Newly Developed Industry Investment Co., Ltd. dated as of [August 19, 2017], constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

6.13 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to Singapore International Arbitration Centre for the purpose of any dispute arising out of or based upon this Agreement; and (b) agree not to commence any suit, action, dispute or other proceeding arising out of or based upon this Agreement except in Singapore International Arbitration Centre in accordance with the preceding clause (a).

6.14 Termination of Share Option Agreement. Upon the Closing, all provisions of, rights granted and covenants made in the Share Option Agreement with respect to the Series E Rights are hereby waived, released and superseded in their entirety and shall have no further force or effect.

[*Signature page follows*]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

ACM RESEARCH, INC.

By: /s/ David H. Wang
David H. Wang
President and Chief Executive Officer

Address:
42307 Osgood Road, Suite I
Fremont, CA 94539 USA

SHANGHAI ZHANGJIANG SCIENCE & TECHNOLOGY VENTURE CAPITAL CO., LTD.

By: /s/ Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd.
Name:
Title:

Address:

ZHANGJIANG AJ COMPANY LIMITED

By: /s/ Zhangjiang AJ Company Limited
Name:
Title:

Address:

SCHEDULE 1

Prohibited Transferees

Lam Research Corp.

DNS Electronics LLC

Tokyo Electron Ltd.

SEMES Co. Ltd.

Mujin Electronics Co., Ltd.

Beijing Sevenstar Science & Technology Co., Ltd.

SCHEDULE 2

Wire Transfer Information

Upon the Closing, Purchaser shall pay the Purchase Price in a lump sum to the following bank account of ACM:

Account Name:

Routing number:

Check account number:

Name of the Bank:

SWIFT Code for USD:

Swift Code for Foreign currency:

Exhibit 10.10

ACM RESEARCH, INC.

2016 OMNIBUS INCENTIVE PLAN

ACM RESEARCH, INC. sets forth herein the terms of its 2016 Omnibus Incentive Plan.

1. PURPOSE

The Plan is intended to enhance the ability of the Company and its Affiliates to attract and retain highly qualified officers, Non-employee Directors, employees, consultants and advisors, and to motivate such individuals to serve the Company and its Affiliates and to expend maximum effort to improve the business results and earnings of the Company, by providing to such persons an opportunity to acquire or increase a direct proprietary interest in the operations and future success of the Company. To this end, the Plan provides for the grant of stock options, stock appreciation rights, restricted stock, restricted stock units, unrestricted stock, other share-based awards and cash awards. Any of these awards may, but need not, be made as performance incentives to reward attainment of performance goals in accordance with the terms hereof.

2. DEFINITIONS

For purposes of interpreting the Plan and related documents (including Award Agreements), the following definitions shall apply:

2.1 "**Acquiror**" shall have the meaning set forth in **Section 15.2.1.**

2.2 "**Affiliate**" means any company or other trade or business that "controls," is "controlled by" or is "under common control with" the Company within the meaning of Rule 405 of Regulation C under the Securities Act, including any Subsidiary.

2.3 "**Award**" means a grant under the Plan of an Option, SAR, Restricted Stock, RSU, Other Share-based Award or cash award.

2.4 "**Award Agreement**" means a written agreement between the Company and a Grantee, or notice from the Company or an Affiliate to a Grantee that evidences and sets out the terms and conditions of an Award.

2.5 "**Board**" means the Board of Directors of the Company.

2.6 "**Cause**" shall be defined as that term is defined in the Grantee's offer letter or other applicable employment agreement; or, if there is no such definition, "Cause" means, as determined by the Company in its sole discretion and unless otherwise provided in the applicable Award Agreement: (a) the commission of any act by a Grantee constituting financial dishonesty against the Company or its Affiliates (which act would be chargeable as a crime under applicable law); (b) a Grantee's engaging in any other act of dishonesty, fraud, intentional misrepresentation, moral turpitude, illegality or harassment that would: (i) materially adversely affect the business or the reputation of the Company or any of its Affiliates with their respective current or prospective customers, suppliers, lenders or other third parties with whom such entity does or might do business or (ii) expose the Company or any of its Affiliates to a risk of civil or criminal legal damages, liabilities or penalties; (c) the repeated failure by a Grantee to follow the directives of the chief executive officer of the Company or any of its Affiliates or the Board; or (d) any material misconduct, violation of the Company's or Affiliates' policies, or willful and deliberate non-performance of duty by the Grantee in connection with the business affairs of the Company or its Affiliates. A Separation from Service for Cause shall be deemed to include a determination by the Company in its sole discretion following a Participant's Separation from Service that circumstances existing prior to such Separation from Service would have entitled the Company or an Affiliate to have terminated the Participant's service for Cause. All rights a Participant has or may have under the Plan shall be suspended automatically during the pendency of any investigation by the Company, or during any negotiations between the Company and the Participant, regarding any actual or alleged act or omission by the Participant of the type described in the applicable definition of Cause.

2.7 "**Change in Control**" shall have the meaning set forth in **Section 15.2.2.**

2.8 "**Code**" means the Internal Revenue Code of 1986.

2.9 "**Committee**" means the Compensation Committee of the Board, or such other committee as determined by the Board. The Compensation Committee of the Board may designate a subcommittee of its members to serve as the Committee (to the extent the Board has not designated another person, committee or entity as the Committee). Following the Initial Public Offering: (a) the Board shall cause the Committee to satisfy the applicable requirements of any securities exchange on which the Common Stock may then be listed; (b) for purposes of Awards to Covered Employees intended to constitute Performance Awards, to the extent required by Section 162(m), Committee means all of the members of the Compensation Committee who are "outside directors" within the meaning of Section 162(m); and (c) for purposes of Awards to Grantees who are subject to Section 16 of the Exchange Act, Committee means all of the members of the Compensation Committee who are "non-employee directors" within the meaning of Rule 16b-3 adopted under the Exchange Act.

2.10 "**Company**" means ACM Research, Inc., a Delaware corporation.

2.11 "**Common Stock**" means the Class A common stock, $0.0001 par value per share, of the Company.

2.12 "**Consultant**" means a consultant or advisor that provides bona fide services to the Company or any Affiliate and who qualifies as a consultant or advisor under Rule 701 of the Securities Act (during any period in which the Company is not a public company subject to the reporting requirements of the Exchange Act) or Form S-8 (during any period in which the Company is a public company subject to the reporting requirements of the Exchange Act).

2.13 "**Covered Employee**" means a Grantee who is a "covered employee" within the meaning of Section 162(m) as qualified by **Section 12.4**.

2.14 "**Disability**" shall be defined as that term is defined in the Grantee's offer letter or other applicable employment agreement; or, if there is no such definition, "Disability" means, as determined by the Company in its sole discretion and unless otherwise provided in the applicable Award Agreement, the Grantee is unable to perform each of the essential duties of such Grantee's position by reason of a medically determinable physical or mental impairment which is potentially permanent in character or which can be expected to last for a continuous period of not less than 12 months; *provided, however*, that, with respect to rules regarding expiration of an Incentive Stock Option following termination of the Grantee's employment, "Disability" means "permanent and total disability" as set forth in Code Section 22(e)(3).

2.15 "**Effective Date**" means December 28, 2016, which is the date on which the Plan was approved by the Board.

2.16 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

2.17 "**Exchange Act Person**" means any natural person, entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" shall not include (a) the Company or any Subsidiary, (b) any employee benefit plan of the Company or any Subsidiary or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary, (c) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (d) an entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of capital stock of the Company, or (e) any natural person, entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the date hereof, is the Owner, directly or indirectly, of securities of the Company representing more than fifty percent of the combined voting power of the Company's then-outstanding securities

2.18 "**Fair Market Value**" of a Share as of a particular date means (a) if the Common Stock is listed on a national securities exchange, the closing or last price of the Common Stock on the composite tape or other comparable reporting system for the applicable date, or if the applicable date is not a trading day, the trading day immediately preceding the applicable date, or (b) if the Common Stock is not then listed on a national securities exchange, or the value of the Common Stock is not otherwise determinable, such value as determined by the Board.

2.19 "**Grant Date**" means the latest to occur of (a) the date as of which the Board approves an Award, (b) the date on which the recipient of an Award first becomes eligible to receive an Award under Section 6 or (c) such other date as may be specified by the Board in the Award Agreement.

2.20 "**Grantee**" means a person who receives or holds an Award.

2.21 "**Holder**" means, with respect to any Issued Shares, the person holding such Issued Shares, including the initial Grantee or any Permitted Transferee.

2.22 "**Incentive Stock Option**" means an "incentive stock option" within the meaning of Code Section 422.

2.23 "**Initial Public Offering**" means the initial public offering of Shares pursuant to a registration statement (other than a Form S-8 or successor forms) filed with, and declared effective by, the SEC.

2.24 "**Issued Shares**" means, collectively, all outstanding Shares issued pursuant to Awards (including outstanding Shares of Restricted Stock prior to or after vesting and Shares issued in connection with the exercise of an Option or SAR).

2.25 "**New Shares**" shall have the meaning set forth in **Section 15.1.**

2.26 "**Non-employee Director**" means a member of the Board or the board of directors of an Affiliate, in each case who is not an officer or employee of the Company or any Affiliate.

2.27 "**Non-qualified Stock Option**" means an Option that is not an Incentive Stock Option.

2.28 "**Offered Shares**" shall have the meaning set forth in **Section 17.4.1.**

2.29 "**Offering**" shall have the meaning set forth in **Section 17.5.**

2.30 "**Option**" means an option to purchase one or more Shares pursuant to the Plan.

2.31 "**Option Price**" means the exercise price for each Share subject to an Option.

2.32 "**Other Share-based Awards**" means Awards consisting of Share units, or other Awards, valued in whole or in part by reference to, or otherwise based on, Shares.

2.33 "**Own**," "**Owned**," "**Owner**," "**Ownership**" means a person or entity shall be deemed to "**Own**," to have "**Owned**," to be the "**Owner**" of, or to have acquired "Ownership" of securities if such person or entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

2.34 "**Performance Award**" means an Award made subject to the attainment of performance goals (as described in **Section 12**) over a performance period of at least one year.

2.35 "**Performance-Based Compensation**" means "performance-based compensation" under Section 162(m).

2.36 "**Permitted Transferee**" means any of the following to whom a Holder may transfer Issued Shares hereunder (as set forth in **Section 17.11.2**): the Holder's spouse, children (natural or adopted), stepchildren or a trust for their sole benefit of which the Holder is the settlor; *provided*, *however*, that any such trust does not require or permit distribution of any Issued Shares during the term of the Plan unless subject to its terms. Upon the death of the Holder, the term Permitted Transferees shall also include such deceased Holder's estate, executors, administrators, personal representatives, heirs, legatees and distributees, as the case may be.

2.37 "**Plan**" means this ACM Research, Inc. 2016 Omnibus Incentive Plan.

2.38 "**Purchase Price**" means the purchase price for each Share pursuant to a grant of Restricted Stock.

2.39 "**Restricted Period**" shall have the meaning set forth in **Section 10.1.**

2.40 "**Restricted Stock**" means restricted Shares, awarded to a Grantee pursuant to **Section 10.**

2.41 "**Restricted Stock Unit**" or "**RSU**" means a bookkeeping entry representing the equivalent of Shares, awarded to a Grantee pursuant to **Section 10.**

2.42 "**SAR Exercise Price**" means the per Share exercise price of a SAR granted to a Grantee under Section 9.

2.43 "**SEC**" means the United States Securities and Exchange Commission.

2.44 "**Section 162(m)**" means Code Section 162(m).

2.45 "**Section 409A**" means Code Section 409A.

2.46 "**Securities Act**" means the Securities Act of 1933, as amended.

2.47 "**Separation from Service**" means the termination of the applicable Participant's employment with, and performance of services for, the Company and each Affiliate. Unless otherwise determined by the Company in its sole discretion, if a Participant's employment or board service with the Company or an Affiliate terminates but the Participant continues to provide services to the Company or an Affiliate in a nonemployee director capacity or as an employee, as applicable, such change in status shall not be deemed a Separation from Service. A Participant employed by, or performing services for, an Affiliate or a division of the Company or an Affiliate shall not be deemed to incur a Separation from Service if such Affiliate or division ceases to be an Affiliate or division of the Company, as the case may be, and the Participant immediately thereafter becomes an employee of (or service provider to), or member of the board of directors of, the Company or an Affiliate or a successor company or an affiliate or subsidiary thereof. Approved temporary absences from employment because of illness, vacation or leave of absence and transfers among the Company and its Affiliates shall not be considered Separations from Service. Notwithstanding the foregoing, with respect to any Award that constitutes nonqualified deferred compensation under Section 409A, "Separation from Service" shall mean a "separation from service" as defined under Section 409A.

2.48 "**Service Provider**" means an employee, officer, non-employee member of the Board or Consultant of the Company or an Affiliate.

2.49 "**Share**" means a share of Common Stock.

2.50 "**Stock Appreciation Right**" or "**SAR**" means a right granted to a Grantee pursuant to **Section 9.**

2.51 "**Stockholders**" means the stockholders of the Company.

2.52 "**Subsidiary**" means any "subsidiary corporation" of the Company within the meaning of Code Section 424(f).

2.53 "**Substitute Award**" means any Award granted in assumption of or in substitution for an award of a company or business acquired by the Company or an Affiliate or with which the Company or an Affiliate combines.

2.54 "**Ten Percent Stockholder**" means an individual who owns more than 10% of the total combined voting power of all classes of outstanding stock of the Company, its parent or any of its Subsidiaries. In determining stock ownership, the attribution rules of Code Section 424(d) shall be applied.

2.55 "**Termination Date**" means the date that is 10 years after the Effective Date, unless the Plan is earlier terminated by the Board under **Section 5.2.**

2.56 "**Transition Period**" means the period beginning with the consummation of an Initial Public Offering and ending as of the earlier of (a) the date of the first annual meeting of Stockholders at which directors are to be elected that occurs after the close of the third calendar year following the calendar year in which the Initial Public Offering occurs and (b) the expiration of the "reliance period" under Treasury Regulation Section 1.162-27(f)(2).

3. ADMINISTRATION OF THE PLAN

3.1 General

The Board shall have such powers and authorities related to the administration of the Plan as are consistent with the Company's certificate of incorporation and bylaws and applicable law. The Board shall have the power and authority to delegate its responsibilities hereunder to the Committee, which shall have full authority to act in accordance with its charter (as in effect from time to time), and with respect to the power and authority of the Board to act hereunder, all references to the Board shall be deemed to include a reference to the Committee, unless such power or authority is specifically reserved by the Board. Except as specifically provided in **Section 14** or as otherwise may be required by applicable law, regulatory requirement or the certificate of incorporation or the bylaws of the Company, the Board shall have full power and authority to take all actions and to make all determinations required or provided for under the Plan, any Award or any Award Agreement, and shall have full power and authority to take all such other actions and make all such other determinations not inconsistent with the specific terms and provisions of the Plan that the Board deems to be necessary or appropriate to the administration of the Plan. Following the Initial Public Offering, the Committee shall administer the Plan; provided, however, the Board shall retain the right to exercise the authority of the Committee to the extent consistent with applicable law and the applicable requirements of any securities exchange on which the Common Stock may then be listed. All actions, determinations and decisions by the Board or the Committee under the Plan or any Award Agreement, or with respect to any Award, shall be in the sole discretion of the Board and shall be final, binding and conclusive on all persons. Without limitation, the Board shall have full and final power and authority, subject to the other terms and conditions of the Plan, to:

(a) designate Grantees;

(b) determine the type or types of Awards to be made to Grantees;

(c) determine the number of Shares to be subject to an Award;

(d) establish the terms and conditions of each Award (including the Option Price of any Option, the nature and duration of any restriction or condition (or provision for lapse thereof) relating to the vesting, exercise, transfer, or forfeiture of an Award or the Shares subject thereto and any terms or conditions that may be necessary to qualify Options as Incentive Stock Options);

(e) prescribe the form of each Award Agreement; and

(f) amend, modify or supplement the terms of any outstanding Award, including the authority, in order to effectuate the purposes of the Plan, to modify Awards to foreign nationals or individuals who are employed outside the United States to recognize differences in local law, tax policy or custom.

3.2 Separation from Service for Cause; Clawbacks; Breach of Restrictive Covenants

3.2.1 Separation from Service for Cause

The Company may annul an Award if the Grantee incurs a Separation from Service for Cause.

3.2.2 Clawbacks

All awards, amounts or benefits received or outstanding under the Plan shall be subject to clawback, cancellation, recoupment, rescission, payback, reduction or other similar action in accordance with the terms of any Company clawback or similar policy or any applicable law related to such actions, as may be in effect from time to time. A Grantee's acceptance of an Award shall be deemed to constitute the Grantee's acknowledgement of and consent to the Company's application, implementation and enforcement of any

applicable Company clawback or similar policy that may apply to the Grantee, whether adopted prior to or following the Effective Date, and any provision of applicable law relating to clawback, cancellation, recoupment, rescission, payback or reduction of compensation, and the Grantee's agreement that the Company may take such actions as may be necessary to effectuate any such policy or applicable law, without further consideration or action.

3.2.3 Breach of Restrictive Covenants

Except as otherwise provided by the Committee, notwithstanding any provision of the Plan to the contrary, if a Participant breaches a non-competition, non-solicitation, non-disclosure, non-disparagement or other restrictive covenant set forth in an Award Agreement or any other agreement between the Participant and the Company or an Affiliate, whether during the Participant's service or after the Participant's Separation from Service, in addition to any other penalties or restrictions that may apply under any such agreement, state law or otherwise, the Participant shall forfeit or pay to the Company the following:

(a) any and all outstanding Awards granted to the Participant, including Awards that have become vested or exercisable;

(b) any shares held by the Participant in connection with the Plan that were acquired by the Participant after the Participant's Separation from Service and within the 12-month period immediately before the Participant's Separation from Service;

(c) the profit realized by the Participant from the exercise of any Options or SARs that the Participant exercised after the Participant's Separation from Service or within the 12-month period immediately before the Participant's Separation from Service, which profit is the difference between the Option Price of the Option or SAR Exercise Price of the SAR and the Fair Market Value of any shares or cash acquired by the Participant upon exercise of such Option or SAR; and

(d) the profit realized by the Participant from the sale, or other disposition for consideration, of any shares received by the Participant in connection with the Plan after the Participant's Separation from Service and within the 12-month period immediately before the Participant's Separation from Service and where such sale or disposition occurs in such similar time period.

3.3 Deferral Arrangement

The Board may permit or require the deferral of any Award payment into a deferred compensation arrangement, subject to such rules and procedures as it may establish and in accordance with Section 409A, which may include provisions for the payment or crediting of interest or dividend equivalents, including converting such credits into deferred Share units.

3.4 No Liability

No member of the Board or of the Committee shall be liable for any action or determination made in good faith with respect to the Plan, any Award or Award Agreement.

3.5 Book Entry

Notwithstanding any other provision of the Plan to the contrary, the Company may elect to satisfy any requirement under the Plan for the delivery of stock certificates through the use of book entry.

4. STOCK SUBJECT TO THE PLAN

4.1 Authorized Number of Shares

Subject to adjustment under **Section 15**, the aggregate number of Shares that may be initially issued pursuant to the Plan shall be equal to the sum of (a) 7,000,000 Shares and (b) an annual increase on the first day of

each year beginning in 2018 and ending in (and including) 2026 equal to the lesser of (i) 4% of the Shares outstanding (on an as converted basis) on the last day of the immediately preceding fiscal year and (ii) such smaller number of Shares as may be determined by the Board. A maximum of 7,000,000 Shares shall be available for issuance under Incentive Stock Options under the Plan; provided, however, that notwithstanding the foregoing, Shares added to the Plan pursuant to **Section 4.1(b)** shall be available for issuance as Incentive Stock Options only to the extent that making such Shares available for issuance as Incentive Stock Options would not cause any Incentive Stock Option to cease to qualify as such. To the extent permitted under applicable law and applicable stock exchange rules, Awards that provide for the delivery of Shares subsequent to the applicable grant date may be granted in excess of the limit set forth in this **Section 4.1** if such Awards provide for the forfeiture or cash settlement of such Awards to the extent that insufficient Shares remain under the share limit in this **Section 4.1** at the time that Shares would otherwise be issued in respect of such Award. Shares issued under the Plan may consist in whole or in part of authorized but unissued Shares, treasury Shares or Shares purchased on the open market or otherwise.

4.2 Share Counting

Any Award settled in cash shall not be counted as issued Shares for any purpose under the Plan. If any Award expires, or is terminated, surrendered or forfeited, in whole or in part, the unissued Shares covered by such Award shall again be available for the grant of Awards. If Shares issued pursuant to the Plan are repurchased by, or are surrendered or forfeited to the Company at no more than cost, such Shares shall again be available for the grant of Awards. If Shares issuable upon exercise, vesting or settlement of an Award, or Shares owned by a Grantee (which are not subject to any pledge or other security interest), are surrendered or tendered to the Company in payment of the Option Price or Purchase Price of an Award or any taxes required to be withheld in respect of an Award, in each case, in accordance with the terms and conditions of the Plan and any applicable Award Agreement, such surrendered or tendered Shares shall again be available for the grant of Awards. Substitute Awards shall not be counted against the number of Shares available for the grant of Awards.

4.3 Section 162(m) Limits

No later than the end of the Transition Period, the maximum number of Shares for each type of Other Share-based Award, and the maximum amount of cash for any cash-based Award, intended to qualify as Performance-Based Compensation granted to any Grantee in any specified period shall be established by the Company and approved by the Stockholders.

5. EFFECTIVE DATE; AMENDMENT and termination

5.1 Effective Date

The Plan is effective as of the Effective Date.

5.2 Amendment and Termination of the Plan

The Board may, at any time and from time to time, amend, suspend or terminate the Plan as to any Awards which have not been made. An amendment shall be contingent on approval of the Stockholders to the extent stated by the Board, required by applicable law or required by applicable securities exchange listing requirements. No Awards shall be made after the Termination Date. The applicable terms of the Plan, and any terms and conditions applicable to Awards granted prior to the Termination Date, shall survive the termination of the Plan and continue to apply to such Awards. No amendment, suspension or termination of the Plan shall, without the consent of the Grantee, materially impair rights or obligations under any Award theretofore awarded.

6. AWARD ELIGIBILITY AND LIMITATIONS

6.1 Service Providers

Subject to this **Section 6**, Awards may be made to any Service Provider as the Board may determine and designate from time to time.

6.2 Successive Awards

An eligible person may receive more than one Award, subject to such restrictions as are provided herein.

6.3 Stand-Alone, Additional, Tandem, and Substitute Awards

Awards may be granted either alone or in addition to, in tandem with, or in substitution or exchange for, any other Award or any award granted under another plan of the Company, any Affiliate or any business entity to be acquired by the Company or an Affiliate, or any other right of a Grantee to receive payment from the Company or any Affiliate. Such additional, tandem or substitute or exchange Awards may be granted at any time. If an Award is granted in substitution or exchange for another award, the Board shall have the right to require the surrender of such other award in consideration for the grant of the new Award. Subject to the requirements of applicable law, the Board may make Awards in substitution or exchange for any other award under another plan of the Company, any Affiliate or any business entity to be acquired by the Company or an Affiliate. In addition, Awards may be granted in lieu of cash compensation, including in lieu of cash amounts payable under other plans of the Company or any Affiliate, in which the value of Shares subject to the Award is equivalent in value to the cash compensation (for example, RSUs or Restricted Stock).

7. AWARD AGREEMENT

The grant of any Award may be contingent upon the Grantee executing an appropriate Award Agreement, in such form or forms as the Board shall from time to time determine. Without limiting the foregoing, an Award Agreement may be provided in the form of a notice which provides that acceptance of the Award constitutes acceptance of all terms of the Plan and the notice. Award Agreements granted from time to time or at the same time need not contain similar provisions but shall be consistent with the terms of the Plan. Each Award Agreement evidencing an Award of Options shall specify whether such Options are intended to be Non-qualified Stock Options or Incentive Stock Options, and in the absence of such specification such options shall be deemed Non-qualified Stock Options.

8. TERMS AND CONDITIONS OF OPTIONS

8.1 Option Price

The Option Price of each Option shall be fixed by the Board and stated in the related Award Agreement. The Option Price of each Option intended to be an Incentive Stock Option (except those that constitute Substitute Awards) shall be at least the Fair Market Value on the Grant Date; *provided, however*, that in the event that a Grantee is a Ten Percent Stockholder as of the Grant Date, the Option Price of an Option granted to such Grantee that is intended to be an Incentive Stock Option shall be not less than 110 percent of the Fair Market Value on the Grant Date. In no case shall the Option Price of any Option be less than the par value of a Share.

8.2 Vesting

Subject to **Section 8.3**, each Option shall become exercisable at such times and under such conditions (including performance requirements) as stated in the Award Agreement.

8.3 Term

Each Option shall terminate, and all rights to purchase Shares thereunder shall cease, upon the expiration of the Option term stated in the Award Agreement not to exceed 10 years from the Grant Date, or under such circumstances and on such date prior thereto as is set forth in the Plan or as may be fixed by the Board and stated in the related Award Agreement; *provided, however*, that in the event that the Grantee is a Ten Percent Stockholder, an Option granted to such Grantee that is intended to be an Incentive Stock Option at the Grant Date shall not be exercisable after the expiration of five years from its Grant Date.

8.4 Limitations on Exercise of Option

Notwithstanding any other provision of the Plan, in no event may any Option be exercised, in whole or in part, after the occurrence of an event which results in termination of the Option.

8.5 Method of Exercise

An Option that is exercisable may be exercised by the Grantee's delivery of a notice of exercise to the Company, setting forth the number of Shares with respect to which the Option is to be exercised, accompanied by full payment for the Shares. To be effective, notice of exercise must be made in accordance with procedures established by the Company from time to time.

8.6 Rights of Holders of Options

Unless otherwise provided in the applicable Award Agreement, an individual holding or exercising an Option shall have none of the rights of a Stockholder (for example, the right to receive cash or dividend payments or distributions attributable to the subject Shares or to direct the voting of the subject Shares) until the Shares covered thereby are fully paid and issued to him. Except as provided in **Section 15** or the related Award Agreement, no adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date of such issuance.

8.7 Delivery of Stock Certificates

Promptly after the exercise of an Option by a Grantee and the payment in full of the Option Price, such Grantee shall be entitled to the issuance of a stock certificate or certificates evidencing his or her ownership of the Shares subject to the Option.

8.8 Limitations on Incentive Stock Options

An Option shall constitute an Incentive Stock Option only (a) if the Grantee of such Option is an employee of the Company or any Subsidiary of the Company; (b) to the extent specifically provided in the related Award Agreement; and (c) to the extent that the aggregate Fair Market Value (determined at the time the Option is granted) of the Shares with respect to which all Incentive Stock Options held by such Grantee become exercisable for the first time during any calendar year (under the Plan and all other plans of the Grantee's employer and its Affiliates) does not exceed $100,000. This limitation shall be applied by taking Options into account in the order in which they were granted. No Option shall be treated as an Incentive Stock Option unless the Plan has been approved by the Stockholders in a manner intended to comply with the stockholder approval requirements of Code Section 422(b)(i); *provided* that any Option intended to be an Incentive Stock Option shall not fail to be effective solely on account of a failure to obtain such approval, but rather such Option shall be treated as a Non-qualified Stock Option unless and until such approval is obtained.

8.9 Early Exercise

An Option may, but need not, include a provision whereby the Grantee may elect at any time before the Grantee's Separation from Service to exercise the Option as to any part or all of the Shares subject to the Option prior to the full vesting of the Option. Any unvested Shares so purchased may be subject to a repurchase option in favor of the Company or to any other restriction the Board determines to be appropriate.

9. TERMS AND CONDITIONS OF STOCK APPRECIATION RIGHTS

9.1 Right to Payment

A SAR shall confer on the Grantee a right to receive, upon exercise thereof, the excess of (a) the Fair Market Value on the date of exercise over (b) the SAR Exercise Price. The Award Agreement for a SAR shall specify the SAR Exercise Price. SARs may be granted alone or in conjunction with all or part of an Option or at any subsequent time during the term of such Option or in conjunction with all or part of any other Award.

9.2 Other Terms

The Board shall determine at the Grant Date or thereafter, the time or times at which and the circumstances under which a SAR may be exercised in whole or in part (including based on achievement of performance goals and/or future service requirements), the time or times at which SARs shall cease to be or become exercisable following Separation from Service or upon other conditions, the method of exercise, whether or not a SAR shall be in tandem or in combination with any other Award and any other terms and conditions of any SAR.

9.3 Term of SARs

The term of a SAR granted under the Plan shall be determined by the Board; *provided*, *however*, that such term shall not exceed 10 years.

9.4 Payment of SAR Amount

Upon exercise of a SAR, a Grantee shall be entitled to receive payment from the Company (in cash or Shares, as set forth in the Award Agreement) in an amount determined by multiplying:

(a) the difference between the Fair Market Value on the date of exercise over the SAR Exercise Price; by

(b) the number of Shares with respect to which the SAR is exercised.

10. TERMS AND CONDITIONS OF RESTRICTED STOCK AND RESTRICTED STOCK UNITS

10.1 Restrictions

At the time of grant, the Board may establish a period of time (a "**Restricted Period**") and any additional restrictions including the satisfaction of corporate or individual performance objectives applicable to an Award of Restricted Stock or RSUs. Each Award of Restricted Stock or RSUs may be subject to a different Restricted Period and additional restrictions. Neither Restricted Stock nor RSUs may be sold, transferred, assigned, pledged or otherwise encumbered or disposed of during the Restricted Period or prior to the satisfaction of any other applicable restrictions.

10.2 Restricted Stock Certificates

The Company shall issue Shares, in the name of each Grantee to whom Restricted Stock has been granted, stock certificates or other evidence of ownership representing the total number of Shares of Restricted Stock granted to the Grantee, as soon as reasonably practicable after the Grant Date. The Board may provide in an Award Agreement that either (a) the Secretary of the Company shall hold such certificates for the Grantee's benefit until such time as the Restricted Stock is forfeited to the Company or the restrictions lapse or (b) such certificates shall be delivered to the Grantee; *provided*, *however*, that such certificates shall bear a legend or legends that comply with the applicable securities laws and regulations and make appropriate reference to the restrictions imposed under the Plan and the Award Agreement.

10.3 Rights of Holders of Restricted Stock

Unless otherwise provided in the applicable Award Agreement, holders of Restricted Stock shall have rights as Stockholders, including voting and dividend rights.

10.4 Rights of Holders of RSUs

10.4.1 Settlement of RSUs

RSUs may be settled in cash or Shares, as set forth in the Award Agreement. The Award Agreement shall also set forth whether the RSUs shall be settled (a) within the time period specified in Section 409A for short term deferrals or (b) otherwise within the requirements of Section 409A, in which case the Award Agreement shall specify upon which events such RSUs shall be settled.

10.4.2 Voting and Dividend Rights

Unless otherwise provided in the applicable Award Agreement, holders of RSUs shall not have rights as Stockholders, including voting or dividend or dividend equivalents rights.

10.4.3 Creditor's Rights

A holder of RSUs shall have no rights other than those of a general creditor of the Company. RSUs represent an unfunded and unsecured obligation of the Company, subject to the terms and conditions of the applicable Award Agreement.

10.5 Purchase of Restricted Stock

The Grantee shall be required, to the extent required by applicable law, to purchase the Restricted Stock from the Company at a Purchase Price equal to the greater of (a) the aggregate par value of the Shares represented by such Restricted Stock or (b) the Purchase Price, if any, specified in the related Award Agreement. If specified in the Award Agreement, the Purchase Price may be deemed paid by services already rendered. The Purchase Price shall be payable in a form described in **Section 11** or, if so determined by the Board, in consideration for past services rendered.

10.6 Delivery of Shares

Upon the expiration or termination of any Restricted Period and the satisfaction of any other conditions prescribed by the Board, the restrictions applicable to Shares of Restricted Stock or RSUs settled in Shares shall lapse, and, unless otherwise provided in the applicable Award Agreement, a stock certificate for such Shares shall be delivered, free of all such restrictions, to the Grantee or the Grantee's beneficiary or estate, as the case may be.

11. FORM OF PAYMENT FOR OPTIONS AND RESTRICTED STOCK

11.1 General Rule

Payment of the Option Price for the Shares purchased pursuant to the exercise of an Option or the Purchase Price for Restricted Stock shall be made in cash or in cash equivalents acceptable to the Company, except as provided in this **Section 11**.

11.2 Surrender of Shares

To the extent the Award Agreement so provides, payment of the Option Price for Shares purchased pursuant to the exercise of an Option or the Purchase Price for Restricted Stock may be made all or in part through the tender to the Company of Shares, which Shares shall be valued, for purposes of determining the extent to which the Option Price or Purchase Price for Restricted Stock has been paid thereby, at their Fair Market Value on the date of exercise or surrender. Notwithstanding the foregoing, in the case of an Incentive Stock Option, the right to make payment in the form of already-owned Shares may be authorized only at the time of grant.

11.3 Cashless Exercise

With respect to an Option only (and not with respect to Restricted Stock) following the Initial Public Offering, to the extent permitted by law and to the extent the Award Agreement so provides, payment of the Option Price may be made all or in part by delivery (on a form acceptable to the Company) of an irrevocable direction to a licensed securities broker acceptable to the Company to sell Shares and to deliver all or part of the sales proceeds to the Company in payment of the Option Price and any withholding taxes described in **Section 17.3**.

11.4 Other Forms of Payment

To the extent the Award Agreement so provides, payment of the Option Price or the Purchase Price for Restricted Stock may be made in any other form that is consistent with applicable laws, regulations and rules, including the Company's withholding of Shares otherwise due to the exercising Grantee.

12. TERMS AND CONDITIONS OF PERFORMANCE AWARDS

12.1 Performance Conditions

The right of a Grantee to exercise or receive a grant or settlement of any Award, and the timing thereof, may be subject to such performance conditions as may be specified by the Board. The Board may use such business criteria and other measures of performance as it may deem appropriate in establishing any performance conditions, and may reduce the amounts payable under any Award subject to performance conditions, except as limited under **Section 12.2** in the case of Performance-Based Compensation.

12.2 Performance Awards Granted to Designated Covered Employees

If and to the extent that the Board determines that a Performance Award to be granted to a Grantee who is designated by the Board as likely to be a Covered Employee should qualify as Performance-Based Compensation, the grant, exercise and/or settlement of such Performance Award shall be contingent upon achievement of pre-established performance goals and other terms set forth in this **Section 12.2**. Notwithstanding anything herein to the contrary, the Board may provide for Performance Awards to Covered Employees that are not intended qualify as Performance-Based Compensation.

12.2.1 Performance Goals Generally

The performance goals for Performance Awards shall consist of one or more business criteria and a targeted level or levels of performance with respect to each of such criteria, as specified by the Board consistent with this **Section 12.2**. Following the end of the Transition Period, performance goals shall be objective and shall otherwise meet the requirements of Section 162(m), including the requirement that the level or levels of performance targeted by the Board result in the achievement of performance goals being "substantially uncertain." The Board may determine that Performance Awards shall be granted, exercised and/or settled upon achievement of any one performance goal or that two or more of the performance goals must be achieved as a condition to grant, exercise and/or settlement of the Performance Awards. Performance goals may be established on a Company-wide basis, or with respect to one or more business units, divisions, Affiliates or business segments, as applicable. Performance goals may be absolute or relative (to the performance of one or more comparable companies or indices). Measurement of performance goals may exclude the impact of charges for restructuring, discontinued operations and other extraordinary, unusual or non-recurring items, and the cumulative effects of tax or accounting changes (each as defined by generally accepted accounting principles and as identified in the Company's financial statements or other SEC filings). Performance goals may differ for Performance Awards granted to any one Grantee or to different Grantees.

12.2.2 Business Criteria

One or more of the following business criteria for the Company, on a consolidated basis, and/or specified Affiliates or business units of the Company (except with respect to the total stockholder return and earnings per share criteria), shall be used exclusively by the Board in establishing performance goals for Performance Awards: (a) cash flow; (b) earnings per share, as adjusted for any stock split, stock dividend or other recapitalization; (c) earnings measures; (d) return on equity; (e) total stockholder return; (f) share price performance, as adjusted for any stock split, stock dividend or other recapitalization; (g) return on capital; (h) revenue; (i) income; (j) profit margin; (k) return on operating revenue; (l) brand recognition or acceptance; (m) customer satisfaction; (n) productivity; (o) expense targets; (p) market share; (q) cost control measures; (r) balance sheet metrics; (s) strategic initiatives; (t) implementation, completion or attainment of measurable objectives with respect to recruitment or retention of personnel or employee satisfaction; or (u) any other business criteria established by the Board; *provided*, *however*, that such business criteria shall include any derivations of business criteria listed above (e.g., income shall include pre-tax income, net income and operating income).

12.2.3 Timing for Establishing Performance Goals

Following the Transition Period, performance goals shall be established not later than 90 days after the beginning of any performance period applicable to Performance Awards, or at such other date as may be required or permitted for Performance-Based Compensation.

12.2.4 Settlement of Performance Awards; Other Terms

Settlement of Performance Awards may be in cash, Shares, other Awards or other property. The Board may reduce the amount of a settlement otherwise to be made in connection with such Performance Awards.

12.3 Written Determinations

All determinations by the Board as to the establishment of performance goals, the amount of any Performance Award pool or potential individual Performance Awards and the achievement of performance goals relating to Performance Awards, shall be made in writing in the case of any Award intended to qualify as Performance-Based Compensation to the extent required by Section 162(m). To the extent permitted by Section 162(m), the Board may delegate any responsibility relating to Performance Awards.

12.4 Status of Section 12.2 Awards under Section 162(m)

The provisions of this **Section 12.4** are applicable following the Transition Period. The validity and exercisability of any and all Awards that are intended to qualify as Performance-Based Compensation granted after the Transition Period are contingent upon approval of the Plan by the Stockholders in a manner intended to comply with the stockholder approval requirements of Section 162(m). It is the intent of the Company that Performance Awards under **Section 12.2** granted to persons who are designated by the Board as likely to be Covered Employees within the meaning of Section 162(m) shall, if so designated by the Board, qualify as Performance-Based Compensation. Accordingly, the terms of **Section 12.2**, including the definitions of Covered Employee and other terms used therein, shall be interpreted in a manner consistent with Section 162(m). The foregoing notwithstanding, because the Board cannot determine with certainty whether a given Grantee will be a Covered Employee with respect to a fiscal year that has not yet been completed, the term Covered Employee as used herein shall mean only a person designated by the Board, at the time of grant of Performance Awards, as likely to be a Covered Employee with respect to that fiscal year. If any provision of the Plan or any agreement relating to such Performance Awards does not comply or is inconsistent with the requirements of Section 162(m), such provision shall be construed or deemed amended to the extent necessary to conform to such requirements.

13. OTHER SHARE-BASED AWARDS

13.1 Grant of Other Share-based Awards

Other Share-based Awards may be granted either alone or in addition to or in conjunction with other Awards. Other Share-based Awards may be granted in lieu of other cash or other compensation to which a Service Provider is entitled from the Company or may be used in the settlement of amounts payable in Shares under any other compensation plan or arrangement of the Company, including any other Company incentive compensation plan. The Board shall determine the persons to whom and the time or times at which such Awards will be made, the number of Shares to be granted pursuant to such Awards, and all other terms and conditions of such Awards. Unless the Board determines otherwise, any such Award shall be confirmed by an Award Agreement, which shall contain such provisions as the Board determines to be necessary or appropriate to carry out the intent of the Plan with respect to such Award.

13.2 Terms of Other Share-based Awards

Any Common Stock subject to Awards made under this **Section 13** may not be sold, assigned, transferred, pledged or otherwise encumbered prior to the date on which the Shares are issued, or, if later, the date on which any applicable restriction, performance or deferral period lapses.

14. REQUIREMENTS OF LAW

14.1 General

The Company shall not be required to sell or issue any Shares under any Award if the sale or issuance of such Shares would constitute a violation by the Grantee, any other individual exercising an Option or the Company of any provision of any law or regulation of any governmental authority, including any federal or state securities laws or regulations. If at any time the Board determines that the listing, registration or qualification of any Shares subject to an Award upon any securities exchange or under any governmental regulatory body is necessary or desirable as a condition of, or in connection with, the issuance or purchase of Shares hereunder, no Shares may be issued or sold to the Grantee or any other individual exercising an Option pursuant to such Award unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Company, and any delay caused thereby shall in no way affect the date of termination of the Award. Specifically, in connection with the Securities Act, upon the exercise of any Option or the delivery of any Shares underlying an Award, unless a registration statement under such Act is in effect with respect to the Shares covered by such Award, the Company shall not be required to sell or issue such Shares unless the Board has received evidence satisfactory to it that the Grantee or any other individual exercising an Option may acquire such Shares pursuant to an exemption from registration under the Securities Act. The Company may, but shall in no event be obligated to, register any securities covered hereby pursuant to the Securities Act. The Company shall not be obligated to take any affirmative action in order to cause the exercise of an Option or the issuance of Shares pursuant to the Plan to comply with any law or regulation of any governmental authority. As to any jurisdiction that expressly imposes the requirement that an Option shall not be exercisable until the Shares covered by such Option are registered or are exempt from registration, the exercise of such Option (under circumstances in which the laws of such jurisdiction apply) shall be deemed conditioned upon the effectiveness of such registration or the availability of such an exemption. The Committee may require the Participant to sign such additional documentation, make such representations and furnish such information as it may consider appropriate in connection with the grant of Awards or issuance or delivery of Shares in compliance with applicable laws, rules and regulations.

14.2 Rule 16b-3

During any time when the Company has a class of equity security registered under Section 12 of the Exchange Act, it is the intent of the Company that Awards and the exercise of Options will qualify for the exemption provided by Rule 16b-3 under the Exchange Act. To the extent that any provision of the Plan or action by the Board or Committee does not comply with the requirements of Rule 16b-3, it shall be deemed inoperative to the extent permitted by law and deemed advisable by the Board, and shall not affect the validity of the Plan. In the event that Rule 16b-3 is revised or replaced, the Board may modify the Plan in any respect necessary to satisfy the requirements of, or to take advantage of any features of, the revised exemption or its replacement.

15. EFFECT OF CHANGES IN CAPITALIZATION

15.1 Adjustments for Changes in Capital Structure

Subject to any required action by the Stockholders, in the event of any change in the Common Stock effected without receipt of consideration by the Company, whether through merger, consolidation, reorganization, reincorporation, recapitalization, reclassification, stock dividend, stock split, reverse stock split, split-up, split-off, spin-off, combination of shares, exchange of shares or similar change in the capital structure of the Company, or in the event of payment of a dividend or distribution to the Stockholders in a form other than Shares (excepting normal cash dividends) that has a material effect on the Fair Market Value, appropriate and proportionate adjustments shall be made in the number and class of shares subject to the Plan and to any outstanding Awards, and in the Option Price, SAR Exercise Price or Purchase Price per Share of any outstanding Awards in order to prevent dilution or enlargement of Grantees' rights under the Plan. For purposes of the foregoing, conversion of any convertible securities of the Company shall not be treated as "effected without receipt of consideration by the Company." If a majority of the Shares which are of the same class as the Shares that are subject to outstanding Awards are exchanged for, converted into, or otherwise become (whether or not pursuant to a Change in Control) shares of another corporation (the "**New Shares**"), the Board may unilaterally amend the outstanding Awards to provide that such Awards are for New Shares. In the event of any such amendment, the number of Shares subject to, and the Option Price, SAR Exercise Price or Purchase Price per Share of, the outstanding Awards shall be adjusted in a fair

and equitable manner. Any fractional share resulting from an adjustment pursuant to this **Section 15.1** shall be rounded down to the nearest whole number and the Option Price, SAR Exercise Price or Purchase Price per share shall be rounded up to the nearest whole cent. In no event may the exercise price of any Award be decreased to an amount less than the par value, if any, of the stock subject to the Award. The Board may also make such adjustments in the terms of any Award to reflect, or related to, such changes in the capital structure of the Company or distributions as it deems appropriate. Adjustments determined by the Board pursuant to this **Section 15.1** shall be made in accordance with Section 409A to the extent applicable.

15.2 Change in Control

15.2.1 Consequences of a Change in Control

Subject to the requirements and limitations of Section 409A if applicable, the Board may provide for any one or more of the following in connection with a Change in Control, which such actions need not be the same for all Grantees:

(a) **Accelerated Vesting.** The Board may provide in any Award Agreement, or in the event of a Change in Control may take such actions as it deems appropriate to provide, for the acceleration of the exercisability, vesting and/or settlement in connection with such Change in Control of each or any outstanding Award or portion thereof and Shares acquired pursuant thereto upon such terms and conditions, including a Grantee's Separation from Service prior to, upon, or following such Change in Control, to such extent as determined by the Board.

(b) **Assumption, Continuation or Substitution.** In the event of a Change in Control, the surviving, continuing, successor or purchasing corporation or other business entity or parent thereof, as the case may be (the "**Acquiror**"), may, without the consent of any Grantee, either assume or continue the Company's rights and obligations under each or any Award or portion thereof outstanding immediately prior to the Change in Control or substitute for each or any such outstanding Award or portion thereof a substantially equivalent award with respect to the Acquiror's stock, as applicable. For purposes of this **Section 15.2.1**, an Award denominated in Shares shall be deemed assumed if, following the Change in Control, the Award confers the right to receive, subject to the terms and conditions of the Plan and the applicable Award Agreement, for each Share subject to the Award immediately prior to the Change in Control, the consideration (whether stock, cash, other securities or property or a combination thereof) to which a Stockholder on the effective date of the Change in Control was entitled; *provided*, *however*, that if such consideration is not solely common stock of the Acquiror, the Board may, with the consent of the Acquiror, provide for the consideration to be received upon the exercise or settlement of the Award, for each Share subject to the Award, to consist solely of common stock of the Acquiror equal in Fair Market Value to the per Share consideration received by Stockholders pursuant to the Change in Control. If any portion of such consideration may be received by Stockholders pursuant to the Change in Control on a contingent or delayed basis, the Board may determine such Fair Market Value as of the time of the Change in Control on the basis of the Board's estimate of the present value of the probable future payment of such consideration. Any Award or portion thereof which is neither assumed or continued by the Acquiror in connection with the Change in Control nor exercised or settled as of the time of consummation of the Change in Control shall terminate and cease to be outstanding effective as of the time of consummation of the Change in Control.

(c) **Cash-Out of Awards**. The Board may, without the consent of any Grantee, determine that, upon the occurrence of a Change in Control, each or any Award or a portion thereof outstanding immediately prior to the Change in Control and not previously exercised or settled shall be canceled in exchange for a payment with respect to each vested Share (and each unvested Share, if so determined by the Board) subject to such canceled Award

in (i) cash, (ii) stock of the Company or of a corporation or other business entity a party to the Change in Control or (iii) other property which, in any such case, shall be in an amount having a Fair Market Value equal to the Fair Market Value of the consideration to be paid per Share in the Change in Control, reduced by the exercise or purchase price per Share, if any, under such Award. If any portion of such consideration may be received by Stockholders pursuant to the Change in Control on a contingent or delayed basis, the Board may determine such Fair Market Value as of the time of the Change in Control on the basis of the Board's estimate of the present value of the probable future payment of such consideration. In the event such determination is made by the Board, the amount of such payment (reduced by applicable withholding taxes, if any) shall be paid to Grantees in respect of the vested portions of their canceled Awards as soon as practicable following the date of the Change in Control and in respect of the unvested portions of their canceled Awards in accordance with the vesting schedules applicable to such Awards. For avoidance of doubt, if the amount determined pursuant to this Section 15.2.1(c) for an Option or SAR is zero or less, the affected Option or SAR may be cancelled without any payment therefore.

15.2.2 Change in Control Defined

Unless other provided in the applicable Award Agreement, a "**Change in Control**" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events following the Effective Date:

(a) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than fifty percent of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction; provided that, notwithstanding the foregoing, a Change in Control shall not be deemed to occur (i) on account of the acquisition of securities of the Company directly from the Company, (ii) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities or (iii) solely because the level of Ownership held by any Exchange Act Person (the "**Subject Person**") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(b) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (i) outstanding voting securities representing more than fifty percent of the combined outstanding voting power of the surviving entity in such merger, consolidation or similar transaction or (ii) more than fifty percent of the combined outstanding voting power of the parent of the surviving entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(c) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and the Subsidiaries, other

than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and the Subsidiaries to an entity, more than fifty percent of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(d) individuals who, on the date hereof, are members of the Board (the "**Incumbent Board**") cease for any reason to constitute at least a majority of the members of the Board; provided, however, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Agreement, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing, if it is determined that an Award is subject to the requirements of Section 409A and payable upon a Change in Control, the Company will not be deemed to have undergone a Change in Control for purposes of the Plan unless the Company is deemed to have undergone a "change in control event" pursuant to the definition of such term in Section 409A.

15.3 Adjustments

Adjustments under this **Section 15** related to Shares or other securities of the Company shall be made by the Board. No fractional Shares or other securities shall be issued pursuant to any such adjustment, and any fractions resulting from any such adjustment shall be eliminated in each case by rounding downward to the nearest whole Share.

16. No Limitations on Company

The making of Awards shall not affect or limit in any way the right or power of the Company to make adjustments, reclassifications, reorganizations or changes of its capital or business structure or to merge, consolidate, dissolve or liquidate, or to sell or transfer all or any part of its business or assets.

17. TERMS APPLICABLE GENERALLY TO AWARDS GRANTED UNDER THE PLAN

17.1 Disclaimer of Rights

No provision in the Plan or in any Award Agreement shall be construed to confer upon any individual the right to remain in the employ or service of the Company or any Affiliate, or to interfere in any way with any contractual or other right or authority of the Company or any Affiliate either to increase or decrease the compensation or other payments to any individual at any time, or to terminate any employment or other relationship between any individual and the Company or any Affiliate. In addition, notwithstanding anything contained in the Plan to the contrary, unless otherwise provided in the applicable Award Agreement, no Award granted under the Plan shall be affected by any change of duties or position of the Grantee, so long as such Grantee continues to be a Service Provider. The obligation of the Company to pay any benefits pursuant to the Plan shall be interpreted as a contractual obligation to pay only those amounts described herein, in the manner and under the conditions prescribed herein. The Plan shall in no way be interpreted to require the Company to transfer any amounts to a third party trustee or otherwise hold any amounts in trust or escrow for payment to any Grantee or beneficiary under the terms of the Plan.

17.2 Nonexclusivity of the Plan

Neither the adoption of the Plan nor the submission of the Plan to the Stockholders for approval shall be construed as creating any limitations upon the right or authority of the Board or its delegate to adopt such other compensation arrangements as the Board or its delegate determines desirable.

17.3 Withholding Taxes

The Company or an Affiliate, as the case may be, shall have the right to deduct from payments of any kind otherwise due to a Grantee any federal, state or local taxes of any kind required by law to be withheld (a) with respect to the vesting of or other lapse of restrictions applicable to an Award, (b) upon the issuance of any Shares upon the exercise of an Option or SAR or (c) otherwise due in connection with an Award. At the time of such vesting, lapse or exercise, the Grantee shall pay to the Company or the Affiliate, as the case may be, any amount that the Company or the Affiliate may reasonably determine to be necessary to satisfy such withholding obligation. Subject to the prior approval of the Board, the Grantee may elect to satisfy such obligations, in whole or in part, (i) by causing the Company or the Affiliate to withhold the minimum required number of Shares otherwise issuable to the Grantee as may be necessary to satisfy such withholding obligation or (ii) by delivering to the Company or the Affiliate Shares already owned by the Grantee. The Shares so delivered or withheld shall have an aggregate Fair Market Value equal to such withholding obligations. The Fair Market Value of the Shares used to satisfy such withholding obligation shall be determined by the Company or the Affiliate as of the date that the amount of tax to be withheld is to be determined. A Grantee who has made an election pursuant to this **Section 17.3** may satisfy his or her withholding obligation only with Shares that are not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.

17.4 Right of First Refusal; Right to Repurchase

17.4.1 Right of First Refusal

Unless otherwise provided in the applicable Award Agreement, stockholders' agreement or other agreement to which a Holder is a party, at any time prior to registration by the Company of its Common Stock under Section 12 of the Exchange Act, in the event that the Holder desires at any time to sell or otherwise transfer all or any part of such Holder's Issued Shares (to the extent vested), the Holder first shall give written notice to the Company of the Holder's intention to make such transfer. Such notice shall state the number of Issued Shares which the Holder proposes to sell (the "**Offered Shares**"), the price and the terms at which the proposed sale is to be made and the name and address of the proposed transferee. At any time within 30 days after the receipt of such notice by the Company, the Company or its assigns may elect to purchase all or any portion of the Offered Shares at the price and on the terms offered by the proposed transferee and specified in the notice. The Company or its assigns shall exercise this right by mailing or delivering written notice to the Holder within the foregoing 30-day period. If the Company or its assigns elect to exercise its purchase rights under this **Section 17.4.1**, the closing for such purchase shall, in any event, take place within 45 days after the receipt by the Company of the initial notice from the Holder. In the event that the Company or its assigns do not elect to exercise such purchase right, or in the event that the Company or its assigns do not pay the full purchase price within such 45-day period, the Holder may, within 60 days thereafter, sell the Offered Shares to the proposed transferee at the same price and on the same terms as specified in the Holder's notice. Any Issued Shares purchased by such proposed transferee shall continue to be subject to the terms of the Plan. Any Issued Shares not sold to the proposed transferee shall remain subject to the Plan.

17.4.2 Right of Repurchase

Unless otherwise provided in the applicable Award Agreement, stockholders' agreement or other agreement to which a Grantee is a party, at any time prior to registration by the Company of its Common Stock under Section 12 of the Exchange Act, in the case of any Grantee whose Separation from Service is for Cause, or where the Grantee has, in the Board's reasonable determination, taken any action prior to or following his Separation from Service which would have constituted grounds for Cause, the Company shall have the right, exercisable at any time and from time to time thereafter, to repurchase from the Grantee (or any successor in interest by purchase, gift or other mode of transfer) any Shares issued to such Grantee under the Plan for the purchase price paid by the Grantee for such Shares (or the Fair Market Value of such Common Stock at the time of repurchase, if lower).

17.5 Market Standoff Requirement

Unless otherwise provided in the applicable Award Agreement, stockholders' agreement or other agreement to which a Grantee is a party, in connection with any underwritten public offering of its Common Stock

("**Offering**") and upon request of the Company or the underwriters managing the Offering, Grantees shall not be permitted to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise directly or indirectly dispose of any Shares delivered under the Plan (other than those Shares included in the Offering) without the prior written consent of the Company or such underwriters, as the case may be, for such period of time from the effective date of the registration statement with respect to such Offering as may be requested by the Company or such managing underwriters and to execute an agreement reflecting the foregoing as may be requested by the underwriters in connection with such Offering.

17.6 Other Provisions; Legends

Each Award Agreement may contain such other terms and conditions not inconsistent with the Plan as may be determined by the Board. Any stock certificates for any Shares issued under the Plan shall be subject to such stop-transfer orders and other restrictions as the Company in its sole discretion may deem advisable under the rules, regulations and other requirements of the SEC, any securities exchange on which the Common Stock may then be listed and any applicable federal or state securities law, and the Company in its sole discretion may cause a legend or legends to be placed on such certificates to make appropriate reference to such restrictions.

17.7 Severability

If any provision of the Plan or any Award Agreement shall be determined to be illegal or unenforceable by any court of law in any jurisdiction, the remaining provisions hereof and thereof shall be severable and enforceable in accordance with their terms, and all provisions shall remain enforceable in any other jurisdiction.

17.8 Governing Law

The Plan shall be governed by and construed in accordance with the internal laws of the State of Delaware without regard to the principles of conflicts of law thereof or principles of conflicts of laws of any other jurisdiction that could cause the application of the laws of any jurisdiction other than the State of Delaware. For purposes of resolving any dispute that arises directly or indirectly in connection with the Plan, each Participant, by virtue of receiving an Award, shall be deemed to have submitted to and consented to the exclusive jurisdiction of the State of Delaware and to have agreed that any related litigation shall be conducted solely in the state courts of Delaware and any federal court located in the State of Delaware, where the Plan is made and/or to be performed, and no other courts.

17.9 Section 409A

The Plan is intended to comply with Section 409A to the extent subject thereto, and, accordingly, to the maximum extent permitted, the Plan shall be interpreted and administered to be in compliance therewith. Any payments described in the Plan that are due within the "short-term deferral period" as defined in Section 409A shall not be treated as deferred compensation unless applicable laws require otherwise. Notwithstanding anything to the contrary in the Plan, to the extent required to avoid accelerated taxation and tax penalties under Section 409A, amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to the Plan during the six-month period immediately following the Grantee's Separation from Service shall instead be paid on the first payroll date after the six-month anniversary of the Grantee's Separation from Service (or the Grantee's death, if earlier). Notwithstanding the foregoing, neither the Company nor the Committee shall have any obligation to take any action to prevent the assessment of any excise tax or penalty on any Grantee under Section 409A and neither the Company nor the Board shall have any liability to any Grantee for such tax or penalty.

17.10 Separation from Service

The Board shall determine the effect of a Separation from Service upon Awards, and such effect shall be set forth in the applicable Award Agreement. Without limiting the foregoing, the Board may provide in the Award Agreements at the time of grant, or any time thereafter with the consent of the Grantee, the actions that will be taken upon the occurrence of a Separation from Service, including accelerated vesting or termination, depending upon the circumstances surrounding the Separation from Service.

17.11 Transferability of Awards and Issued Shares

17.11.1 Transfers in General

No Award shall be assignable or transferable by the Grantee to whom it is granted, other than by will, the laws of descent and distribution or pursuant to a domestic relations order by a court of competent jurisdiction, and, during the lifetime of the Grantee, only the Grantee personally (or the Grantee's personal representative) may exercise rights under the Plan.

17.11.2 Issued Shares

No Issued Shares shall be sold, assigned, transferred, pledged, hypothecated, given away or in any other manner disposed of or encumbered, whether voluntarily or by operation of law, unless (a) such transfer is in compliance with the terms of the applicable Award, all applicable securities laws, and with the terms and conditions of the Plan (including **Sections 17.4** and **17.5** and this **Section 17.11.2**), (b) such transfer does not cause the Company to become subject to the reporting requirements of the Exchange Act, and (c) the transferee consents in writing to be bound by the terms and conditions of the Plan (including **Sections 17.4** and **17.5** and this **Section 17.11.2**). In connection with any proposed transfer, the Board may require the transferor to provide at the transferor's own expense an opinion of counsel to the transferor, satisfactory to the Board, that such transfer is in compliance with all foreign, federal and state securities laws. Any attempted disposition of Issued Shares not in accordance with the terms and conditions of this **Section 17.11.2** shall be null and void, and the Company shall not reflect on its records any change in record ownership of any Issued Shares as a result of any such disposition, shall otherwise refuse to recognize any such disposition and shall not in any way give effect to any such disposition of Issued Shares. Subject to the foregoing general provisions, and unless otherwise provided in the applicable Award Agreement, Issued Shares may be transferred pursuant to the following specific terms and conditions:

(i) **Transfers to Permitted Transferees**. The Holder may sell, assign, transfer or give away any or all of the Issued Shares to Permitted Transferees; *provided, however,* that following such sale, assignment or other transfer, such Issued Shares shall continue to be subject to the terms of the Plan (including **Sections 17.4** and **17.5** and this **Section 17.11.2**) and such Permitted Transferee(s) shall, as a condition to any such transfer, deliver a written acknowledgment to that effect to the Company.

(ii) **Transfers upon Death**. Upon the death of the Holder, any Issued Shares then held by the Holder at the time of such death and any Issued Shares acquired thereafter by the Holder's legal representative shall be subject to the terms and conditions of the Plan, and the Holder's estate, executors, administrators, personal representatives, heirs, legatees and distributees shall be obligated to convey such Issued Shares to the Company or its assigns under the terms contemplated hereby.

17.12 Dividends and Dividend Equivalent Rights

If specified in the Award Agreement, the recipient of an Award may be entitled to receive, currently or on a deferred basis, dividends or dividend equivalents with respect to the Common Stock or other securities covered by an Award. The terms and conditions of a dividend equivalent right may be set forth in the Award Agreement. Dividend equivalents credited to a Grantee may be paid currently or may be deemed to be reinvested in additional Shares or other securities of the Company at a price per unit equal to the Fair Market Value on the date that such dividend was paid to Stockholders.

17.13 Data Protection

A Participant's acceptance of an Award shall be deemed to constitute the Participant's acknowledgement of and consent to the collection and processing of personal data relating to the Participant so that the Company and the Affiliates can fulfill their obligations and exercise their rights under the Plan and generally administer and manage the Plan. This data shall include data about participation in the Plan and Shares offered or received, purchased or sold under the Plan and other appropriate financial and other data (such as the date on which the Awards were granted) about the Participant and the Participant's participation in the Plan.

17.14 Section 25102(o) of the California Corporations Code

This Plan is intended to comply with Section 25102(o) of the California Corporations Code. In that regard, to the extent required by Section 25102(o), (a) the terms of any Options or SARs, to the extent vested and exercisable upon a Grantee's Separation from Service, shall include any minimum exercise periods following Separation from Service specified by Section 25102(o), and (b) any repurchase right of the Company with respect to shares of Stock issued under the Plan shall include a minimum 90-day notice requirement. Any provision of this Plan which is inconsistent with Section 25102(o) shall, without further act or amendment by the Company or the Board, be reformed to comply with the requirements of Section 25102(o).

17.15 Plan Construction

In the Plan, unless otherwise stated, the following uses apply: (a) references to a statute or law refer to the statute or law and any amendments and any successor statutes or laws, and to all valid and binding governmental regulations, court decisions and other regulatory and judicial authority issued or rendered thereunder, as amended, or their successors, as in effect at the relevant time; (b) in computing periods from a specified date to a later specified date, the words "from" and "commencing on" (and the like) mean "from and including," and the words "to," "until" and "ending on" (and the like) mean "to and including"; (c) indications of time of day shall be based upon the time applicable to the location of the principal headquarters of the Company; (d) the words "include," "includes" and "including" (and the like) mean "include, without limitation," "includes, without limitation" and "including, without limitation" (and the like), respectively; (e) all references to articles and sections are to articles and sections in the Plan; (f) all words used shall be construed to be of such gender or number as the circumstances and context require; (g) the captions and headings of articles and sections have been inserted solely for convenience of reference and shall not be considered a part of the Plan, nor shall any of them affect the meaning or interpretation of the Plan or any of its provisions; (h) any reference to an agreement, plan, policy, form, document or set of documents, and the rights and obligations of the parties under any such agreement, plan, policy, form, document or set of documents, shall mean such agreement, plan, policy, form, document or set of documents as amended from time to time, and any and all modifications, extensions, renewals, substitutions or replacements thereof; and (i) all accounting terms not specifically defined shall be construed in accordance with GAAP.

Adopted by the Board: December 28, 2016
Approved by the Stockholders: , 2017
Scheduled Termination Date: December 27, 2026

NOTICE OF GRANT OF INCENTIVE STOCK OPTION

ACM RESEARCH, INC.
2016 OMNIBUS INCENTIVE PLAN

FOR GOOD AND VALUABLE CONSIDERATION, ACM Research, Inc. (the "**Company**") hereby grants, pursuant to the provisions of the ACM Research, Inc. 2016 Omnibus Incentive Plan (the "**Plan**"), to the Grantee designated in this Notice of Grant of Incentive Stock Option ("**Notice of Grant**") an Incentive Stock Option to purchase the number of Shares set forth in this Notice of Grant (the "**Option**"), subject to certain terms and conditions as outlined below in this Notice of Grant and the additional terms and conditions set forth in the attached Terms and Conditions of Stock Option (together with this Notice of Grant, the "**Award Agreement**").

Grantee:	[*Name*]
Type of Option:	Incentive Stock Option
Grant Date:	[*Date*]
Number of Shares Purchasable:	*[####]*
Option Price per Share:	$[*#.##*], which is the Fair Market Value as of the Grant Date
Expiration Date:	[*Date*], which is [10] years from the Grant Date
Exercisability Schedule:	[I*nsert schedule – time-based or performance-based*] Notwithstanding the foregoing Exercisability Schedule, exercisability of all or some portion of the Option may be accelerated in accordance with the terms and conditions of Section 2(c) of the attached Terms and Conditions.
Exercise after Separation from Service:	*Separation from Service for any reason other than death, Disability or Cause*: any non-exercisable portion of the Option expires immediately and any exercisable portion of the Option remains exercisable for 90 days following Separation from Service for any reason other than death, Disability or Cause. *Separation from Service due to death or Disability*: any non-exercisable portion of the Option expires immediately and any exercisable portion of the Option remains exercisable for 12 months following Separation from Service due to death or Disability. *Separation from Service for Cause*: the entire Option, including any exercisable and non-exercisable portion, expires immediately upon Separation from Service for Cause. **IN NO EVENT MAY THE OPTION BE EXERCISED AFTER THE EXPIRATION DATE AS PROVIDED ABOVE.**

By signing below, the Grantee agrees that the Option is granted under and governed by the terms and conditions of the Plan and the Award Agreement, as of the Grant Date.

GRANTEE	**ACM RESEARCH, INC.**
Sign Name: _____	Sign Name: _____
Print Name: _____	Print Name: _____
	Title: _____

TERMS AND CONDITIONS OF STOCK OPTION

1. Grant of Option. The Option granted to the Grantee and described in the Notice of Grant is subject to the terms and conditions of the Plan. The terms and conditions of the Plan are hereby incorporated herein by reference. Except as otherwise expressly set forth herein, the Award Agreement shall be construed in accordance with the terms and conditions of the Plan. Any capitalized term not otherwise defined in the Award Agreement shall have the definition set forth in the Plan.

The Committee has approved the grant to the Grantee of the Option, conditioned upon the Grantee's acceptance of the terms and conditions of the Award Agreement within 60 days after the Award Agreement is presented to the Grantee for review.

If designated in the Notice of Grant as an Incentive Stock Option, the Option is intended to qualify as an Incentive Stock Option. To the extent that the Option fails to meet the requirements of an Incentive Stock Option or is not designated as an Incentive Stock Option, the Option shall be treated as a Non-qualified Stock Option.

2. Exercise of Option.

(a) Right to Exercise. The Option shall be exercisable, in whole or in part, during its term in accordance with the Exercisability Schedule set forth in the Notice of Grant and with the applicable provisions of the Plan and the Award Agreement. No Shares shall be issued pursuant to the exercise of the Option unless the issuance and exercise comply with applicable laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to the Grantee on the date on which the Option is exercised with respect to such Shares. Until such time as the Option has been duly exercised and Shares have been delivered, the Grantee shall not be entitled to exercise any voting rights with respect to such Shares, shall not be entitled to receive dividends or other distributions with respect thereto and shall not have any other rights of a Stockholder with respect thereto.

(b) Method of Exercise. The Grantee may exercise the Option by delivering an exercise notice in a form approved by the Company (the "**Exercise Notice**"), which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Option Price as to all Shares exercised. The Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Option Price (as well as any applicable withholding or other taxes).

(c) Acceleration of Exercisability under Certain Circumstances. [The exercisability of the Option shall not be accelerated under any circumstances, except as otherwise provided in the Plan.]

3. Method of Payment. If the Grantee elects to exercise the Option by submitting an Exercise Notice in accordance with Section 2(b) above, the aggregate Option Price (as well as any applicable withholding or other taxes) shall be paid by cash or check; *provided*, *however*, that the Committee may, but is not required to, consent to payment in any of the following forms, or a combination of them:

(a) cash or check;

(b) a "net exercise" under which the Company reduces the number of Shares issued upon exercise by the largest whole number of Shares with a Fair Market Value that does not exceed the aggregate Option Price and any applicable withholding, or such other consideration received by the Company under a cashless exercise program approved by the Company in connection with the Plan;

(c) surrender of other Shares owned by the Grantee that have a Fair Market Value on the date of surrender equal to the aggregate Option Price of the exercised Shares and any applicable withholding; or

(d) any other consideration that the Committee deems appropriate and in compliance with applicable law.

4. Restrictions on Exercise. The Option may not be exercised until such time as the Plan has been approved by the Stockholders, or if the issuance of the Shares upon exercise or the method of payment of consideration for those Shares would constitute a violation of any applicable law, regulation or Company policy.

5. Transferability.

(a) The Option may not be transferred in any manner other than by will or by the laws of descent or distribution and may be exercised during the lifetime of the Grantee only by the Grantee[; *provided*, *however*, that the Grantee may transfer the Option (i) pursuant to a domestic relations order by a court of competent jurisdiction or (ii) to any Family Member of the Grantee in accordance with Section 17.11.2 of the Plan (entitled "Family Transfers," or any successor provision thereto) by delivering to the Company a notice of assignment in a form acceptable to the Company. No transfer or assignment of the Option to or on behalf of a Family Member under this Section 5 shall be effective until the Company has acknowledged such transfer or assignment in writing].

(b) Without limitation of Section 9 below, any Issued Shares in connection with the Option shall be subject to the Company's right of first refusal under Section 17.4.1 of the Plan (entitled "Right of First Refusal," or any successor provision thereto), the Company's right of repurchase under Section 17.4.2 of the Plan (entitled "Right of Repurchase," or any successor provision thereto), the market standoff requirement under Section 17.5 of the Plan (entitled "Market Standoff Requirement," or any successor provision thereto), and the transfer restrictions under Section 17.11.3 of the Plan (entitled "Issued Shares," or any successor provision thereto).

6. Term of Option. The Option may be exercised only within the term set forth in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of the Award Agreement.

7. Withholding.

(a) The Committee shall determine the amount of any withholding or other tax required by law to be withheld or paid by the Company with respect to any income recognized by the Grantee with respect to the Option.

(b) The Grantee shall be required to meet any applicable tax withholding obligation in accordance with the provisions of Section 17.3 of the Plan (entitled "Withholding Taxes," or any successor provision thereto).

(c) Subject to any rules prescribed by the Committee, the Grantee shall have the right to elect to meet any withholding requirement (i) by having withheld from the Option at the appropriate time that number of whole Shares whose Fair Market Value is equal to the amount of any taxes required to be withheld with respect to the Option, (ii) by direct payment to the Company in cash of the amount of any taxes required to be withheld with respect to the Option or (iii) by a combination of Shares and cash.

(d) If the Grantee makes any disposition of Shares delivered pursuant to the exercise of an Incentive Stock Option under the circumstances described in Code Section 421(b) (relating to certain disqualifying dispositions), the Grantee shall notify the Company of such disposition within 10 days of such disposition.

8. Adjustment. Upon any event described in Section 15 of the Plan (entitled "Effect of Changes in Capitalization," or any successor provision thereto) occurring after the Grant Date, the adjustment provisions as provided for under Section 15 of the Plan (or any successor provision thereto) shall apply to the Option.

9. Bound by Plan and Committee Decisions. By accepting the Option, the Grantee acknowledges that the Grantee has received a copy of the Plan, has had an opportunity to review the Plan, and agrees to be bound by all of the terms and conditions of the Plan. In the event of any conflict between the provisions of the Award Agreement and the Plan, the provisions of the Plan shall control. The authority to manage and control the operation and administration of the Award Agreement and the Plan shall be vested in the Committee, and the Committee shall have all powers with respect to the Award Agreement as it has with respect to the Plan. Any interpretation of the Award Agreement or the Plan by the Committee and any decision made by the Committee with respect to the Award Agreement or the Plan shall be final and binding on all persons.

10. Grantee Representations. The Grantee hereby represents to the Company that the Grantee has read and fully understands the provisions of the Award Agreement and the Plan and that the Grantee's decision to participate in the Plan is completely voluntary. Further, the Grantee acknowledges that the Grantee is relying solely on his or her own advisors with respect to the tax consequences of the Option.

11. Regulatory Limitations on Exercises. Notwithstanding the other provisions of the Award Agreement, the Committee may impose such conditions, restrictions, and limitations (including suspending the exercise of the Option and the tolling of any applicable exercise period during such suspension) on the issuance of Common Stock with respect to the Option unless and until the Committee determines that such issuance complies with (a) any applicable registration requirements under the Securities Act or the Committee has determined that an exemption therefrom is available, (b) any applicable listing requirement of any stock exchange on which the Common Stock is listed, (c) any applicable Company policy or administrative rules, and (d) any other applicable provision of state, federal, or foreign law, including foreign securities laws where applicable.

12. Miscellaneous.

(a) Notices. Any notice that either party hereto may be required or permitted to give to the other shall be in writing and may be delivered personally, by intraoffice mail, by fax, by electronic mail or other electronic means, or via a postal service, postage prepaid, to such electronic mail or postal address and directed to such person as the Company may notify the Grantee from time to time; and to the Grantee at the Grantee's electronic mail or postal address as shown on the records of the Company from time to time, or at such other electronic mail or postal address as the Grantee, by notice to the Company, may designate in writing from time to time.

(b) Waiver. The waiver by any party hereto of a breach of any provision of the Award Agreement shall not operate or be construed as a waiver of any other or subsequent breach.

(c) Entire Agreement. The Award Agreement and the Plan constitute the entire agreement between the parties with respect to the Option. Any prior agreements, commitments, or negotiations concerning the Option are superseded.

(d) Binding Effect; Successors. The obligations and rights of the Company under the Award Agreement shall be binding upon and inure to the benefit of the Company and any successor corporation or organization resulting from the merger, consolidation, sale, or other reorganization of the Company, or upon any successor corporation or organization succeeding to substantially all of the assets and business of the Company. The obligations and rights of the Grantee under the Award Agreement shall be binding upon and inure to the benefit of the Grantee and the beneficiaries, executors, administrators, heirs, and successors of the Grantee.

(e) Governing Law; Consent to Jurisdiction; Consent to Venue. The Award Agreement shall be construed and interpreted in accordance with the internal laws of the State of Delaware without regard to principles of conflicts of law thereof, or principles of conflicts of laws of any other jurisdiction that could cause the application of the laws of any jurisdiction other than the State of Delaware. For purposes of resolving any dispute that arises directly or indirectly from the relationship of the parties evidenced by the Option or the Award Agreement, the parties hereto hereby submit to and consent to the exclusive jurisdiction of the State of Delaware and agree that any related litigation shall be conducted solely in the state courts of Delaware or the federal courts for the State of Delaware, and no other courts.

(f) Headings. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of the Award Agreement.

(g) Amendment. The Award Agreement may be amended at any time by the Committee, *provided* that no amendment may, without the consent of the Grantee, materially impair the Grantee's rights with respect to the Option.

(h) Severability. The invalidity or unenforceability of any provision of the Award Agreement shall not affect the validity or enforceability of any other provision of the Award Agreement, and each other provision of the Award Agreement shall be severable and enforceable to the extent permitted by law.

(i) No Rights to Service. Nothing contained in the Award Agreement shall be construed as giving the Grantee any right to be retained, in any position, as a director, officer, employee, or consultant of the Company or its Affiliates, or shall interfere with or restrict in any way the rights of the Company or its Affiliates, which are hereby expressly reserved, to remove, terminate, or discharge the Grantee at any time for any reason whatsoever or for no reason, subject to the Company's articles of incorporation, bylaws, and other similar governing documents and applicable law.

(j) Section 409A. It is intended that the Award Agreement and the Option will be exempt from (or in the alternative will comply with) Code Section 409A, and the Award Agreement shall be administered accordingly and interpreted and construed on a basis consistent with such intent. This Section 12(j) shall not be construed as a guarantee of any particular tax effect for the Grantee's benefits under the Award Agreement and the Company does not guarantee that any such benefits will satisfy the provisions of Code Section 409A or any other provision of the Code.

(k) Further Assurances. The Grantee agrees, upon demand of the Company or the Committee, to do all acts and execute, deliver, and perform all additional documents, instruments, and agreements that may be reasonably required by the Company or the Committee, as the case may be, to implement the provisions and purposes of the Award Agreement and the Plan.

(l) Confidentiality. The Grantee agrees that the terms and conditions of the Option award reflected in the Award Agreement are strictly confidential and, with the exception of the Grantee's counsel, tax advisor, immediate family, or as required by applicable law, have not and shall not be disclosed, discussed, or revealed to any other persons, entities, or organizations, whether within or outside Company, without prior written approval of Company. The Grantee shall take all reasonable steps necessary to ensure that confidentiality is maintained by any of the individuals or entities referenced above to whom disclosure is authorized.

NOTICE OF GRANT OF NON-QUALIFIED STOCK OPTION

ACM RESEARCH, INC.
2016 OMNIBUS INCENTIVE PLAN

FOR GOOD AND VALUABLE CONSIDERATION, ACM Research, Inc. (the "**Company**") hereby grants, pursuant to the provisions of the ACM Research, Inc. 2016 Omnibus Incentive Plan (the "**Plan**"), to the Grantee designated in this Notice of Grant of Non-qualified Stock Option ("**Notice of Grant**") a Non-qualified Stock Option to purchase the number of Shares set forth in this Notice of Grant (the "**Option**"), subject to certain terms and conditions as outlined below in this Notice of Grant and the additional terms and conditions set forth in the attached Terms and Conditions of Stock Option (together with this Notice of Grant, the "**Award Agreement**").

Grantee:	[*Name*]
Type of Option:	Non-qualified Stock Option
Grant Date:	[*Date*]
Number of Shares Purchasable:	*[####]*
Option Price per Share:	$[*#.##*], which is the Fair Market Value as of the Grant Date
Expiration Date:	[*Date*], which is [10] years from the Grant Date
Exercisability Schedule:	[*Insert schedule - time-based or performance-based*] Notwithstanding the foregoing Exercisability Schedule, exercisability of all or some portion of the Option may be accelerated in accordance with the terms and conditions of Section 2(c) of the attached Terms and Conditions.
Exercise after Separation from Service:	*Separation from Service for any reason other than death, Disability or Cause*: any non-exercisable portion of the Option expires immediately and any exercisable portion of the Option remains exercisable for 90 days following Separation from Service for any reason other than death, Disability or Cause. *Separation from Service due to death or Disability*: any non-exercisable portion of the Option expires immediately and any exercisable portion of the Option remains exercisable for 12 months following Separation from Service due to death or Disability. *Separation from Service for Cause*: the entire Option, including any exercisable and non-exercisable portion, expires immediately upon Separation from Service for Cause. **IN NO EVENT MAY THE OPTION BE EXERCISED AFTER THE EXPIRATION DATE AS PROVIDED ABOVE.**

By signing below, the Grantee agrees that the Option is granted under and governed by the terms and conditions of the Plan and the Award Agreement, as of the Grant Date.

GRANTEE

Sign Name: _____

Print Name: _____

ACM RESEARCH, INC.

Sign Name: _____

Print Name: _____

Title: _____

TERMS AND CONDITIONS OF STOCK OPTION

1. Grant of Option. The Option granted to the Grantee and described in the Notice of Grant is subject to the terms and conditions of the Plan. The terms and conditions of the Plan are hereby incorporated herein by reference. Except as otherwise expressly set forth herein, the Award Agreement shall be construed in accordance with the terms and conditions of the Plan. Any capitalized term not otherwise defined in the Award Agreement shall have the definition set forth in the Plan.

The Committee has approved the grant to the Grantee of the Option, conditioned upon the Grantee's acceptance of the terms and conditions of the Award Agreement within 60 days after the Award Agreement is presented to the Grantee for review.

2. Exercise of Option.

(a) Right to Exercise. The Option shall be exercisable, in whole or in part, during its term in accordance with the Exercisability Schedule set forth in the Notice of Grant and with the applicable provisions of the Plan and the Award Agreement. No Shares shall be issued pursuant to the exercise of the Option unless the issuance and exercise comply with applicable laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to the Grantee on the date on which the Option is exercised with respect to such Shares. Until such time as the Option has been duly exercised and Shares have been delivered, the Grantee shall not be entitled to exercise any voting rights with respect to such Shares, shall not be entitled to receive dividends or other distributions with respect thereto and shall not have any other rights of a Stockholder with respect thereto.

(b) Method of Exercise. The Grantee may exercise the Option by delivering an exercise notice in a form approved by the Company (the "**Exercise Notice**"), which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised, and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Option Price as to all Shares exercised. The Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Option Price (as well as any applicable withholding or other taxes).

(c) Acceleration of Exercisability under Certain Circumstances. [The exercisability of the Option shall not be accelerated under any circumstances, except as otherwise provided in the Plan.]

3. Method of Payment. If the Grantee elects to exercise the Option by submitting an Exercise Notice in accordance with Section 2(b) above, the aggregate Option Price (as well as any applicable withholding or other taxes) shall be paid by cash or check; *provided*, *however*, that the Committee may, but is not required to, consent to payment in any of the following forms, or a combination of them:

(a) cash or check;

(b) a "net exercise" under which the Company reduces the number of Shares issued upon exercise by the largest whole number of Shares with a Fair Market Value that does not exceed the aggregate Option Price and any applicable withholding, or such other consideration received by the Company under a cashless exercise program approved by the Company in connection with the Plan;

(c) surrender of other Shares owned by the Grantee that have a Fair Market Value on the date of surrender equal to the aggregate Option Price of the exercised Shares and any applicable withholding; or

(d) any other consideration that the Committee deems appropriate and in compliance with applicable law.

4. Restrictions on Exercise. The Option may not be exercised until such time as the Plan has been approved by the Stockholders, or if the issuance of the Shares upon exercise or the method of payment of consideration for those Shares would constitute a violation of any applicable law, regulation or Company policy.

5. Transferability.

(a) The Option may not be transferred in any manner other than by will or by the laws of descent or distribution and may be exercised during the lifetime of the Grantee only by the Grantee[; *provided*, *however*, that the Grantee may transfer the Option (i) pursuant to a domestic relations order by a court of competent jurisdiction or (ii) to any Family Member of the Grantee in accordance with Section 17.11.2 of the Plan (entitled "Family Transfers," or any successor provision thereto) by delivering to the Company a notice of assignment in a form acceptable to the Company. No transfer or assignment of the Option to or on behalf of a Family Member under this Section 5 shall be effective until the Company has acknowledged such transfer or assignment in writing].

(b) Without limitation of Section 9 below, any Issued Shares in connection with the Option shall be subject to the Company's right of first refusal under Section 17.4.1 of the Plan (entitled "Right of First Refusal," or any successor provision thereto), the Company's right of repurchase under Section 17.4.2 of the Plan (entitled "Right of Repurchase," or any successor provision thereto), the market standoff requirement under Section 17.5 of the Plan (entitled "Market Standoff Requirement," or any successor provision thereto), and the transfer restrictions under Section 17.11.3 of the Plan (entitled "Issued Shares," or any successor provision thereto).

6. Term of Option. The Option may be exercised only within the term set forth in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of the Award Agreement.

7. Withholding.

(a) The Committee shall determine the amount of any withholding or other tax required by law to be withheld or paid by the Company with respect to any income recognized by the Grantee with respect to the Option.

(b) The Grantee shall be required to meet any applicable tax withholding obligation in accordance with the provisions of Section 17.3 of the Plan (entitled "Withholding Taxes," or any successor provision thereto).

(c) Subject to any rules prescribed by the Committee, the Grantee shall have the right to elect to meet any withholding requirement (i) by having withheld from the Option at the appropriate time that number of whole Shares whose Fair Market Value is equal to the amount of any taxes required to be withheld with respect to the Option, (ii) by direct payment to the Company in cash of the amount of any taxes required to be withheld with respect to the Option or (iii) by a combination of Shares and cash.

8. Adjustment. Upon any event described in Section 15 of the Plan (entitled "Effect of Changes in Capitalization," or any successor provision thereto) occurring after the Grant Date, the adjustment provisions as provided for under Section 15 of the Plan (or any successor provision thereto) shall apply to the Option.

9. Bound by Plan and Committee Decisions. By accepting the Option, the Grantee acknowledges that the Grantee has received a copy of the Plan, has had an opportunity to review the Plan, and agrees to be bound by all of the terms and conditions of the Plan. In the event of any conflict between the provisions of the Award Agreement and the Plan, the provisions of the Plan shall control. The authority to manage and control the operation and administration of the Award Agreement and the Plan shall be vested in the Committee, and the Committee shall have all powers with respect to the Award Agreement as it has with respect to the Plan. Any interpretation of the Award Agreement or the Plan by the Committee and any decision made by the Committee with respect to the Award Agreement or the Plan shall be final and binding on all persons.

10. Grantee Representations. The Grantee hereby represents to the Company that the Grantee has read and fully understands the provisions of the Award Agreement and the Plan and that the Grantee's decision to participate in the Plan is completely voluntary. Further, the Grantee acknowledges that the Grantee is relying solely on his or her own advisors with respect to the tax consequences of the Option.

11. Regulatory Limitations on Exercises. Notwithstanding the other provisions of the Award Agreement, the Committee may impose such conditions, restrictions, and limitations (including suspending the exercise of the Option and the tolling of any applicable exercise period during such suspension) on the issuance of Common Stock with respect to the Option unless and until the Committee determines that such issuance complies with (a) any applicable registration requirements under the Securities Act or the Committee has determined that an exemption therefrom is available, (b) any applicable listing requirement of any stock exchange on which the Common Stock is listed, (c) any applicable Company policy or administrative rules, and (d) any other applicable provision of state, federal, or foreign law, including foreign securities laws where applicable.

12. Miscellaneous.

(a) Notices. Any notice that either party hereto may be required or permitted to give to the other shall be in writing and may be delivered personally, by intraoffice mail, by fax, by electronic mail or other electronic means, or via a postal service, postage prepaid, to such electronic mail or postal address and directed to such person as the Company may notify the Grantee from time to time; and to the Grantee at the Grantee's electronic mail or postal address as shown on the records of the Company from time to time, or at such other electronic mail or postal address as the Grantee, by notice to the Company, may designate in writing from time to time.

(b) Waiver. The waiver by any party hereto of a breach of any provision of the Award Agreement shall not operate or be construed as a waiver of any other or subsequent breach.

(c) Entire Agreement. The Award Agreement and the Plan constitute the entire agreement between the parties with respect to the Option. Any prior agreements, commitments, or negotiations concerning the Option are superseded.

(d) Binding Effect; Successors. The obligations and rights of the Company under the Award Agreement shall be binding upon and inure to the benefit of the Company and any successor corporation or organization resulting from the merger, consolidation, sale, or other reorganization of the Company, or upon any successor corporation or organization succeeding to substantially all of the assets and business of the Company. The obligations and rights of the Grantee under the Award Agreement shall be binding upon and inure to the benefit of the Grantee and the beneficiaries, executors, administrators, heirs, and successors of the Grantee.

(e) Governing Law; Consent to Jurisdiction; Consent to Venue. The Award Agreement shall be construed and interpreted in accordance with the internal laws of the State of Delaware without regard to principles of conflicts of law thereof, or principles of conflicts of laws of any other jurisdiction that could cause the application of the laws of any jurisdiction other than the State of Delaware. For purposes of resolving any

dispute that arises directly or indirectly from the relationship of the parties evidenced by the Option or the Award Agreement, the parties hereto hereby submit to and consent to the exclusive jurisdiction of the State of Delaware and agree that any related litigation shall be conducted solely in the state courts of Delaware or the federal courts for the State of Delaware, and no other courts.

(f) Headings. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of the Award Agreement.

(g) Amendment. The Award Agreement may be amended at any time by the Committee, *provided* that no amendment may, without the consent of the Grantee, materially impair the Grantee's rights with respect to the Option.

(h) Severability. The invalidity or unenforceability of any provision of the Award Agreement shall not affect the validity or enforceability of any other provision of the Award Agreement, and each other provision of the Award Agreement shall be severable and enforceable to the extent permitted by law.

(i) No Rights to Service. Nothing contained in the Award Agreement shall be construed as giving the Grantee any right to be retained, in any position, as a director, officer, employee, or consultant of the Company or its Affiliates, or shall interfere with or restrict in any way the rights of the Company or its Affiliates, which are hereby expressly reserved, to remove, terminate, or discharge the Grantee at any time for any reason whatsoever or for no reason, subject to the Company's articles of incorporation, bylaws, and other similar governing documents and applicable law.

(j) Section 409A. It is intended that the Award Agreement and the Option will be exempt from (or in the alternative will comply with) Code Section 409A, and the Award Agreement shall be administered accordingly and interpreted and construed on a basis consistent with such intent. This Section 12(j) shall not be construed as a guarantee of any particular tax effect for the Grantee's benefits under the Award Agreement and the Company does not guarantee that any such benefits will satisfy the provisions of Code Section 409A or any other provision of the Code.

(k) Further Assurances. The Grantee agrees, upon demand of the Company or the Committee, to do all acts and execute, deliver, and perform all additional documents, instruments, and agreements that may be reasonably required by the Company or the Committee, as the case may be, to implement the provisions and purposes of the Award Agreement and the Plan.

(l) Confidentiality. The Grantee agrees that the terms and conditions of the Option award reflected in the Award Agreement are strictly confidential and, with the exception of the Grantee's counsel, tax advisor, immediate family, or as required by applicable law, have not and shall not be disclosed, discussed, or revealed to any other persons, entities, or organizations, whether within or outside Company, without prior written approval of Company. The Grantee shall take all reasonable steps necessary to ensure that confidentiality is maintained by any of the individuals or entities referenced above to whom disclosure is authorized.

NOTICE OF GRANT OF RESTRICTED STOCK UNITS

ACM RESEARCH, INC.
2016 OMNIBUS INCENTIVE PLAN

FOR GOOD AND VALUABLE CONSIDERATION, ACM Research, Inc. (the "**Company**") hereby grants, pursuant to the provisions of the ACM Research, Inc. 2016 Omnibus Incentive Plan (the "Plan"), to the Grantee designated in this Notice of Grant of Restricted Stock Units ("**Notice of Grant**"), the number of restricted stock units ("**RSUs**") set forth in this Notice of Grant (the "**Award**"), subject to certain terms and conditions as outlined below in this Notice of Grant and the additional terms and conditions set forth in the attached Terms and Conditions of Restricted Stock Units (the "**Terms and Conditions**," and together with this Notice of Grant, the "**Award Agreement**").

Grantee:	[*Name*]
Grant Date:	[*Date*]
Number of RSUs Granted:	*[####]*
Definition of RSU:	Each RSU shall entitle the Grantee to receive one Share at such future date or dates and subject to such terms and conditions as set forth in the Award Agreement.
Vesting Schedule:	Subject to the provisions of the Terms and Conditions, the Award shall vest in accordance with the following schedule, in the event the Grantee does not have a Separation from Service prior to the applicable vesting date: [*Insert schedule - time-based or performance-based*]
Acceleration of Vesting on Separation from Service:	[*Add provisions if applicable; otherwise delete.*]
Acceleration of Vesting on Change in Control:	[*Add provisions if applicable; otherwise delete.*]

By signing below, the Grantee agrees that the Award is granted under and governed by the terms and conditions of the Plan and the Award Agreement, as of the Grant Date.

GRANTEE		**ACM RESEARCH, INC.**	
Sign Name:	_____	Sign Name:	_____
Print Name:	_____	Print Name:	_____
		Title:	_____

TERMS AND CONDITIONS OF RESTRICTED STOCK UNITS

1. Grant of RSUs.

(a) The Award granted to the Grantee and described in the Notice of Grant is subject to the terms and conditions of the Plan. The terms and conditions of the Plan are hereby incorporated herein by reference. Except as otherwise expressly set forth herein, the Award Agreement shall be construed in accordance with the terms and conditions of the Plan. Any capitalized term not otherwise defined in the Award Agreement shall have the definition set forth in the Plan.

(b) The Committee has approved the grant to the Grantee of the Award, conditioned upon the Grantee's acceptance of the terms and conditions of the Award Agreement within 60 days after the Award Agreement is presented to the Grantee for review.

(c) As of the Grant Date, the Company grants to the Grantee the number of RSUs set forth in the Notice of Grant, subject to the terms and conditions of the Plan and the Award Agreement. Each RSU shall entitle the Grantee to receive one Share, at such future date or dates and subject to such terms and conditions as set forth in the Award Agreement.

2. Restrictions.

(a) The Grantee shall have no rights or privileges of a Company stockholder as to the RSUs prior to settlement in accordance with Section 5 of these Terms and Conditions ("**Settlement**"), including no right to vote or receive dividends or other distributions with respect to the RSUs; in addition, the following provisions shall apply:

(i) the Grantee shall not be entitled to delivery of a certificate or certificates for Shares in connection with the RSUs until Settlement (if at all), and upon the satisfaction of all other applicable conditions;

(ii) none of the RSUs may be sold, transferred (other than by will or the laws of descent and distribution), assigned, pledged or otherwise encumbered or disposed of prior to Settlement; and

(iii) all of the RSUs shall be forfeited and all rights of the Grantee with respect to the RSUs shall terminate in their entirety on the terms and conditions set forth in Section 4 below.

(b) Any attempt to dispose of RSUs or any interest in the RSUs in a manner contrary to the restrictions set forth in the Award Agreement shall be void and of no effect.

3. Restricted Period and Vesting. The "**Restricted Period**" is the period beginning on the Grant Date and ending on the date the RSUs, or such applicable portion of the RSUs, are deemed vested under the schedule set forth in the Notice of Grant (including the applicable accelerated vesting provisions set forth in the Notice of Grant, if any).

4. Forfeiture. If, during the Restricted Period, (i) the Grantee incurs a Separation from Service, (ii) there occurs a material breach of the Award Agreement by the Grantee or (iii) the Grantee fails to meet the tax withholding obligations described in Section 6 below, all rights of the Grantee to the RSUs that have not vested in accordance with Section 3 above (including pursuant to the applicable accelerated vesting provisions set forth in the Notice of Grant, if any) shall terminate immediately and be forfeited in their entirety.

5. Settlement of RSUs. Delivery of Shares or other amounts under the Award Agreement shall be subject to the following:

(a) The Company shall deliver to the Grantee one Share for each RSU that has vested and not otherwise been forfeited within 30 days following the end of the applicable Restricted Period;

(b) Any issuance of Shares pursuant to the Award Agreement may be effected on a non-certificated basis, to the extent not prohibited by applicable law or the applicable rules of any securities exchange or similar entity; and

(c) In the event that a certificate for Shares is delivered to the Grantee in connection with the Award, such certificate shall bear the following legend (or such other legend as determined appropriate by the Company in its sole discretion):

> The ownership and transferability of this certificate and the shares of stock represented hereby are subject to the terms and conditions (including forfeiture) of the ACM Research, Inc. 2016 Omnibus Incentive Plan and a restricted stock unit award agreement entered into between the registered owner and ACM Research, Inc. Copies of such plan and agreement are on file in the executive offices of ACM Research, Inc.

In addition, the stock certificate or certificates for any Shares shall be subject to such stop-transfer orders and other restrictions as the Company may deem advisable under the rules, regulations and other requirements of the SEC, any stock exchange upon which the Common Stock is then listed, and any applicable federal or state securities law, and the Company may cause a legend or legends to be placed on such certificate or certificates to make appropriate reference to such restrictions.

6. Withholding.

(a) The Committee shall determine the amount of any withholding or other tax required by law to be withheld or paid by the Company with respect to any income recognized by the Grantee with respect to the Award.

(b) The Grantee shall be required to meet any applicable tax withholding obligation in accordance with the provisions of Section 17.3 of the Plan (entitled "Withholding Taxes," or any successor provision thereto).

(c) Subject to any rules prescribed by the Committee, the Grantee shall have the right to elect to meet any withholding requirement (i) by having withheld from the Award at the appropriate time that number of whole Shares whose Fair Market Value is equal to the amount of any taxes required to be withheld with respect to the Award, (ii) by direct payment to the Company in cash of the amount of any taxes required to be withheld with respect to the Award or (iii) by a combination of Shares and cash.

7. Issued Shares. Without limitation of Section 9 below, any Issued Shares in connection with the Award shall be subject to the Company's right of first refusal under Section 17.4.1 of the Plan (entitled "Right of First Refusal," or any successor provision thereto), the Company's right of repurchase under Section 17.4.2 of the Plan (entitled "Right of Repurchase," or any successor provision thereto), the market standoff requirement under Section 17.5 of the Plan (entitled "Market Standoff Requirement," or any successor provision thereto), and the transfer restrictions under Section 17.11.3 of the Plan (entitled "Issued Shares," or any successor provision thereto).

8. Adjustment. Upon any event described in Section 15 of the Plan (entitled "Effect of Changes in Capitalization," or any successor provision thereto) occurring after the Grant Date, the adjustment provisions as provided for under Section 15 of the Plan (or any successor provision thereto) shall apply to the Award.

9. Bound by Plan and Committee Decisions. By accepting the Award, the Grantee acknowledges that the Grantee has received a copy of the Plan, has had an opportunity to review the Plan, and agrees to be bound by all of the terms and conditions of the Plan. In the event of any conflict between the provisions of the Award Agreement and the Plan, the provisions of the Plan shall control. The authority to manage and control the operation and administration of the Award Agreement and the Plan shall be vested in the Committee, and the Committee shall have all powers with respect to the Award Agreement as it has with respect to the Plan. Any interpretation of the Award Agreement or the Plan by the Committee and any decision made by the Committee with respect to the Award Agreement or the Plan shall be final and binding on all persons.

10. Grantee Representations. The Grantee hereby represents to the Company that the Grantee has read and fully understands the provisions of the Award Agreement and the Plan and that the Grantee's decision to participate in the Plan is completely voluntary. Further, the Grantee acknowledges that the Grantee is relying solely on his or her own advisors with respect to the tax consequences of the Award.

11. Regulatory Restrictions on the RSUs. Notwithstanding the other provisions of the Award Agreement, the Committee may impose such conditions, restrictions and limitations on the issuance of Common Stock with respect to the Award unless and until the Committee determines that such issuance complies with (a) any applicable registration requirements under the Securities Act or the Committee has determined that an exemption therefrom is available, (b) any applicable listing requirement of any stock exchange on which the Common Stock is listed, (c) any applicable Company policy or administrative rules and (d) any other applicable provision of state, federal or foreign law, including foreign securities laws where applicable.

12. Miscellaneous.

(a) Notices. Any notice that either party hereto may be required or permitted to give to the other shall be in writing and may be delivered personally, by intraoffice mail, by fax, by electronic mail or other electronic means, or via a postal service, postage prepaid, to such electronic mail or postal address and directed to such person as the Company may notify the Grantee from time to time; and to the Grantee at the Grantee's electronic mail or postal address as shown on the records of the Company from time to time, or at such other electronic mail or postal address as the Grantee, by notice to the Company, may designate in writing from time to time.

(b) Waiver. The waiver by any party hereto of a breach of any provision of the Award Agreement shall not operate or be construed as a waiver of any other or subsequent breach.

(c) Entire Agreement. The Award Agreement and the Plan constitute the entire agreement between the parties with respect to the Award. Any prior agreements, commitments or negotiations concerning the Award are superseded.

(d) Binding Effect; Successors. The obligations and rights of the Company under the Award Agreement shall be binding upon and inure to the benefit of the Company and any successor corporation or organization resulting from the merger, consolidation, sale, or other reorganization of the Company, or upon any successor corporation or organization succeeding to substantially all of the assets and business of the Company. The obligations and rights of the Grantee under the Award Agreement shall be binding upon and inure to the benefit of the Grantee and the beneficiaries, executors, administrators, heirs and successors of the Grantee.

(e) Governing Law; Consent to Jurisdiction; Consent to Venue. The Award Agreement shall be construed and interpreted in accordance with the internal laws of the State of Delaware without regard to principles of conflicts of law thereof, or principles of conflicts of laws of any other jurisdiction that could cause the application of the laws of any jurisdiction other than the State of Delaware. For purposes of resolving any dispute that arises directly or indirectly from the relationship of the parties evidenced by the Award or the Award Agreement, the parties hereto hereby submit to and consent to the exclusive jurisdiction of the State of Delaware and agree that any related litigation shall be conducted solely in the state courts of Delaware or the federal courts for the State of Delaware, and no other courts.

(f) Headings. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of the Award Agreement.

(g) Amendment. The Award Agreement may be amended at any time by the Committee, *provided* that no amendment may, without the consent of the Grantee, materially impair the Grantee's rights with respect to the Award.

(h) Severability. The invalidity or unenforceability of any provision of the Award Agreement shall not affect the validity or enforceability of any other provision of the Award Agreement, and each other provision of the Award Agreement shall be severable and enforceable to the extent permitted by law.

(i) No Rights to Service. Nothing contained in the Award Agreement shall be construed as giving the Grantee any right to be retained, in any position, as a director, officer, employee or consultant of the Company or its Affiliates, or shall interfere with or restrict in any way the rights of the Company or its Affiliates, which are hereby expressly reserved, to remove, terminate or discharge the Grantee at any time for any reason whatsoever or for no reason, subject to the Company's articles of incorporation, bylaws and other similar governing documents and applicable law.

(j) Section 409A. It is intended that the Award Agreement and the Award will be exempt from (or in the alternative will comply with) Code Section 409A, and the Award Agreement shall be administered accordingly and interpreted and construed on a basis consistent with such intent. This Section 12(j) shall not be construed as a guarantee of any particular tax effect for the Grantee's benefits under the Award Agreement and the Company does not guarantee that any such benefits will satisfy the provisions of Code Section 409A or any other provision of the Code.

(k) Further Assurances. The Grantee agrees, upon demand of the Company or the Committee, to do all acts and execute, deliver and perform all additional documents, instruments and agreements that may be reasonably required by the Company or the Committee, as the case may be, to implement the provisions and purposes of the Award Agreement and the Plan.

(l) Confidentiality. The Grantee agrees that the terms and conditions of the Award reflected in the Award Agreement are strictly confidential and, with the exception of the Grantee's counsel, tax advisor, immediate family, or as required by applicable law, have not and shall not be disclosed, discussed or revealed to any other persons, entities or organizations, whether within or outside Company, without prior written approval of Company. The Grantee shall take all reasonable steps necessary to ensure that confidentiality is maintained by any of the individuals or entities referenced above to whom disclosure is authorized.

ACM RESEARCH, INC.
STOCK OPTION AGREEMENT

This Stock Option Agreement (the "**Agreement**") is made as of the date first below written, between ACM Research, Inc. (the "**Company**") and [*name*] ("**Optionee**").

RECITALS:

WHEREAS, the Board of Directors of the Company (the "**Board**") determined on [*date of Board approval*] (the "**Grant Date**") to grant to Optionee a stock option to purchase shares of Class [__] common stock of the Company ("**Shares**") on the terms set forth herein;

WHEREAS, the Company regards Optionee as a valuable Service Provider (as defined below), and has determined that it would be to the advantage and in the interests of the Company and its shareholders to grant the Option (as defined below) provided for in this Agreement to Optionee as an inducement to remain in the service of the Company and as an incentive for increased efforts during such service;

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, the parties to this Agreement hereby agree as follows:

1. **Definitions**. In addition to the terms defined throughout the Agreement, the following capitalized terms shall have the meanings set forth below:

(a) "**Affiliate**" means any parent corporation or subsidiary corporation, whether now or hereafter existing, as those terms are defined in Sections 424(e) and (f) respectively, of the Code.

(b) "**Code**" means the Internal Revenue Code of 1986, as amended.

(c) "**Committee**" means the Compensation Committee of the Board, or such other committee as determined by the Board. The Compensation Committee of the Board may designate a subcommittee of its members to serve as the Committee (to the extent the Board has not designated another person, committee or entity as the Committee). Following the Initial Public Offering: (i) the Board shall cause the Committee to satisfy the applicable requirements of any securities exchange on which the Common Stock may then be listed, and (ii) for purposes of an Option granted to an Optionee who is subject to Section 16 of the Exchange Act, Committee means all of the members of the Compensation Committee who are "non-employee directors" within the meaning of Rule 16b-3 adopted under the Exchange Act.

(d) "**Disability**" means, as determined by the Company in its sole discretion, Optionee is unable to perform each of the essential duties of such Optionee's position by reason of a medically determinable physical or mental impairment which is potentially permanent in character or which can be expected to last for a continuous period of not less than 12 months; *provided*, *however*, that, with respect to rules regarding expiration of an incentive stock option following termination of Optionee's employment, "**Disability**" means "permanent and total disability" as set forth in Code Section 22(e)(3).

(e) "**Exchange Act**" means the Securities Exchange Act of 1934.

(f) "**Initial Public Offering**" means the initial public offering of shares of the Company's common stock pursuant to a registration statement (other than a Form S-8 or successor forms) filed with, and declared effective by, the United States Securities and Exchange Commission.

(g) "**Service Provider**" means an employee, consultant, advisor, or non-employee director of the Company or any Affiliate of the Company.

2. **Option Grant**. The Company hereby grants to Optionee the right and option to purchase from the Company all or any part of an aggregate of [####] Shares (the "**Optioned Shares**"), on the terms and conditions hereinafter set forth (the "**Option**"). The purchase price of the Optioned Shares shall be $[##] per Share (the "**Option Price**"). This Option is intended to be treated as a non-qualified stock option.

3. **Option Period**. This Option shall be exercisable only during the Option Period (as defined below), and during such Option Period, the exercisability of the Option shall be subject to the limitations of Section 4 hereof. The "**Option Period**" shall commence on the Grant Date and except as provided in Section 4 hereof, shall terminate (the "**Termination Date**") ten (10) years from the Grant Date.

4. **Limits on Option Period**. The Option Period may end before the Termination Date, as follows:

(a) Termination of Status as Service Provider. Should Optionee cease to be a Service Provider to the Company for any reason other than Disability or death during the Option Period, the Option Period shall terminate three (3) months after the date when Optionee ceases to be a Service Provider or on the Termination Date, whichever shall first occur, and the Option shall be exercisable only to the extent exercisable under Section 5 hereof on the date that Optionee ceases to be a Service Provider. Optionee shall be deemed to be a Service Provider so long as Optionee continues to render services to the Company or any Affiliate of the Company as a Service Provider.

(b) Death. If Optionee dies while acting as a Service Provider, the Option Period shall end twelve (12) months after the date of death or on the Termination Date, whichever shall first occur, and Optionee's executor or administrator or the person or persons to whom Optionee's rights under this Option shall pass by will or by the applicable laws of descent and distribution may exercise this Option on to the extent exercisable under Section 5 hereof on the date of Optionee's death.

(c) Disability. If Optionee's service is terminated by reason of Disability, the Option Period shall end twelve (12) months after date of Optionee's cessation of service or on the Termination Date, whichever shall first occur, and the Option shall be exercisable only to the extent exercisable under Section 5 hereof on the date of Optionee's cessation of service.

(d) Leave of Absence. If Optionee is on a leave of absence from the Company because of his or her Disability, or for the purpose of serving the government of the country in which the principal place of service of Optionee is located, either in a military or civilian capacity, or for such other purpose or reason as the Committee may approve, Optionee shall not be deemed during the period of such absence, by virtue of such absence alone, to have terminated service with the Company except as the Committee may otherwise expressly provide.

5. **Vesting of Right to Exercise Option**. Subject to other limitations contained in this Agreement, Optionee shall have the right to exercise the Option such that the Option is fully exercisable as follows:

(a) Twenty-five percent (25%) of the Optioned Shares shall vest after one year from the Grant Date and thereafter the Optioned Shares shall vest on a monthly basis of [#####] of the Optioned Shares per month. Upon the expiration of four years from the Grant Date, subject to Section 4 above, 100% of the Optioned Shares shall be deemed fully vested.

(b) Any portion of the Option that is not exercised shall accumulate and may be exercised at any time during the Option Period prior to the Termination Date. No partial exercise of this Option may be for less than five percent (5%) of the total number of Optioned Shares then available under this Option. In no event shall the Company be required to issue fractional Shares.

6. **Manner of Exercising Option**.

(a) To exercise the Option with respect to all or any portion of the Optioned Shares for which the Option is at the time exercisable, Optionee (or in the case of exercise after Optionee's death, Optionee's executor, administrator, heir or legatee, as the case may be) must take the following actions:

(i) Execute and deliver to the Secretary of the Company a notice of exercise and a stock purchase agreement (the "**Purchase Agreement**") upon the Company's request.

(ii) Pay on the exercise date the aggregate Option Price for the purchased Shares in cash or by check (as well as any applicable withholding or other taxes).

(iii) Furnish to the Company appropriate documentation that the person or persons exercising the Option, if other than Optionee, have the right to exercise the Option.

(iv) Complete and furnish to the Company an Investor Qualification Questionnaire upon the Company's request at any time.

(b) Execution of Agreements. Optionee (and Optionee's spouse, if any) shall be required, as a condition precedent to acquiring Shares through exercise of the Option, to execute one or more agreements relating to obligations in connection with ownership of the Shares or restrictions on transfer of the Shares no less restrictive than the obligations and restrictions to which the other shareholders of the Company are subject at the time of such exercise.

(c) Investment Representations. If required by the Committee, Optionee shall give the Company satisfactory assurance in writing, signed by Optionee or his or her legal representative, as the case may be, that such Shares are being purchased for investment and not with a view to the distribution thereof, provided that such assurance shall be deemed inapplicable to (1) any sale of such Shares by such Optionee made in accordance with the terms of a registration statement covering such sale, which may hereafter be filed and become effective under the Securities Act of 1933, as amended (the "**Securities Act**"), and with respect to which no stop order suspending the effectiveness thereof has been issued, and (2) any other sale of such Shares with respect to which in the opinion of counsel for the Company, such assurance is not required to be given in order to comply with the provisions of the Securities Act.

(d) Delivery of Certificates. As soon as practicable after receipt of the notice required in Section 6(a) above and satisfaction of the conditions set forth in Section 6(b) and 6(c) above, the Company shall, without transfer or issue tax and without other incidental expense to Optionee, deliver to Optionee at the office of the Company, or such other place as may be mutually acceptable to the Company and Optionee, a certificate or certificates of such Shares, including through the use of book entry at the Company's election; *provided, however*, that the time of such delivery may be postponed by the Company for such period as may be required for it with reasonable diligence to comply with applicable registration requirements under the Securities Act, the Exchange Act, any applicable listing requirements of any national securities exchange, and requirements under any other law or regulation applicable to the issuance or transfer of such Shares.

7. **Corporate Transactions**.

(a) Definition. For purposes of this Section 7, a "**Corporate Transaction**" shall include any of the following shareholder-approved transactions to which the Company is a party:

(i) a merger or consolidation in which the Company is not the surviving entity, except for (1) a transaction the principal purpose of which is to change the state of the Company's incorporation, or (2) a transaction in which the Company's shareholders immediately prior to such merger or consolidation hold (by virtue of securities received in exchange for their shares in the Company) securities of the surviving entity representing more than fifty percent (50%) of the total voting power of such surviving entity immediately after such transaction.

(ii) the sale, transfer or other disposition of all or substantially all of the assets of the Company unless the Company's shareholders immediately prior to such sale, transfer or other disposition hold (by virtue of securities received in exchange for their shares in the Company) securities of the purchaser or other transferee representing more than fifty percent (50%) of the total voting power of such entity immediately after such transaction; or

(iii) any merger in which the Company is the surviving entity but in which the Company's shareholders immediately prior to such merger do not hold (by virtue of their shares in the Company held immediately prior to such transaction) securities of the surviving entity (by virtue of their shares in the Company held immediately prior to such transaction) representing more than fifty percent (50%) of the total voting power of the surviving entity immediately after such transaction.

(b) **Effect**. In the event of any Corporate Transaction, all Optioned Shares shall immediately vest and all Optioned Shares shall be deemed fully vested.

8. **Right of First Refusal**.

(a) Grant of Right. The Company is hereby granted the right of first refusal (the "**First Refusal Right**"), exercisable in connection with any proposed sale or other transfer of the Optioned Shares acquired by Optionee upon exercise of this Option. For purposes of this Section, the term "**transfer**" shall include any assignment, pledge, encumbrance or other disposition for value of the Optioned Shares intended to be made by the Owner (defined below), but shall not include any of the permitted transfers under Section 8(f) below. For purposes of this Section, the term "**Owner**" shall include Optionee or any subsequent holder of the Optioned Shares who derives his or her chain of ownership through a transfer permitted by Section 8(f) below.

(b) Notice of Intended Disposition. In the event the Owner desires to accept a bona fide third-party offer for any or all the Optioned Shares (the Optioned Shares subject to such offer to be hereinafter called, solely for the purposes of this Section, the "**Target Shares**"), Owner shall promptly deliver to the Secretary of the Company written notice (the "**Disposition Notice**") of the offer and the basic terms and conditions thereof, including the proposed purchase price.

(c) Exercise of Right. The Company (or its assignee) shall, for a period of twenty (20) days following receipt of the Disposition Notice, have the right to repurchase any or all of the Target Shares specified in the Disposition Notice upon substantially the same terms and conditions specified therein. Such right shall be exercisable by written notice (the "**Exercise Notice**") delivered to Owner

prior to the expiration of the twenty (20) day exercise period. If the Exercise Notice pertains to all the Target Shares specified in the Disposition Notice, then the Company (or its assignees) shall effect the repurchase of such Target Shares, including payment of the purchase price, not more than five (5) business days after delivery of the Exercise Notice; and at such time Owner shall deliver to the Company the certificates representing the Target Shares to be repurchased, each certificate to be properly endorsed for transfer. Should the purchase price specified in the Disposition Notice be payable in property other than cash or evidences of indebtedness, the Company (or its assignees) shall have the right to pay the purchase price in the form of cash equal in amount to the value of such property. If the Owner and the Company (or its assignees) cannot agree on such cash value within ten (10) days after the Company's receipt of the Disposition Notice, the valuation shall be made by an appraiser of recognized standing selected by the Owner and the Company (or its assignees) or, if they cannot agree on an appraiser within twenty (20) days after the Company's receipt of the Disposition Notice, each shall select an appraiser of recognized standing and the two appraisers shall designate a third appraiser of recognized standing, whose appraisal shall be determinative of such value. The closing shall then be held on the later of (i) the fifth business day following delivery of the Exercise Notice or (ii) the 15th day after such cash valuation shall have been made.

(d) Non-Exercise of Right. In the event the Exercise Notice is not given to Owner within twenty (20) days following the date of the Company's receipt of the Disposition Notice, Owner shall have a period of ninety (90) days thereafter in which to sell or otherwise dispose of the Target Shares upon terms and conditions (including the purchase price) no more favorable to the third party purchaser than those specified in the Disposition Notice. The Third- party purchaser shall acquire the Target Shares subject to all the terms and provisions of this Agreement. All transferees of the Target Shares shall be required as a condition of such transfer to agree in writing (in a form satisfactory to the Company) that such transferee shall receive and hold the Target Shares subject to the provisions of this Agreement. In the event Owner does not sell or otherwise dispose of the Target Shares within the specified ninety (90) day period, the Company's First Refusal Right shall continue to be applicable to any subsequent disposition of the Target Shares by Owner until such right lapses in accordance with Section 11 hereof.

(e) Partial Exercise of Right. In the event the Company (or its assignees) makes a timely exercise of the First Refusal Right with respect to a portion, the Owner shall have the Option, exercisable by written notice to the Company delivered within ninety (90) days after the date of the Disposition Notice, to effect the sale of the Target Shares pursuant to one of the following alternatives:

(i) sale or other distribution of all the Target Shares to a third-party purchaser in compliance with the requirements of Section 8(d) above, as if the Company did not exercise the First Refusal Right hereunder; or

(ii) sale to the Company (or its assignees) of the portion of the Target Shares which the Company (or its assignees) has elected to purchase, such sale to be effected in substantial conformity with the provisions of Section 8(c) above.

Failure of Owner to deliver timely notification to the Company under this Section 8(e) shall be deemed to be an election by Owner to sell the Target Shares pursuant to alternative (ii) above.

(f) Exempt Transfers. The Company's First Refusal Right under this Section shall not apply to transfers of the Shares by will or the laws of descent and distribution; *provided, however*, that all of the terms of this Agreement shall remain in effect as to such transferred Shares to a revocable trust for the sole benefit of Owner, his or her spouse, or his or her lineal descendants, or to his or her spouse or his or her lineal descendants subject to an irrevocable voting trust of a duration of ten (10) years without

the written permission of the Company, provided said Owner is trustee and prior written notice (together with a copy of the trust agreement) is give to the Company within thirty (30) days thereafter. The trustee shall hold such Shares subject to all the provisions hereof, and shall make no further transfers other than as provided therein. Upon the death, total disability, or termination of employment of the transferor Owner, the successor trustee or any cotrustee (and any subsequent transferee) shall be required to sell, transfer to present said Shares for purchase as provided herein, for the price and on the terms hereafter set forth as if such successor trustee and subsequent transferee were the transferor Owner. Such transferee shall make no further transfers other than as provided herein, and any attempted transfer in violation of this Section 8 shall be null and void and shall be disregarded by the Company. All references herein to "**Shares**" shall be deemed to included Shares owned by any such successor trustee or subsequent transferee, except that payment for such trustee and transferee Shares shall be made to the trustee and transferee instead of to the original Owner or his or her estate.

9. **Adjustments for Changes in Stock**. If there should be any change in a class of stock subject to this Option, through merger, consolidation, reorganization, recapitalization, reincorporation, stock split, stock dividend or other change in the capital structure of the Company (except for a Corporate Transaction described in Section 7 hereof), the Company shall make appropriate adjustments in the number of Optioned Shares and in the Option Price. Any new, substituted or additional securities or property which is distributed with respect to the Shares shall be immediately subject to the provisions of Section 8, but only to the extent the Shares are at such time covered by such provisions. Any adjustment made pursuant to this Section as a consequence of a change in the capital structure of the Company shall not entitle Optionee to acquire a number of shares of Company stock or shares of stock of any successor company greater than the number of shares Optionee would receive if, prior to such change, Optionee had actually held a number of Shares equal to the number of Optioned Shares. Nothing in this Agreement shall affect or limit in any way the right or power of the Company to make adjustments, reclassifications, reorganizations or changes of its capital or business structure or to merge, consolidate, dissolve or liquidate, or to sell or transfer all or any part of its business or assets.

10. **Limitations on Transfer of Option**. This Option shall, during Optionee's lifetime, be exercisable only by Optionee, and neither this Option nor any right hereunder shall be transferable by Optionee by operation of law or otherwise other than by will or the laws of descent and distribution. In the event of any attempt by Optionee to alienate, assign, pledge, hypothecate, or otherwise dispose of this Option or of any right hereunder, except as provided for in this Agreement, or in the event of the levy of any attachment, execution, or similar process upon the rights or interest hereby conferred, the Company at its election may terminate this Option by notice to Optionee and this Option shall thereupon be null and void.

11. **Lapse**. The Company's First Refusal Right under Section 8 shall lapse and cease to have effect upon one of the following events whichever occurs first:

(a) the Company is merged into, or sells its assets to, or exchanges stock with, another corporation which has, after such merger, sale of assets or exchange of stock, consolidated total assets of at least $10,000,000 and is qualified to be listed on NASDAQ, or

(b) engages in an Initial Public Offering with a minimum share price of $5.00 and total offering proceeds of at least $10,000,000.00.

12. **No Shareholder Rights**. Neither Optionee nor any person entitled to exercise Optionee's rights in the event of his or her death shall have any of the rights of a shareholder with respect to the Optioned Shares except to the extent the certificates for such shares shall have been issued upon the exercise of this Option.

13. **NO EFFECT ON TERMS OF EMPLOYMENT OR SERVICE CONTRACT**. SUBJECT TO THE TERMS OF ANY WRITTEN EMPLOYMENT CONTRACT TO THE CONTRARY, THE COMPANY SHALL HAVE THE RIGHT TO TERMINATE OR CHANGE THE TERMS OF EMPLOYMENT OF OPTIONEE AT ANY TIME AND FOR ANY REASON WHATSOEVER, WITH OR WITHOUT CAUSE. FURTHERMORE, NOTHING IN THIS AGREEMENT SHALL CONFER UPON OPTIONEE ANY RIGHT TO CONTINUE IN THE SERVICE OF THE COMPANY FOR ANY PERIOD OF SPECIFIC DURATION.

14. **Notice**. Any notice required to be given under the terms of this Agreement shall be addressed to him or her at the address given by him or her beneath his or her signature to this Agreement, or such other address as either party to this Agreement may hereafter designate in writing to the other. Any such notice shall be deemed to have been duly given when enclosed in a properly sealed envelope or wrapper addressed as aforesaid, express or certified and deposited (postage or certification fee prepaid) in a post office or branch post office or branch post office regularly maintained by the United States Post Office.

15. **Lock-up Agreement**.

(a) Agreement. Optionee, if requested by the Company and the lead underwriter of any Initial Public Offering (the "**Lead Underwriter**"), hereby irrevocable agrees not to sell, contract to sell, grant any option to purchase, transfer the economic risk of ownership in, make any short sale of, pledge or otherwise transfer or dispose of any interest in any common stock of the Company (the "**Common Stock**") or any securities convertible into or exchangeable or exercisable for or any other rights to purchase or acquire Common Stock (except Common Stock included in such Initial Public Offering or acquired on the public market after such offering) during the 180-day period following the effective date of a registration statement of the Company filed under the Securities Act, or such shorter period of time as the Lead Underwriter shall specify. Optionee further agrees to sign such documents as may be requested by the Lead Underwriter to effect the foregoing and agrees that the Company may impose stop-transfer instructions with respect to such Common Stock until the end of such period. The Company and Optionee acknowledge that each Lead Underwriter of an Initial Public Offering, during the period of such Initial Public Offering and for the 180-day period thereafter, is an intended beneficiary of this Section.

(b) Permitted Transfers. Notwithstanding the foregoing, Section 15(a) hereof shall not prohibit Optionee from transferring any shares of Common Stock or securities convertible into or exchangeable or exercisable for the Company's Common Stock either during Optionee's lifetime or on death by will or intestacy to Optionee's immediate family or to a trust the beneficiaries of which are exclusively Optionee and/or a member or members of Optionee's immediate family; *provided, however*, that prior to any such transfer, each transferee shall execute an agreement pursuant to which each transferee shall agree to receive and hold such securities subject to the provisions of this Section. For the purposes of this Section, the term "**immediate family**" shall mean spouse, lineal descendant, father, mother, brother or sister of the transferor.

(c) No Amendment Without Consent of Underwriter. During the period from identification as a Lead Underwriter in connection with any Initial Public Offering until the earlier of (i) the expiration of the lock-up period specified in Section 15(a) hereof in connection with such offering or (ii) the abandonment of such offering by the Company and the Lead Underwriter, the Provisions of this Section may not be amended or waived except with the consent of the Lead Underwriter.

16. **Taxes**. The Committee shall determine the amount of any withholding or other tax required by law to be withheld or paid by the Company with respect to any income recognized by

Optionee with respect to the Option. It is intended that the Agreement and the Option will be exempt from (or in the alternative will comply with) Section 409A of the Code, and the Agreement shall be administered accordingly and interpreted and construed on a basis consistent with such intent. This Section 16 shall not be construed as a guarantee of any particular tax effect for Optionee's benefits under the Agreement and the Company does not guarantee that any such benefits will satisfy the provisions of Section 409A of the Code or any other provision of the Code.

17. **Board and Committee Discretion**. The Board shall have such powers and authorities related to the administration of the Agreement as are consistent with the Company's certificate of incorporation and bylaws and applicable law. The Board shall have the power and authority to delegate its responsibilities hereunder to the Committee, which shall have full authority to act in accordance with its charter (as in effect from time to time), and with respect to the power and authority of the Board to act hereunder, all references to the Board shall be deemed to include a reference to the Committee, unless such power or authority is specifically reserved by the Board. Except as otherwise may be required by applicable law, regulatory requirement or the certificate of incorporation or the bylaws of the Company, the Board shall have full power and authority to take all actions and to make all determinations required or provided for under the Agreement and shall have full power and authority to take all such other actions and make all such other determinations not inconsistent with the specific terms and provisions of the Agreement that the Board deems to be necessary or appropriate to the administration of the Agreement. Following the Initial Public Offering, the Committee shall administer the Agreement; *provided*, *however*, the Board shall retain the right to exercise the authority of the Committee to the extent consistent with applicable law and the applicable requirements of any securities exchange on which the Shares may then be listed. All actions, determinations and decisions by the Board or the Committee under the Agreement shall be in the sole discretion of the Board and shall be final, binding and conclusive on all persons. No member of the Board or of the Committee shall be liable for any action or determination made in good faith with respect to the Agreement.

18. **Amendment**. The Board may, at any time and from time to time, amend the Agreement. An amendment shall be contingent on approval of the Company's shareholders to the extent stated by the Board, required by applicable law or required by applicable securities exchange listing requirements. No amendment, suspension or termination of the Agreement shall, without the consent of Optionee, materially impair rights or obligations under the Agreement.

19. **Successors**. This Agreement shall be binding upon and inure to the benefit of any successor or successors of the Company. Where the context permits, "**Optionee**" as used in this Agreement shall include Optionee's executor, administrator or other legal representative or the person or persons to whom Optionee's rights pass by will or the applicable laws of descent and distribution.

20. **Clawbacks**. The Agreement, the Option, and the Optioned Shares shall be subject to clawback, cancellation, recoupment, rescission, payback, reduction or other similar action in accordance with the terms of any Company clawback or similar policy or any applicable law related to such actions, as may be in effect from time to time. Optionee's acceptance of the Option shall be deemed to constitute Optionee's acknowledgement of and consent to the Company's application, implementation and enforcement of any applicable Company clawback or similar policy that may apply to Optionee, whether adopted prior to or following the Grant Date, and any provision of applicable law relating to clawback, cancellation, recoupment, rescission, payback or reduction of compensation, and Optionee's agreement that the Company may take such actions as may be necessary to effectuate any such policy or applicable law, without further consideration or action.

21. **Restrictive Legends**. All certificates for the Optioned Shares shall bear the following legends, in addition to any other legends required by applicable state securities law and securities commissioners:

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR UNDER ANY STATE SECURITIES LAWS. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED, SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THESE SECURITIES UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS OR AN OPINION OF LEGAL COUNSEL SATISFACTORY TO THE COMPANY THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND APPLICABLE STATE SECURITIES LAWS."

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ISSUED UNDER THE LIMITED OFFERING EXEMPTION PROVIDED BY SECTION 25102(f) OF THE CALIFORNIA CORPORATIONS CODE."

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO THE COMPANY'S RIGHT OF FIRST REFUSAL AND ONE HUNDRED EIGHTY (180) DAYS LOCK-UP RESTRICTION PROVIDED IN THE COMPANY'S STOCK OPTION AGREEMENT."

22. **Construction**. This Agreement and the Option evidenced hereby are made and granted pursuant to terms set forth herein. All decisions of the Committee with respect to any question or issue arising under this Agreement shall be conclusive and binding on all persons having an interest in the Option.

23. **Delays or Omissions**. Except as expressly provided herein, no delay or omission to exercise any right, power or remedy accruing to the Company, upon any breach of Optionee under this Agreement, shall impair any such right, power or remedy of such Company nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind of character on the part of the Company of any breach or default under this Agreement, or any waiver on the part of any holder of the provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing.

24. **Entire Agreement**. This Agreement constitutes the entire agreement and understanding of the parties with respect to the subject matter hereof and supersedes all prior oral or written agreements, arrangements, and understandings with respect any options to purchase options to purchase Company stock approved by the Board on the Grant Date. No representation, promise, inducement, statement or intention has been made by any party hereto that is not embodied herein, and no party shall be bound by or liable for any alleged representation, promise, inducement, or statement not so set forth herein.

25. **California Law**. The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of California.

[*signature page follows*]

IN WITNESS WHEREOF, this Agreement is entered into by Optionee and the Company as of _____.

"Company"

ACM RESEARCH, INC.

By: _____
Name: David Hui Wang
Title: President

"Optionee"

Name: _____

[*signature page to Option Agreement*]

ACM RESEARCH, INC.

1998 STOCK OPTION PLAN

Adopted by the Board of Directors on **April 30, 1998** for **ACM Research, Inc.,** (the "Company").

1. PURPOSES.

(a) The purpose of the Plan is to provide a means by which selected Employees and Directors of and Consultants to the Company, and its Affiliates, may be given an opportunity to purchase stock of the Company.

(b) The Company, by means of the Plan, seeks to retain the services of persons who are now Employees or Directors of or Consultants to the Company, to secure and retain the services of new Employees, Directors and Consultants, and to provide incentives for such persons to exert maximum efforts for the success of the Company or any present or future parent company and/or subsidiary.

(c) The Company intends that the Options issued under the Plan shall, in the discretion of the Board or any Committee to which responsibility for administration of the Plan has been delegated pursuant to subsection 3(c), be either Incentive Stock Options or Nonstatutory Stock Options. All Options shall be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and in such form as issued pursuant to section 6, and a separate certificate or certificates will be issued for shares purchased on exercise of each type of Option.

2. DEFINITIONS.

(a) **"Affiliate"** means any parent corporation or subsidiary corporation, whether now or hereafter existing, as those terms are defined in Sections 424(e) and (f) respectively, of the Code.

(b) **"Board"** means the Board of Directors of the Company.

(c) **"Code"** means the Internal Revenue Code of 1986, as amended.

(d) **"Committee"** means a Committee appointed by the Board in accordance with subsection 3(c) of the Plan.

(e) **"Company"** means **ACM Research Inc.,** a California corporation.

(f) **"Consultant"** means any person, including an advisor, engaged by the Company or an Affiliate to render consulting services and who is compensated for such services, provided that the term "Consultant" shall not include Directors who are paid only a director's fee by the Company or who are not compensated by the Company for their services as Directors.

(g) **"Continuous Status as an Employee, Director or Consultant"** means the

employment or relationship as a Director or Consultant is not interrupted or terminated by the Company or any Affiliate. The Board, in its sole discretion, may determine whether Continuous Status as an Employee, Director or Consultant shall be considered interrupted in the case of: (i) any leave of absence approved by the Board, including sick leave, military leave, or any other personal leave; provided, however, that for purposes of Incentive Stock Options, any such leave may not exceed ninety (90) days, unless reemployment upon the expiration of such leave is guaranteed by contract (including certain Company policies) or statute; or (ii) transfers between locations of the Company or between the Company, Affiliates or its successor.

(h) **"Director"** means a member of the Board.

(i) **"Disinterested Person"** means a Director: (i) who was not during the one year prior to service as an administrator of the Plan granted or awarded equity securities pursuant to the Plan or any other plan of the Company or any of its affiliates entitling the participants therein to acquire equity securities of the Company or any of its affiliates except as permitted by Rule 16b-3(c)(2)(i); or (ii) who is otherwise considered to be a "disinterested person" in accordance with Rule 16b-3(c)(2)(i), or any other applicable rules, regulations or interpretations of the Securities and Exchange Commission.

(j) **"Employee"** means any person, including Officers and Directors, employed by the Company or any Affiliate of the Company. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

(k) **"Exchange Act"** means the Securities Exchange Act of 1934, as amended.

(l) **"Fair Market Value"** means, as of any date, the value of the common stock of the Company determined as follows:

(1) If the common stock is listed on any established stock exchange or a national market system, including without limitation the National Market System of the National Association of Securities Dealers, Inc. Automated Quotation ("NASDAQ") System, the Fair Market Value of a share of common stock shall be the closing sales price for such stock (or Low closing bid, if no sales were reported) as quoted on such system or exchange (or the exchange with the greatest volume of trading in common stock) on the last market trading day prior to the day of determination, as reporting in the Wall Street Journal or such other source as the Board deems reliable;

(2) If the common stock is quoted on the NASDAQ System (but not on the National Market System thereof) or is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a share of common stock shall be the mean between the high bid and high asked prices for the common stock on the last market trading day prior to the day of determination, as reported in the Wall Street Journal or such other source as the Board deems reliable;

(3) In the absence of an established market for the common stock, the Fair Market Value shall be determined in good faith by the Board.

(m) **"Incentive Stock Option"** means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder;

(n) **"Nonstatutory Stock Option"** means an Option not intended to qualify as an Incentive Stock Option.

(o) **"Officer"** means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(p) **"Option"** means a stock option granted pursuant to the Plan.

(q) **"Stock Option Agreement"** means a written agreement between the Company and an Optionee evidencing the terms and conditions of an individual Option grant, whether it be an Incentive or Nonstatutory Stock Option Agreement. The Option Agreements are subject to the terms and conditions of the Plan and attached hereto as Exhibit A.

(r) **"Stock Purchase Agreement"** means a written agreement between the Company and an Optionee exercising his/her options evidencing the terms and conditions of the Company's right of first refusal and repurchase rights and other terms and conditions of the sale of the Company's stock and attached hereto as Exhibit B.

(s) **"Optioned Stock"** means the common stock of the Company subject to an Option.

(t) **"Optionee"** means an Employee, Director or Consultant who holds an outstanding Option.

(u) **"Plan"** means this **1998** Stock Option Plan.

(v) **"Rule 16b-3"** means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

3. ADMINISTRATION.

(a) The Plan shall be administered by the Board unless and until the Board delegates administration to a Committee, as provided in subsection 3(c).

(b) The Board shall have the power, subject to, and within the limitations of the express provisions of the Plan:

(1) To determine from time to time which of the persons eligible under the Plan shall be granted Options; when and how the Option shall be granted; whether the Option will be an Incentive Stock Option or a Nonstatutory Stock Option; the provisions of each Option granted (which need not be identical), including the time or times such Option may be exercised in whole or in part; and the number of shares for which an Option shall be granted to each such person.

(2) To construe and interpret the Plan and Options granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Option Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(3) To amend the Plan as provided in Section 11.

(c) The Board may delegate administration of the Plan to a committee composed of not fewer than two (2) members (the "Committee"), all of the members of which Committee shall be disinterested persons, if required and as defined by the provisions of subsection 3(d). If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board (and references in this Plan to the Board shall thereafter be to the Committee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may abolish the Committee at any time and revest in the Board the administration of the Plan. Additionally, prior to the date of the first registration of an equity security of the Company under Section 12 of the Exchange Act, and notwithstanding anything to the contrary contained herein, the Board may delegate administration of the Plan to any person or persons and the term "Committee" shall apply to any person or persons to whom such authority has been delegated.

(d) Any requirement that an administrator of the Plan be a Disinterested Person shall not apply (i) prior to the date of the first registration of an equity security of the Company under Section 12 of the Exchange Act, or (ii) if the Board or the Committee expressly decided that such requirement shall not apply. Any Disinterested Person shall otherwise comply with the requirements of Rule 16b-3.

4. SHARES SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 10 relating to adjustments upon changes in stock, the stock that may be sold pursuant to Options shall not exceed in the aggregate of **six hundred thousand (600,000)** shares of the Company's common stock. If any Option shall for any reason expire or otherwise terminate without having been exercised in full, the stock not purchased under such Option shall again become available for the Plan.

(b) The stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

5. ELIGIBILITY.

(a) Incentive Stock Options may be granted only to Employees. Nonstatutory Stock Options may be granted only to Employees, Directors or Consultants.

(b) A Director shall in no event be eligible for the benefits of the Plan unless at the time discretion is exercised in the selection of the Director as a person to whom Options may be granted, or in the determination of the number of shares which may be covered by Options granted to the Director: (i) the Board has delegated its discretionary authority over the Plan to a Committee which consists solely of Disinterested Persons; or (ii) the Plan otherwise complies with the requirements of Rule 16b-3. The Board shall otherwise comply with the requirements of Rule 16b-3. This subsection 5(b) shall not apply (i) prior to the date of the first registration of an equity security of the Company under Section 12 of the Exchange Act, or (ii) if the Board or Committee expressly declares that it shall not apply.

(c) No person shall be eligible for the grant of an Option if, at the time of grant, such

person owns (or is deemed to own pursuant to Section 424(d) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or of any of its Affiliates unless the exercise price of such Option is at least one hundred ten percent (110%) of the Fair Market Value of such stock at the date of grant and the Option is not exercisable after the expiration of five (5) years from the date of grant.

6. OPTION PROVISIONS.

Each Option shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The provisions of separate Options need not be identical, but each Option shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) **Term.** No Option shall be exercisable after the expiration of ten (10) years from the effective date of the Plan.

(b) **Price.** The option price of each Incentive Stock Option shall be not less than one hundred percent (100%) of the fair market value of the stock subject to the Option on the date the Option is granted. The option price of each Nonstatutory Stock Option shall be not less than eighty-five percent (85%) of the fair market value of the stock subject to the Option on the date the Option is granted, unless otherwise determined by the Board.

(c) **Consideration.** The purchase price of stock acquired pursuant to an Option shall be paid, to the extent permitted by applicable statutes and regulations, either (i) in cash at the time the option is exercised, or (ii) at the discretion of the Board or the Committee, either at the time of the grant or exercise of the Option, (A) by delivery to the Company of other common stock of the Company, (B) according to a deferred payment or other arrangement (which may include, without limiting the generality of the foregoing, the use of other common stock of the Company) with the person to whom the Option is granted or to whom the Option is transferred pursuant to subsection 6(d), or (C) in any other form of legal consideration that may be acceptable to the Board.

In the case of any deferred payment arrangement, interest shall be payable at least annually and shall be charged at the minimum rate of interest necessary to avoid the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement.

(d) **Transferability.** An Incentive Stock Option shall not be transferable except by will or by the laws of descent and distribution, and shall be exercisable during the lifetime of the person to whom the Incentive Stock Option is granted only by such person. A Nonstatutory Stock Option shall not be transferable except by will or by the laws of descent and distribution or pursuant to a qualified domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act, or the rules thereunder (a “QDRO”), and shall be exercisable during the lifetime of the Person to whom the Option is granted only by such person or any transferee pursuant to a QDRO.

(e) **Vesting.** The total number of shares of stock subject to an option may, but need not, be allotted in periodic installments (which may, but need not, be equal) as determined by the Board or the Committee. The Option Agreement may provide that from time to time during each of such installment periods,

the Option may become exercisable ("vest") with respect to some or all of the shares allotted to that period, and may be exercised with respect to some or all of the shares allotted to such period and/or any prior period as to which the Option became vested but was not fully exercised. During the remainder of the term of the Option (if its term extends beyond the end of the installment periods), the option may be exercised from time to time with respect to any shares then remaining subject to the Option. The provisions of this subsection 6(c) are subject to any option provisions governing the minimum number of shares as to which an option may be exercised.

(f) **Securities Law Compliance.** The Company may require any Optionee, or any person to whom an Option is transferred under subsection 6(d), as a condition of exercising any such Option, (1) to give written assurances satisfactory to the Company as to the Optionee's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters, and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Option; and (2) to give written assurances satisfactory to the Company stating that such person is acquiring the stock subject to the Option for such person's own account and not with any present intention of selling or otherwise distributing the stock. These requirements, and any assurances given pursuant to such requirements, shall be inoperative if (i) the issuance of the shares upon the exercise of the Option has been registered under a then currently effective registration statement under the Securities Act of 1933, as amended (the 'Securities Act'), or (ii) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws.

(g) **Termination of Employment or Relationship as a Director or Consultant.** In the event an Optionee's Continuous Status as an Employee, Director or Consultant terminates (other than upon the Optionee's death or disability), the Optionee may exercise his or her Option, but only within such period of time as is determined by the Board, and only to the extent that the Optionee was entitled to exercise it at the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). In the case of an Incentive Stock Option, the Board shall determine such period of time (in no event to exceed three (3) months from the date of termination) when the Option is granted. If, at the date of termination, the Optionee is not entitled to exercise his or her entire Option, the shares covered by the unexercisable portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified in the Option Agreement, the Option shall terminate, and the shares covered by such Option shall revert to the Plan.

(h) **Disability of Optionee.** In the event an Optionee's Continuous Status as an Employee, Director or Consultant terminates as a result of the Optionee's disability, the Optionee may exercise his or her Option, but only within twelve (12) months from the date of such termination (or such shorter period specified in the Option Agreement), and only to the extent that the Optionee was entitled to exercise it at the date of such termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). If, at the date of termination, the Optionee is not entitled to exercise his or her entire Option, the shares covered by the unexercisable portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified herein, the Option shall terminate, and the shares covered by such Option shall revert to the Plan.

(i) **Death of Optionee.** In the event of the death of an Optionee, the Option may be exercised, at any time within twelve (12) months following the date of death (or such shorter period specified in the Option Agreement) (but in no event later than the expiration of the term of such Option as set forth in the

Option Agreement), by the Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent the Optionee was entitled to exercise the Option at the date of death. If, at the time of death, the Optionee was not entitled to exercise his or her entire Option, the shares covered by the unexercisable portion of the Option shall revert to the Plan. If, after death, the Optionee's estate or a person who acquired the right to exercise the Option by bequest or inheritance does not exercise the Option within the time specified herein, the Option shall terminate, and the shares covered by such Option shall revert to the Plan.

(j) **Early Exercise.** The Option may, but need not, include a provision whereby the Optionee may elect at any time while an Employee, Director or Consultant to exercise the Option as to any part or all of the shares subject to the Option prior to the full vesting of the Option. Any unvested shares so purchased may be subject to a repurchase right in favor of the Company or to any other restriction the Board determines to be appropriate.

(k) **Withholding.** To the extent provided by the terms of an Option Agreement, the Optionee may satisfy any federal, state or local tax withholding obligation relating to the exercise of such Option by any of the following means or by a combination of such means: (1) tendering a cash payment; (2) authorizing the Company to withhold shares from the shares of the common stock otherwise issuable to the participant as a result of the exercise of the Option; or (3) delivering to the Company owned and unencumbered shares of the common stock of the Company.

7. COVENANTS OF THE COMPANY.

(a) During the terms of the Options, the Company shall keep available at all times the number of shares of stock required to satisfy such Options.

(b) The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to issue and sell shares of stock upon exercise of the Options; provided, however, this undertaking shall not require the Company to register under the Securities Act either the Plan, any Option or any stock issued or issuable pursuant to any such Option. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell stock upon exercise of such Options unless and until such authority is obtained.

8. **USE OF PROCEEDS FROM STOCK.**

Proceeds from the sale of stock pursuant to Options shall constitute general funds of the Company.

9. **MISCELLANEOUS.**

(a) Neither an Optionee nor any person to whom an Option is transferred under subsection 6(d) shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares subject to such Option unless and until such person has satisfied all requirements for exercise of the Option pursuant to its terms.

(b) Nothing in the Plan or any instrument executed or Option granted pursuant thereto shall confer upon any Employee, Director, Consultant or Optionee any right to continue in the employ of the

Company or any Affiliate (or to continue acting as a Director or Consultant) or shall affect the right of the Company or any Affiliate to terminate the employment or relationship as a Director or Consultant of any Employee, Director, Consultant or Optionee with or without cause.

(c) To the extent that the aggregate Fair Market Value (determined at the time of grant) of stock with respect to which Incentive Stock Options granted after 1986 are exercisable for the first time by any Optionee during any calendar year under all plans of the Company and its Affiliates exceeds one hundred thousand dollars ($100,000), the Options or portions thereof which exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options.

10. **ADJUSTMENTS UPON CHANGES IN STOCK.**

(a) If any change is made in the stock subject to the Plan, or subject to any Option (through merger, consolidation, reorganization, recapitalization, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or otherwise), the Plan and outstanding Options will be appropriately adjusted in the class(es) and maximum number of shares subject to the Plan and the class(es) and number of shares and price per share of stock subject to outstanding Options.

(b) In the event of: (1) a merger or consolidation in which the Company is not the surviving corporation except for (i) a transaction the principal purpose of which is to change the state of the Company's incorporation, or (ii) a transaction in which the Company's shareholders immediately prior to such merger or consolidation hold (by virtue of securities received in exchange for their shares in the Company) securities of the surviving entity representing more than fifty percent (50%) of the total voting power of such surviving entity immediately after such transaction, or (2) the sale, transfer or other disposition of all or substantially all of the Company's assets unless the Company's shareholders immediately prior to such sale, transfer or other disposition hold (by virtue of securities received in exchange for their shares in the Company) securities of the purchaser or other transferee representing more than fifty percent (50%) of the total voting power of such entity immediately after such transaction, or (3) any merger in which the Company is the surviving entity but in which the Company's shareholders immediately prior to such merger do not hold (by virtue of their shares in the Company held immediately prior to such transaction) securities representing more than fifty percent (50%) of the total voting power of the surviving entity immediately after such transaction, then to the extent permitted by applicable law: (i) any surviving corporation shall assume any Options outstanding under the Plan or shall substitute similar Options for those outstanding under the Plan, or (ii) in the event any surviving corporation refuses to assume or continue such Options, or to substitute similar options for those outstanding under the Plan, then such Options shall be terminated if not exercised prior to such event. In the event of a dissolution or liquidation of the Company, any Options outstanding under the Plan shall terminate if not exercised prior to such event.

11. **AMENDMENT OF THE PLAN.**

(a) The Board at any time, and from time to time, may amend the Plan. However, except as provided in Section 10 relating to adjustments upon changes in stock, no amendment shall be effective unless approved by the stockholders of the Company within twelve (12) months before or after the adoption of the amendment, where the amendment will:

(1) Increase the number of shares reserved for options under the Plan;

(2) Modify the requirements as to eligibility for participation in the Plan (to the extent such modification requires stockholder approval in order for the Plan to satisfy the requirements of Section 422 of the Code); or

(3) Modify the Plan in any other way if such modification requires stockholder approval in order for the Plan to satisfy the requirements of Section 422 of the Code or to comply with the requirements of Rule 16b-3.

(b) It is expressly contemplated that the Board may amend the Plan in any respect the Board deems necessary or advisable to provide Optionees with the maximum benefits provided or to be provided under the provisions of the Code and the regulations promulgated thereunder relating to Incentive Stock Options and/or to bring the Plan and/or Incentive Stock Options granted under it into compliance therewith.

(c) Rights and obligations under any Option granted before amendment of the Plan shall not be altered or impaired by any amendment of the Plan unless (i) the Company requests the consent of the person to whom the Option was granted and (ii) such person consents in writing.

12. **TERMINATION OR SUSPENSION OF THE PLAN.**

(a) The Board may suspend or terminate the Plan at any time. Unless sooner terminated, the Plan shall terminate on **April 29, 2008** (ten years after its adoption). No Options may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) Rights and obligations under any Option granted while the Plan is in effect shall not be altered or impaired by suspension or termination of the Plan, except with the consent of the person to whom the Option was granted.

13. **EFFECTIVE DATE OF PLAN**

The Plan shall become effective as of **April 30, 1998**, but no Options grants under the Plan shall be exercised unless and until the Plan has been approved by the stockholders of the Company, and, if required, an appropriate permit has been issued by the Commissioner of Corporations of the State of California.

14. **ENTIRE ENGAGEMENT**

This Agreement represents the entire agreement between the parties and supersedes all prior representations, discussions, negotiations and agreements, whether written or oral.

DECLARATION

I further declare under penalty of perjury that the 1998 Stock Option Plan has been duly approved and adopted by the Board of Directors of the Company set forth herein.

Executed at Fremont, California.

Dated: April 30, 1998

/s/ Hui Wang
Hui Wang, President ACM Research, Inc.

ACM RESEARCH, INC.
INCENTIVE STOCK OPTION AGREEMENT

This Agreement is made as of _____ between **ACM RESEARCH. INC.,** a California corporation (the "Company") and _____ ("Optionee").

RECITALS:

WHEREAS, the Company has adopted the 1998 Stock Option Plan (the "Plan"), which Plan is incorporated in this Agreement by reference and made a part of it; and

WHEREAS, the Company regards Optionee as a valuable employee or consultant of the Company, and has determined that it would be to the advantage and in the interests of the Company and its shareholders to grant the options provided for in this Agreement to Optionee as an inducement to remain in the service of the Company and as an incentive for increased efforts during such service;

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, the parties to this Agreement hereby agree as follows:

1. **Option Grant.** The Company hereby grants to Optionee the right and option to purchase from the Company on the terms and conditions hereinafter set forth, all or any part of an aggregate of _____ shares of the Common Stock of the Company (the "Stock"). This option is intended to satisfy the requirements of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code") to qualify as **an Incentive Stock Option.** The option Grant Date shall be _____.

2. **Option Price.** The purchase price of the Stock subject to this option shall be $_____ per share (the "Option Price") as determined by the Board of Directors of the Company or a committee designated by it (the "Committee").

3. **Option Period.** This option shall be exercisable only during the Option Period (as defined below), and during such Option Period, the exercisability of the option shall be subject to the limitations of Section 4 hereof. The "Option Period" shall commence on the Grant Date and except as provided in Section 4 hereof shall terminate (the "Termination Date") ten (10) years from the Grant Date.

4. **Limits on Option Period.** The Option Period may end before the Termination Date, as follows:

(a) Termination of Employment. If Optionee ceases to be a bona fide employee of the Company or for any reason other than disability [within the Meaning of subsections (d)] or death during the Option Period, the Option Period shall terminate one (1) **month** after the date of such cessation of employment or on the Termination Date, whichever shall first occur, and the option shall be exercisable only to extent exercisable under Section *5* hereof on the date of Optionee's cessation of employment.

(b) Termination of Status as Service Provider. Should Optionee cease to be a Service Provider to the Company, the Option Period shall terminate **three (3) months** after the date when

Optionee ceases to be a Service Provider, and the option shall be exercisable only to the extent exercisable under Section 5 hereof on the date that Optionee ceases to be a Service Provider. Optionee shall be deemed to be a Service Provider so long as Optionee continues to render services to the Company in the same or greater capacity that he/she renders them as of the date of this Agreement, whether as an employee or an independent contractor or consultant.

(c) Death. If Optionee dies while in the employ of the Company or any of its Affiliates, the Option Period shall end twelve (12) months after the date of death or on the Termination Date, whichever shall first occur, and Optionee's executor or administrator or the person or persons to whom Optionee's rights under this option shall pass by will or by the applicable laws of descent and distribution may exercise this option on to the extent exercisable under Section *5* hereof on the date of Optionee's death.

(d) Disability. If Optionee's employment is terminated by reason of disability, the Option Period shall end twelve (12) months after date of Optionee's cessation of employment or on the Termination Date, whichever shall first occur, and the option shall be exercisable only to the extent exercisable under Section *5* hereof on the date of Optionee's cessation of employment.

(e) Leave of Absence. If Optionee is on a leave of absence from the company because of his or her disability, or for the purpose of serving the government of the country in which the principal place of employment of Optionee is located, either in a military or civilian capacity or for such other purpose or reason as the Committee may approve, Optionee shall not be deemed during the period of such absence, by virtue of such absence alone, to have terminated employment with the Company except as the Committee may otherwise expressly provide.

5. **Vesting of Right to Exercise Options.** Subject to other limitations contained in this Agreement, the Optionee shall have the right to exercise the option such that the options are fully exercisable as follows:

Any portion of the option that is not exercised shall accumulate and may be exercised at any time during the Option Period prior to the Termination Date. No partial exercise of this option may be for less than five percent **(5%)** of the total number of shares then available under this option. In no event shall the Company be required to issue fractional shares.

6. **Manner of Exercising Option.**

(a) To exercise the Option with respect to all or any portion of the Optioned Shares for which the option is at the time exercisable. Optionee (or in the case of exercise after Optionee's death, the Optionee's executor, administrator, heir or legatee, as the case may be) must take the following actions:

(i) Execute and deliver to the Secretary of the Company the Notice of Exercise, and a stock purchase agreement (the "Purchase Agreement") upon the Company's request.

(ii) Pay on the exercise date the aggregate Option Price for the purchased shares in cash or by check.

(iii) Furnish to the Company appropriate documentation that the person or persons exercising the Option, if other than Optionee, have the right to exercise the Option. Optionee may exercise the option with respect to all or any part of the shares of Stock then subject to such exercise as follows:

(b) Execution of Agreements. Optionee (and Optionee's spouse, if any) shall be required, as a condition precedent to acquiring Stock through exercise of the option, to execute one or more agreements relating to obligations in connection with ownership of the Stock or restrictions on transfer of the Stock no less restrictive than the obligations and restrictions to which the other shareholders of the Company are subject at the time of such exercise.

(c) Investment Representations. If required by the Committee, Optionee shall give the Company satisfactory assurance in writing, signed by Optionee or his or her legal representative, as the case may be, that such shares are being purchased for investment and not with a view to the distribution thereof, provided that such assurance shall be deemed inapplicable to (l) any sale of such shares by such Optionee made in accordance with the terms of a registration statement covering such sale, which may hereafter be filed and become effective under the Securities Act of 1933, as amended (the "Securities Act"), and with respect to which no stop order suspending the effectiveness thereof has been issued, and (2) any other sale of such shares with respect to which in the opinion of counsel for the Company, such assurance is not required to be given in order to comply with the provisions of the Securities Act.

(d) Delivery of Certificates. As soon as practicable after receipt of the notice required in Section 6(a) above and satisfaction of the conditions set forth in Section 6(b) and 6(c) above, the Company shall, without transfer or issue tax and without other incidental expense to Optionee, deliver to Optionee at the office of the company, or such other place as may be mutually acceptable to the company and Optionee, a certificate or certificates of such shares of Stock; provided, however, that the time of such delivery may be postponed by the Company for such period as may be required for it with reasonable diligence to comply with applicable registration requirements under the Securities Act, the Securities Exchange Act of 1934, as amended, any applicable listing requirements of any national securities exchange. and requirements under any other law or regulation applicable to the issuance or transfer of such shares.

7. **Corporate Transactions**.

(a) Definition. For purposes of this Section 7, a "Corporate "Transaction" shall include any of the following shareholder-approved transactions to which the Company is a party:

(i) a merger or consolidation in which the Company is not the surviving entity, except for (1) a transaction the principal purpose of which is to change the state of the Company's incorporation, or (2) a transaction in which the Company's shareholders immediately prior to such merger or consolidation hold (by virtue of securities received in exchange for their shares in the Company) securities of the surviving entity representing more than fifty percent (50%) of the total voting power of such surviving entity immediately after such transaction.

(ii) the sale, transfer or other disposition of all or substantially all of the assets of the Company unless the Company's shareholders immediately prior to such sale, transfer or other disposition hold (by virtue of securities received in exchange for their shares in the Company) securities of the purchaser or other transferee representing more than fifty percent (50%) of the total voting power of such entity immediately after such transaction; or

(iii) any merger in which the Company is the surviving entity but in which the Company's shareholders immediately prior to such merger do not hold (by virtue of their shares in the Company held immediately prior to such transaction) securities of the surviving entity (by virtue of their shares in the Company held immediately prior to such transaction) representing more than fifty percent, (50%) of the total voting power of the surviving entity immediately after such transaction.

(b) Effect. In the event of any Corporate Transaction, this option shall terminate immediately prior to the specified effective date of the Corporate Transaction unless assumed by the successor corporation or its parent company, pursuant to options providing substantially equal value and having substantially equivalent provisions as the options granted pursuant to this Agreement. In the event of any Corporate Transaction, the Company's rights under Section 8 hereof shall terminate,

8. **Right of First Refusal**.

(a) Grant of Right. The Company is hereby granted the right of first refusal (the "First Refusal Right"), exercisable in connection with any proposed sale or other transfer of the Stock acquired by Optionee upon exercise of this option. For purposes of this Section, the term "transfer" shall include any assignment, pledge, encumbrance, or other disposition for value of the Stock intended to be made by the Owner (defined below), but shall not include any of the permitted transfers under Section 8(f) below. For purpose of this section, the term ''Owner" shall include the Optionee or any subsequent holder of the Stock who derives his or her chain of ownership through a transfer permitted by Section 8(f) below.

(b) Notice of Intended Disposition. In the event the Owner desires to accept a bona fide third-party offer for any or all the Stock (the shares subject to such offer to be hereinafter called, solely for the purposes of this Section, the "Target Shares"), Owner shall promptly deliver to the Secretary of the Company written notice (the "Disposition Notice") of the offer and the basic terms and conditions thereof, including the proposed purchase price.

(c) Exercise of Right. The Company (or its assignee) shall, for a period of twenty (20) days following receipt of the Disposition Notice, have the right to repurchase any or all of the Target Shares specified in the Disposition Notice upon substantially the same terms and conditions specified therein. Such right shall be exercisable by written notice (the "Exercise Notice") delivered to Owner prior to the expiration of the twenty (20) day exercise period. If the Exercise Notice pertains to all the Target Shares specified in the Disposition Notice, then the Company (or its assignees) shall affect the repurchase of such Target Shares, including payment of the purchase price, not more than five (5) business days after delivery of the Exercise Notice; and at such time Owner shall deliver to the Company the certificates representing the Target shares to be repurchased, each certificate to be properly endorsed for transfer. Should the purchase price specified in the Disposition Notice be payable in property other than cash or evidences of indebtedness, the Company (or its assignees) shall have the right to pay the purchase price in the form of cash equal in amount to the value of such property. If the Owner and the Company (or its assignees) cannot agree on such cash value within ten (10) days after the Company's receipt of the Disposition notice, the valuation shall be made by an appraiser of recognized standing selected by the Owner and the Company (or its assignees) or if they cannot agree on an appraiser within twenty (20) days after the company's receipt of the Disposition Notice, each shall select an appraiser of recognized standing and the two appraisers shall designate a third appraiser of recognized standing, whose appraisal shall be determinative of such value. The closing shall then be held on the later of (i) the fifth business day following delivery of the Exercise Notice or (ii) the 15th day after such cash valuation shall have been made.

(d) Non-Exercise of Right. In the event the Exercise Notice is not given to

Owner within twenty (20) days following the date of the Company's receipt of the Disposition Notice, Owner shall have a period of ninety (90) days thereafter in which to sell or otherwise dispose of the Target Shares upon terms and conditions (inducting the purchase price) no more favorable to the third party purchaser than those specified in the Disposition Notice, The Third-party purchaser shall acquire the Target shares subject to all the terms and provisions of this Agreement. All transferees of the Target Shares shall be required as a condition of such transfer to agree in writing (in a form satisfactory to the Company) that such transferee shall receive and hold the Target Shares subject to the provisions of this Agreement. In the event Owner does not sell or otherwise dispose of the Target shares within the specified ninety (90) day period, the Company's First Refusal Right shall continue to be applicable to any subsequent disposition of the Target Shares by Owner until such right lapses in accordance with Section 12 hereof.

(e) Partial Exercise of Right. In the event the Company (or its assignees) makes a timely exercise of the First Refusal Right with respect to a portion, the Owner shall have the option, exercisable by written notice to the Company delivered within ninety (90) days after the date of the Disposition Notice, to affect the sale of the Target Shares pursuant to one of the following alternatives:

(i) sale or other distribution of all the Target Shares to a third-party purchaser in compliance with the requirements of Section 8(d) above, as if the Company did not exercise the First Refusal Right hereunder; or

(ii) sale to the Company (or its assignees) of the portion of the Target Shares which the Company (or its assignees) has elected to purchase, such sale to be effected in substantial conformity with the provisions of Section 8(c) above.

Failure of Owner to deliver timely notification to the Company under this Section 8(e) shall be deemed to be an election by Owner to sell the Target Shares pursuant to alternative (ii) above,

(f) Exempt Transfers. The Company's First Refusal Right under this Section shall not apply to transfers of the Stock by will or the laws of descent and distribution; provided, however, that all of the terms of this Agreement shall remain in effect as to such transferred Stock to a revocable trust for the sole benefit of Owner, his or her spouse, or his or her lineal descendants, or to his or her spouse or his or her lineal descendants subject to an irrevocable voting trust of a duration of ten (10) years , without the written permission of the Company, provided said Owner is trustee and prior written notice (together with a copy of the trust agreement) give to the Company within thirty (30) days thereafter. The trustee shall hold such Stock subject to all the provisions hereof, and shall make no further transfers other than as provided therein. Upon the death, total disability, or termination of employment of the transferor Owner, the successor trustee or any cotrustee (and any subsequent transferee) shall be required to sell, transfer to present said Stock for purchase as provided herein, for the price and on the terms hereafter set forth as if such successor trustee and subsequent transferee were the transferor Owner. Such transferee shall make no further transfers other than as provided herein, and any attempted transfer in violation of this Section 8 shall be null and void and shall be disregarded by the Company. All references herein to Stock shall be deemed to include Stock owned by any such successor trustee or subsequent transferee, except that payment for such trustee and transferee Stock shall be made to the trustee and transferee instead of to the original Owner or his or her estate.

9. **Adjustment for Changes in Stock.** If there should be any change in a class of Stock subject to this option, through merger, consolidation, reorganization, recapitalization, reincorporation,

stock split, stock dividend or other change in the capital structure of the Company (except for a Corporate Transaction described in Section 7 hereof), the Company shall make appropriate adjustments in the number of shares of such Stock subject to this option in the price per share. Any new, substituted or additional securities or property which is distributed with respect to the Stock shall be immediately subject to the provisions of Section 8, but only to the extent the Stock is at such time covered by such provisions. Any adjustment made pursuant to this Section as a consequence of a change in the capital structure of the Company shall not entitle Optionee to acquire a number of shares of such Stock of the Company or shares of stock of any successor company greater than the number of shares Optionee would receive if, prior to such change, Optionee had actually held a number of shares of such Stock equal to the number of shares then subject to this option.

10. **Limitations on Transfer of Option.** This option shall, during Optionee's lifetime, be exercisable only by Optionee, and neither this option nor any right hereunder shall be transferable by Optionee by operation of law or otherwise other than by will or the laws of descent and distribution. In the event of any attempt by Optionee to alienate, assign, pledge, hypothecate, or otherwise dispose of this option or of any right hereunder, except as provided for in this Agreement, or in the event of the levy of any attachment, execution, or similar process upon the rights or interest hereby conferred, the Company at its election may terminate this option by notice to Optionee and this option shall thereupon be null and void,

11. **Lapse.** The Company's First Refusal Right under Section 8 shall lapse and cease to have effect upon one of the following events whichever occurs first:

(a) the Company is merged into, or sells its assets to, or exchanges stock with, another corporation which has, after such merger, sale of assets or exchange of stock, consolidated total assets of at least $10,000,000 and is qualified to be listed on NASDAQ, or

(b) engages in an initial public offering with a minimum share price of $5.00 and total offering proceeds of at least $10,000,000.00.

12. **No Shareholder Rights. N**either Optionee nor any person entitled to exercise Optionee's rights in the event of his or her death shall have any of the rights of a shareholder with respect to the shares of Stock subject to this option except to the extent the certificates for such shares shall have been issued upon the exercise of this option.

13. NO EFFECT ON TERMS OF EMPLOYMENT OR SERVICE CONTRACT. SUBJECT TO THE TERMS OF ANY WRITTEN EMPLOYMENT CONTRACT TO THE CONTRARY, THE COMPANY SHALL HAVE THE RIGHT TO TERMINATE OR CHANGE THE TERMS OF EMPLOYMENT OF OPTIONEE AT ANY TIME AND FOR ANY REASON WHATSOEVER, WITH OR WITHOUT CAUSE. FURTHERMORE, NOTHING IN THIS AGREEMENT OR IN THE PLAN SHALL CONFER UPON THE OPTIONEE ANY RIGHT TO CONTINUE IN THE SERVICE OF THE COMPANY FOR ANY PERIOD OF SPECIFIC DURATION.

14. **Notice.** Any notice required to be given under the terms of this Agreement shall be addressed to him or her at the address given by him or her beneath his or her signature to this Agreement, or such other address as either party to this Agreement may hereafter designate in writing to the other. Any such notice shall be deemed to have been duly given when enclosed in a properly sealed envelope or wrapper addressed as aforesaid, express or certified and deposited (postage or certification fee prepaid) in a post office or branch post office regularly maintained by the United States Post Office.

15. **Lock-up Agreement**.

(a) Agreement. Optionee, if requested by the Company and the lead underwriter of any public offering of the Common Stock or other securities of the Company (the "Lead Underwriter"), hereby irrevocable agrees not to sell, contract to sell, grant any option to purchase, transfer the economic risk of ownership in, make any short sale of, pledge or otherwise transfer or dispose of any interest in any Common Stock of the Company (the "Common Stock") or any securities convertible into or exchangeable or exercisable for or any other rights to purchase or acquire Common Stock (except Common Stock included in such public offering or acquired on the public market after such offering) during the 180-day period following the effective date of a registration statement of the Company filed under the Securities Act, or such shorter period of time as the Lead Underwriter shall specify. Optionee further agrees to sign such documents as may be requested by the Lead Underwriter to affect the foregoing and agrees that the Company may impose stop-transfer instructions with respect to such Common Stock until the end of such period. The Company and Optionee acknowledge that each Lead Underwriter of a public offering of the Company's stock, during the period of such offering and for the 180-day period thereafter, is an intended beneficiary of this Section.

(b) Permitted Transfers. Notwithstanding the foregoing, Section 16(a) hereof shall not prohibit Optionee from transferring any shares of Common Stock or securities convertible into or exchangeable or exercisable for the Company's Common Stock either during Optionee's lifetime or on death by will or intestacy to Optionee's immediate family or to a trust the beneficiaries of which are exclusively Optionee and/or a member or members of Optionee's immediate family; provided. however, that prior to any such transfer, each transferee shall execute an agreement pursuant to which each transferee shall agree to receive and hold such securities subject to the provisions of this Section. For the purposes of this Section, the term "immediate family" shall mean spouse, lineal descendant, father, mother, brother or sister of the transferor.

(c) No Amendment Without Consent of Underwriter. During the period from identification as a Lead Underwriter in connection with any public offering of the Company's Common Stock until the earlier of (i) the expiration of the lock-up period specified in Section 16(a) hereof in connection with such offering or (ii) the abandonment of such offering by the Company and the Lead Underwriter, the Provisions of this Section may not be amended or waived except with the consent of the Lead Underwriter.

16. **Committee Decisions Conclusive**. All decisions of the Committee upon any question arising under the Plan or under this Agreement shall be conclusive.

17. **Successors**. This Agreement shall be binding upon and inure to the benefit of any successor or successors of the Company. Where the context permits, "Optionee" as used in this Agreement shall include Optionee's executor, administrator or other Legal representative or the person or persons to whom Optionee's rights pass by will or the applicable laws of descent and distribution.

18. **Restrictive Legends.** All certificates for shares of the Stock shall bear the following legends, in addition to any other legends required by applicable state securities law and securities commissioners:

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"),

OR UNDER ANY STATE SECURITIES LAWS. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED, SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT EFFECT WITH RESPECT TO THESE SECURITIES UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS OR AN OPINION OF LEGAL COUNSEL SATISFACTORY TO THE COMPANY THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND APPLICABLE STATE SECURITIES LAWS."

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ISSUED UNDER THE LIMITED OFFERING EXEMPTION PROVIDED BY SECTION 25102(f) OF THE CALIFORNIA CORPORATIONS CODE."

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO THE COMPANY'S RIGHT OF FIRST REFUSAL AND A ONE HUNDRED EIGHTY (180) DAY LOCK-UP RESTRICTION PROVIDED IN THE COMPANY'S INCENTIVE/NON-STATUTORY STOCK OPTION AGREEMENT."

19. **Construction.** This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the express terms and provisions of the Plan. All decisions of the Plan Administrator with respect to any question or issue arising under the Plan or this Agreement shall be conclusive and binding on all persons having an interest in the option.

20. **California Law.** The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of California.

21. **Copy of Plan**. Optionee hereby acknowledges receipt of a copy of the Plan.

[the remainder of this page is intentionally left blank]

IN WITNESS WHEREOF, the Company and Optionee have executed this Agreement as of the day and year first above written.

ACM Research, Inc.

By: _____

OPTIONEE

_____

CONSENT OF SPOUSE (If married)

_____

ACM RESEARCH, INC.
NON-STATUTORY STOCK OPTION AGREEMENT

This Agreement is made as of _____ between **ACM RESEARCH. INC.,** a California corporation (the "Company") and _____ ("Optionee").

RECITALS:

WHEREAS, the Company has adopted the 1998 Stock Option Plan (the "Plan"), which Plan is incorporated in this Agreement by reference and made a part of it; and

WHEREAS, the Company regards Optionee as a valuable employee or consultant of the Company, and has determined that it would be to the advantage and in the interests of the Company and its shareholders to grant the options provided for in this Agreement to Optionee as an inducement to remain in the service of the Company and as an incentive for increased efforts during such service;

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, the parties to this Agreement hereby agree as follows:

1. **Option Grant.** The Company hereby grants to Optionee the right and option to purchase from the Company on the terms and conditions hereinafter set forth, all or any part of an aggregate of _____ shares of the Common Stock of the Company (the "Stock") in consideration of consulting services provided by Optionee. The option Grant Date shall be _____.

2. **Option Price.** The purchase price of the Stock subject to this option shall be $_____ per share (the "Option Price") as determined by the Board of Directors of the Company or a committee designated by it (the "Committee").

3. **Option Period.** This option shall be exercisable only during the Option Period (as defined below), and during such Option Period, the exercisability of the option shall be subject to the limitations of Section 4 hereof. The "Option Period" shall commence on the Grant Date and except as provided in Section 4 hereof shall terminate (the "Termination Date") five (5) years from the Grant Date.

4. **Limits on Option Period.** The Option Period may end before the Termination Date, as follows:

(a) Termination of Employment. If Optionee ceases to be a bona fide employee of the Company or for any reason other than disability [within the Meaning of subsections (d)] or death during the Option Period, the Option Period shall terminate three (3) **months** after the date of such cessation of employment or on the Termination Date, whichever shall first occur, and the option shall be exercisable only to extent exercisable under Section 5 hereof on the date of Optionee's cessation of employment.

(b) Termination of Status as Service Provider. Should Optionee cease to be a Service Provider to the Company, the Option Period shall terminate **three (3) months** after the date when Optionee ceases to be a Service Provider, and the option shall be exercisable only to the extent exercisable under

Section 5 hereof on the date that Optionee ceases to be a Service Provider. Optionee shall be deemed to be a Service Provider so long as Optionee continues to render services to the Company in the same or greater capacity that he/she renders them as of the date of this Agreement, whether as an employee or an independent contractor or consultant.

(c) Death. If Optionee dies while in the employ of the Company or any of its Affiliates, the Option Period shall end twelve (12) months after the date of death or on the Termination Date, whichever shall first occur, and Optionee's executor or administrator or the person or persons to whom Optionee's rights under this option shall pass by will or by the applicable laws of descent and distribution may exercise this option on to the extent exercisable under Section *5* hereof on the date of Optionee's death.

(d) Disability. If Optionee's employment is terminated by reason of disability, the Option Period shall end twelve (12) months after date of Optionee's cessation of employment or on the Termination Date, whichever shall first occur, and the option shall be exercisable only to the extent exercisable under Section *5* hereof on the date of Optionee's cessation of employment.

(e) Leave of Absence. If Optionee is on a leave of absence from the company because of his or her disability, or for the purpose of serving the government of the country in which the principal place of employment of Optionee is located, either in a military or civilian capacity or for such other purpose or reason as the Committee may approve, Optionee shall not be deemed during the period of such absence, by virtue of such absence alone, to have terminated employment with the Company except as the Committee may otherwise expressly provide.

5. **Vesting of Right to Exercise Options.** Subject to other limitations contained in this Agreement, the Optionee shall have the right to exercise the option such that the options are fully exercisable as follows:

Any portion of the option that is not exercised shall accumulate and may be exercised at any time during the Option Period prior to the Termination Date. No partial exercise of this option may be for less than five percent **(5%)** of the total number of shares then available under this option. In no event shall the Company be required to issue fractional shares.

6. **Manner of Exercising Option.**

(a) To exercise the Option with respect to all or any portion of the Optioned Shares for which the option is at the time exercisable. Optionee (or in the case of exercise after Optionee's death, the Optionee's executor, administrator, heir or legatee, as the case may be) must take the following actions:

(i) Execute and deliver to the Secretary of the Company the Notice of Exercise, and a stock purchase agreement (the "Purchase Agreement") upon the Company's request.

(ii) Pay on the exercise date the aggregate Option Price for the purchased shares in cash or by check.

(iii) Furnish to the Company appropriate documentation that the person or persons exercising the Option, if other than Optionee, have the right to exercise the Option. Optionee may exercise the option with respect to all or any part of the shares of Stock then subject to such exercise as follows:

(b) Execution of Agreements. Optionee (and Optionee's spouse, if any) shall be required, as a condition precedent to acquiring Stock through exercise of the option, to execute one or more agreements relating to obligations in connection with ownership of the Stock or restrictions on transfer of the Stock no less restrictive than the obligations and restrictions to which the other shareholders of the Company are subject at the time of such exercise.

(c) Investment Representations. If required by the Committee, Optionee shall give the Company satisfactory assurance in writing, signed by Optionee or his or her legal representative, as the case may be, that such shares are being purchased for investment and not with a view to the distribution thereof, provided that such assurance shall be deemed inapplicable to (l) any sale of such shares by such Optionee made in accordance with the terms of a registration statement covering such sale, which may hereafter be filed and become effective under the Securities Act of 1933, as amended (the "Securities Act"), and with respect to which no stop order suspending the effectiveness thereof has been issued, and (2) any other sale of such shares with respect to which in the opinion of counsel for the Company, such assurance is not required to be given in order to comply with the provisions of the Securities Act.

(d) Delivery of Certificates. As soon as practicable after receipt of the notice required in Section 6(a) above and satisfaction of the conditions set forth in Section 6(b) and 6(c) above, the Company shall, without transfer or issue tax and without other incidental expense to Optionee, deliver to Optionee at the office of the company, or such other place as may be mutually acceptable to the company and Optionee, a certificate or certificates of such shares of Stock; provided, however, that the time of such delivery may be postponed by the Company for such period as may be required for it with reasonable diligence to comply with applicable registration requirements under the Securities Act, the Securities Exchange Act of 1934, as amended, any applicable listing requirements of any national securities exchange. and requirements under any other law or regulation applicable to the issuance or transfer of such shares.

7. **Corporate Transactions.**

(a) Definition. For purposes of this Section 7, a "Corporate "Transaction" shall include any of the following shareholder-approved transactions to which the Company is a party:

(i) a merger or consolidation in which the Company is not the surviving entity, except for (1) a transaction the principal purpose of which is to change the state of the Company's incorporation, or (2) a transaction in which the Company's shareholders immediately prior to such merger or consolidation hold (by virtue of securities received in exchange for their shares in the Company) securities of the surviving entity representing more than fifty percent (50%) of the total voting power of such surviving entity immediately after such transaction.

(ii) the sale, transfer or other disposition of all or substantially all of the assets of the Company unless the Company's shareholders immediately prior to such sale, transfer or other disposition hold (by virtue of securities received in exchange for their shares in the Company) securities of the purchaser or other transferee representing more than fifty percent (50%) of the total voting power of such entity immediately after such transaction; or

(iii) any merger in which the Company is the surviving entity but in which the Company's shareholders immediately prior to such merger do not hold (by virtue of their shares in the Company held immediately prior to such transaction) securities of the surviving entity (by virtue of their shares in the Company held immediately prior to such transaction) representing more than fifty percent, (50%) of the total voting power of the surviving entity immediately after such transaction.

(b) Effect. In the event of any Corporate Transaction, this option shall terminate immediately prior to the specified effective date of the Corporate Transaction unless assumed by the successor corporation or its parent company, pursuant to options providing substantially equal value and having substantially equivalent provisions as the options granted pursuant to this Agreement. In the event of any Corporate Transaction, the Company's rights under Section 8 hereof shall terminate,

8. **Right of First Refusal**.

(a) Grant of Right. The Company is hereby granted the right of first refusal (the "First Refusal Right"), exercisable in connection with any proposed sale or other transfer of the Stock acquired by Optionee upon exercise of this option. For purposes of this Section, the term "transfer" shall include any assignment, pledge, encumbrance, or other disposition for value of the Stock intended to be made by the Owner (defined below), but shall not include any of the permitted transfers under Section 8(f) below. For purpose of this section, the term "Owner" shall include the Optionee or any subsequent holder of the Stock who derives his or her chain of ownership through a transfer permitted by Section 8(f) below.

(b) Notice of Intended Disposition. In the event the Owner desires to accept a bona fide third-party offer for any or all the Stock (the shares subject to such offer to be hereinafter called, solely for the purposes of this Section, the "Target Shares"), Owner shall promptly deliver to the Secretary of the Company written notice (the "Disposition Notice") of the offer and the basic terms and conditions thereof, including the proposed purchase price.

(c) Exercise of Right. The Company (or its assignee) shall, for a period of twenty (20) days following receipt of the Disposition Notice, have the right to repurchase any or all of the Target Shares specified in the Disposition Notice upon substantially the same terms and conditions specified therein. Such right shall be exercisable by written notice (the "Exercise Notice") delivered to Owner prior to the expiration of the twenty (20) day exercise period. If the Exercise Notice pertains to all the Target Shares specified in the Disposition Notice, then the Company (or its assignees) shall affect the repurchase of such Target Shares, including payment of the purchase price, not more than five (5) business days after delivery of the Exercise Notice; and at such time Owner shall deliver to the Company the certificates representing the Target shares to be repurchased, each certificate to be properly endorsed for transfer. Should the purchase price specified in the Disposition Notice be payable in property other than cash or evidences of indebtedness, the Company (or its assignees) shall have the right to pay the purchase price in the form of cash equal in amount to the value of such property. If the Owner and the Company (or its assignees) cannot agree on such cash value within ten (10) days after the Company's receipt of the Disposition notice, the valuation shall be made by an appraiser of recognized standing selected by the Owner and the Company (or its assignees) or if they cannot agree on an appraiser within twenty (20) days after the company's receipt of the Disposition Notice, each shall select an appraiser of recognized standing and the two appraisers shall designate a third appraiser of recognized standing, whose appraisal shall be determinative of such value. The closing shall then be held on the later of (i) the fifth business day following delivery of the Exercise Notice or (ii) the 15th day after such cash valuation shall have been made.

(d) Non-Exercise of Right. In the event the Exercise Notice is not given to

Owner within twenty (20) days following the date of the Company's receipt of the Disposition Notice, Owner shall have a period of ninety (90) days thereafter in which to sell or otherwise dispose of the Target Shares upon terms and conditions (inducting the purchase price) no more favorable to the third party purchaser than those specified in the Disposition Notice, The Third-party purchaser shall acquire the Target shares subject to all the terms and provisions of this Agreement. All transferees of the Target Shares shall be required as a condition of such transfer to agree in writing (in a form satisfactory to the Company) that such transferee shall receive and hold the Target Shares subject to the provisions of this Agreement. In the event Owner does not sell or otherwise dispose of the Target shares within the specified ninety (90) day period, the Company's First Refusal Right shall continue to be applicable to any subsequent disposition of the Target Shares by Owner until such right lapses in accordance with Section 12 hereof.

(e) Partial Exercise of Right. In the event the Company (or its assignees) makes a timely exercise of the First Refusal Right with respect to a portion, the Owner shall have the option, exercisable by written notice to the Company delivered within ninety (90) days after the date of the Disposition Notice, to affect the sale of the Target Shares pursuant to one of the following alternatives:

(i) sale or other distribution of all the Target Shares to a third-party purchaser in compliance with the requirements of Section 8(d) above, as if the Company did not exercise the First Refusal Right hereunder; or

(ii) sale to the Company (or its assignees) of the portion of the Target Shares which the Company (or its assignees) has elected to purchase, such sale to be effected in substantial conformity with the provisions of Section 8(c) above.

Failure of Owner to deliver timely notification to the Company under this Section 8(e) shall be deemed to be an election by Owner to sell the Target Shares pursuant to alternative (ii) above,

(f) Exempt Transfers. The Company's First Refusal Right under this Section shall not apply to transfers of the Stock by will or the laws of descent and distribution; provided, however, that all of the terms of this Agreement shall remain in effect as to such transferred Stock to a revocable trust for the sole benefit of Owner, his or her spouse, or his or her lineal descendants, or to his or her spouse or his or her lineal descendants subject to an irrevocable voting trust of a duration of ten (10) years , without the written permission of the Company, provided said Owner is trustee and prior written notice (together with a copy of the trust agreement) give to the Company within thirty (30) days thereafter. The trustee shall hold such Stock subject to all the provisions hereof, and shall make no further transfers other than as provided therein. Upon the death, total disability, or termination of employment of the transferor Owner, the successor trustee or any cotrustee (and any subsequent transferee) shall be required to sell, transfer to present said Stock for purchase as provided herein, for the price and on the terms hereafter set forth as if such successor trustee and subsequent transferee were the transferor Owner. Such transferee shall make no further transfers other than as provided herein, and any attempted transfer in violation of this Section 8 shall be null and void and shall be disregarded by the Company. All references herein to Stock shall be deemed to include Stock owned by any such successor trustee or subsequent transferee, except that payment for such trustee and transferee Stock shall be made to the trustee and transferee instead of to the original Owner or his or her estate.

9. **Adjustment for Changes in Stock.** If there should be any change in a class of Stock subject to this option, through merger, consolidation, reorganization, recapitalization, reincorporation,

stock split, stock dividend or other change in the capital structure of the Company (except for a Corporate Transaction described in Section 7 hereof), the Company shall make appropriate adjustments in the number of shares of such Stock subject to this option in the price per share. Any new, substituted or additional securities or property which is distributed with respect to the Stock shall be immediately subject to the provisions of Section 8, but only to the extent the Stock is at such time covered by such provisions. Any adjustment made pursuant to this Section as a consequence of a change in the capital structure of the Company shall not entitle Optionee to acquire a number of shares of such Stock of the Company or shares of stock of any successor company greater than the number of shares Optionee would receive if, prior to such change, Optionee had actually held a number of shares of such Stock equal to the number of shares then subject to this option.

10. **Limitations on Transfer of Option.** This option shall, during Optionee's lifetime, be exercisable only by Optionee, and neither this option nor any right hereunder shall be transferable by Optionee by operation of law or otherwise other than by will or the laws of descent and distribution. In the event of any attempt by Optionee to alienate, assign, pledge, hypothecate, or otherwise dispose of this option or of any right hereunder, except as provided for in this Agreement, or in the event of the levy of any attachment, execution, or similar process upon the rights or interest hereby conferred, the Company at its election may terminate this option by notice to Optionee and this option shall thereupon be null and void,

11. **Lapse.** The Company's First Refusal Right under Section 8 shall lapse and cease to have effect upon one of the following events whichever occurs first:

(a) the Company is merged into, or sells its assets to, or exchanges stock with, another corporation which has, after such merger, sale of assets or exchange of stock, consolidated total assets of at least $10,000,000 and is qualified to be listed on NASDAQ**,** or

(b) engages in an initial public offering with a minimum share price of $5.00 and total offering proceeds of at least $10,000,000.00.

12. **No Shareholder Rights. N**either Optionee nor any person entitled to exercise Optionee's rights in the event of his or her death shall have any of the rights of a shareholder with respect to the shares of Stock subject to this option except to the extent the certificates for such shares shall have been issued upon the exercise of this option.

13. NO EFFECT ON TERMS OF EMPLOYMENT OR SERVICE CONTRACT. SUBJECT TO THE TERMS OF ANY WRITTEN EMPLOYMENT CONTRACT TO THE CONTRARY, THE COMPANY SHALL HAVE THE RIGHT TO TERMINATE OR CHANGE THE TERMS OF EMPLOYMENT OF OPTIONEE AT ANY TIME AND FOR ANY REASON WHATSOEVER, WITH OR WITHOUT CAUSE. FURTHERMORE, NOTHING IN THIS AGREEMENT OR IN THE PLAN SHALL CONFER UPON THE OPTIONEE ANY RIGHT TO CONTINUE IN THE SERVICE OF THE COMPANY FOR ANY PERIOD OF SPECIFIC DURATION.

14. **Notice.** Any notice required to be given under the terms of this Agreement shall be addressed to him or her at the address given by him or her beneath his or her signature to this Agreement, or such other address as either party to this Agreement may hereafter designate in writing to the other. Any such notice shall be deemed to have been duly given when enclosed in a properly sealed envelope or wrapper addressed as aforesaid, express or certified and deposited (postage or certification fee prepaid) in a post office or branch post office regularly maintained by the United States Post Office.

15. **Lock-up Agreement.**

(a) Agreement. Optionee, if requested by the Company and the lead underwriter of any public offering of the Common Stock or other securities of the Company (the "Lead Underwriter"), hereby irrevocable agrees not to sell, contract to sell, grant any option to purchase, transfer the economic risk of ownership in, make any short sale of, pledge or otherwise transfer or dispose of any interest in any Common Stock of the Company (the "Common Stock") or any securities convertible into or exchangeable or exercisable for or any other rights to purchase or acquire Common Stock (except Common Stock included in such public offering or acquired on the public market after such offering) during the 180-day period following the effective date of a registration statement of the Company filed under the Securities Act, or such shorter period of time as the Lead Underwriter shall specify. Optionee further agrees to sign such documents as may be requested by the Lead Underwriter to affect the foregoing and agrees that the Company may impose stop-transfer instructions with respect to such Common Stock until the end of such period. The Company and Optionee acknowledge that each Lead Underwriter of a public offering of the Company's stock, during the period of such offering and for the 180-day period thereafter, is an intended beneficiary of this Section.

(b) Permitted Transfers. Notwithstanding the foregoing, Section 16(a) hereof shall not prohibit Optionee from transferring any shares of Common Stock or securities convertible into or exchangeable or exercisable for the Company's Common Stock either during Optionee's lifetime or on death by will or intestacy to Optionee's immediate family or to a trust the beneficiaries of which are exclusively Optionee and/or a member or members of Optionee's immediate family; provided. however, that prior to any such transfer, each transferee shall execute an agreement pursuant to which each transferee shall agree to receive and hold such securities subject to the provisions of this Section. For the purposes of this Section, the term "immediate family" shall mean spouse, lineal descendant, father, mother, brother or sister of the transferor.

(c) No Amendment Without Consent of Underwriter. During the period from identification as a Lead Underwriter in connection with any public offering of the Company's Common Stock until the earlier of (i) the expiration of the lock-up period specified in Section 16(a) hereof in connection with such offering or (ii) the abandonment of such offering by the Company and the Lead Underwriter, the Provisions of this Section may not be amended or waived except with the consent of the Lead Underwriter.

16. **Committee Decisions Conclusive**. All decisions of the Committee upon any question arising under the Plan or under this Agreement shall be conclusive.

17. **Successors**. This Agreement shall be binding upon and inure to the benefit of any successor or successors of the Company. Where the context permits, "Optionee" as used in this Agreement shall include Optionee's executor, administrator or other Legal representative or the person or persons to whom Optionee's rights pass by will or the applicable laws of descent and distribution.

18. **Restrictive Legends.** All certificates for shares of the Stock shall bear the following legends, in addition to any other legends required by applicable state securities law and securities commissioners:

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"),

OR UNDER ANY STATE SECURITIES LAWS. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED, SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT EFFECT WITH RESPECT TO THESE SECURITIES UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS OR AN OPINION OF LEGAL COUNSEL SATISFACTORY TO THE COMPANY THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND APPLICABLE STATE SECURITIES LAWS."

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ISSUED UNDER THE LIMITED OFFERING EXEMPTION PROVIDED BY SECTION 25102(f) OF THE CALIFORNIA CORPORATIONS CODE."

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO THE COMPANY'S RIGHT OF FIRST REFUSAL AND A ONE HUNDRED EIGHTY (180) DAY LOCK-UP RESTRICTION PROVIDED IN THE COMPANY'S INCENTIVE/NON-STATUTORY STOCK OPTION AGREEMENT."

19. **Construction.** This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the express terms and provisions of the Plan. All decisions of the Plan Administrator with respect to any question or issue arising under the Plan or this Agreement shall be conclusive and binding on all persons having an interest in the option.

20. **California Law.** The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of California.

21. **Copy of Plan**. Optionee hereby acknowledges receipt of a copy of the Plan.

[the remainder of this page is intentionally left blank]

IN WITNESS WHEREOF, the Company and Optionee have executed this Agreement as of the day and year first above written.

ACM Research, Inc.

By: _____

OPTIONEE

_____

CONSENT OF SPOUSE (If married)

_____

INDEMNIFICATION AGREEMENT

THIS INDEMNIFICATION AGREEMENT ("*Agreement*") is made as of _____ by and between ACM Research, Inc., a Delaware corporation (the "*Company*"), and _____ (the "*Indemnitee*").

RECITALS

A. Highly competent persons have become more reluctant to serve corporations as directors, officers or in other capacities unless they are provided with adequate protection through insurance or adequate indemnification against inordinate risks of claims and actions against them arising out of their service to and activities on behalf of the Company;

B. The Board of Directors of the Company (the "*Board*") has determined, in order to attract and retain qualified individuals, the Company will attempt to maintain on an ongoing basis, at its sole expense, liability insurance to protect persons serving the Company and its subsidiaries from certain liabilities. Although the furnishing of such insurance has been a customary and widespread practice among United States-based corporations and other business enterprises, the Company believes, given current market conditions and trends, such insurance may be available to it in the future only at higher premiums and with more exclusions. At the same time, directors, officers and other persons in service to corporations or business enterprises are being increasingly subjected to expensive and time-consuming litigation relating to, among other things, matters that traditionally would have been brought only against the Company or business enterprise itself. The Bylaws (the "*Bylaws*") and the Certificate of Incorporation of the Company (the "*Certificate of Incorporation*") require indemnification of the officers and directors of the Company. Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware (the "*DGCL*"). The Bylaws and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the Board, officers and other persons with respect to indemnification;

C. The uncertainties relating to such insurance and to indemnification have increased the difficulty of attracting and retaining such persons;

D. The Board has determined that the increased difficulty in attracting and retaining such persons is detrimental to the best interests of the Company and its stockholders and that the Company should act to assure such persons that there will be increased certainty of such protection in the future;

E. It is reasonable, prudent and necessary for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law so that they will serve or continue to serve the Company free from undue concern that they will not be so indemnified;

F. This Agreement is a supplement to and in furtherance of the Bylaws, the Certificate of Incorporation and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; and

G. Indemnitee does not regard the protection available under the Bylaws, the Certificate of Incorporation and insurance as adequate in the present circumstances, and may not be willing to serve as an officer or director without adequate protection, and the Company desires Indemnitee to serve in such capacity. Indemnitee is willing to serve, continue to serve and to take on additional service for or on behalf of the Company on the condition that he be so indemnified.

NOW, THEREFORE, in consideration of the premises and the covenants contained herein, the Company and Indemnitee hereby agree as follows:

1. Services to the Company. Indemnitee agrees to serve as a director or an officer of the Company. Indemnitee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee. Indemnitee specifically acknowledges that Indemnitee's employment with the Company (or any of its subsidiaries or any Enterprise), if any, is at will, and the Indemnitee may be discharged at any time for any reason, with or without cause, except as may be otherwise provided in any written employment contract between Indemnitee and the Company (or any of its subsidiaries or any Enterprise), other applicable formal severance policies duly adopted by the Board, or, with respect to service as a director or officer of the Company, by the Certificate of Incorporation, the Bylaws and the DGCL. The foregoing notwithstanding, this Agreement shall continue in force after Indemnitee has ceased to serve as a director or an officer, as provided in Section 16 hereof.

2. Definitions. As used in this Agreement:

(a) References to "*agent*" shall mean any person who is or was a director, officer, or employee of the Company or a subsidiary of the Company or other person authorized by the Company to act for the Company, to include such person serving in such capacity as a director, officer, employee, fiduciary or other official of another corporation, partnership, limited liability company, joint venture, trust or other enterprise at the request of, for the convenience of, or to represent the interests of the Company or a subsidiary of the Company.

(b) A "*Change in Control*" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) Acquisition of Stock by Third Party. Any Person (as defined below) is or becomes the Beneficial Owner (as defined below), directly or indirectly, of securities of the Company representing more than fifty percent of the combined voting power of the Company's then outstanding securities, other than by virtue of a merger, consolidation or similar transaction; *provided* that, notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities or (C) solely because the level of beneficial ownership held by any Person (the "*Subject Person*") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, *provided* that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Beneficial Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) Change in Board of Directors. During any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board, and any new director (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 2(b)(i), 2(b)(iii) or 2(b)(iv)) whose election by the Board or nomination for election by the Company's stockholders was approved by a majority vote of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute at least a majority of the members of the Board;

(iii) Corporate Transactions. The effective date of a merger, consolidation or similar transaction of the Company with any other entity and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not beneficially own, directly or indirectly, either (A) outstanding voting securities representing more than fifty percent of the combined outstanding voting power of the surviving entity in such merger, consolidation or similar transaction or (B) more than fifty percent of the combined outstanding voting power of the parent of the surviving entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their beneficial ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iv) Liquidation. The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale, lease, exclusive license or other disposition by the Company of all or substantially all of the consolidated assets of the Company and any subsidiary, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and any subsidiary to an entity, more than fifty percent of the combined voting power of the voting securities of which are beneficially owned by stockholders of the Company in substantially the same proportions as their ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; and

(v) Other Events. There occurs any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or a response to any similar item on any similar schedule or form) promulgated under the Exchange Act (as defined below), whether or not the Company is then subject to such reporting requirement.

(c) For purposes of this Section 2(c), the following terms shall have the following meanings:

(i) "*Exchange Act*" shall mean the Securities Exchange Act of 1934, as amended from time to time.

(ii) "*Person*" shall have the meaning as set forth in Sections 13(d) and 14(d) of the Exchange Act; *provided, however*, that Person shall exclude (A) the Company, (B) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (C) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(iii) "*Beneficial Owner*" shall have the meaning given to such term in Rule 13d-3 under the Exchange Act; *provided, however*, that Beneficial Owner shall exclude any Person otherwise becoming a Beneficial Owner by reason of the stockholders of the Company approving a merger of the Company with another entity.

(d) "*Business Day*" means any day other than a Saturday or Sunday or any day on which the Federal Reserve Bank of San Francisco, California is closed.

(e) "*Corporate Status*" describes the status of a person who is or was a director, trustee, partner, managing member, officer, employee, agent or fiduciary of the Company or of any other corporation, limited liability company, partnership or joint venture, trust or other enterprise, which such person is or was serving at the request of the Company.

(f) "*Disinterested Director*" shall mean a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(g) "*Enterprise*" shall mean the Company and any other corporation, limited liability company, partnership, joint venture, trust or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, officer, trustee, partner, managing member, employee, agent or fiduciary.

(h) "*Expenses*" shall include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts and other professionals, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, fax transmission charges, secretarial services, any federal, state, local or foreign taxes imposed on Indemnitee as a result of the actual or deemed receipt of any payments under this Agreement, ERISA excise taxes and penalties, and all other disbursements, obligations or expenses of the types customarily incurred in connection with, or as a result of, prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a deponent or witness in, or otherwise participating in, a Proceeding. Expenses also shall include (i) Expenses incurred in connection with any appeal resulting from any Proceeding, including the premium, security for, and other costs relating to any cost bond, supersedeas bond, or other appeal bond or its equivalent, (ii) expenses incurred in connection with recovery under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether the Indemnitee is ultimately determined to be entitled to such indemnification, advancement or Expenses or insurance recovery, as the case may be, and (iii) for purposes of Section 14(d) only, Expenses incurred by or on behalf of Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement, by litigation or otherwise. The parties agree that for the purposes of any advancement of Expenses for which Indemnitee has made written demand to the Company in accordance with this Agreement, all Expenses included in such demand that are certified by affidavit of Indemnitee's counsel as being reasonable shall be presumed conclusively to be reasonable. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(i) "*Independent Counsel*" shall mean a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning the Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for

indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees and expenses of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(j) The term "*Proceeding*" shall include any threatened, pending or completed action, suit, claim, counterclaim, cross claim, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative, regulatory, legislative or investigative (formal or informal) nature, including any appeal therefrom, in which Indemnitee was, is or will be involved as a party, potential party, non-party witness or otherwise by reason of the fact that Indemnitee is or was a director or officer of the Company, by reason of any action taken by him (or a failure to take action by him) or of any action (or failure to act) on his part while acting pursuant to his Corporate Status, in each case whether or not serving in such capacity at the time any liability or Expense is incurred for which indemnification, reimbursement or advancement of Expenses can be provided under this Agreement. If the Indemnitee believes in good faith that a given situation may lead to or culminate in the institution of a Proceeding, this shall be considered a Proceeding under this paragraph.

(k) Reference to "*other enterprise*" shall include employee benefit plans; references to "*fines*" shall include any excise tax assessed with respect to any employee benefit plan; references to "*serving at the request of the Company*" shall include any service as a director, officer, employee or agent of the Company that imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the best interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "*not opposed to the best interests of the Company*" as referred to in this Agreement.

3. Indemnity in Third-Party Proceedings. The Company shall indemnify Indemnitee in accordance with the provisions of this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses, judgments, liabilities, fines, penalties and amounts paid in settlement (including all interest, assessments and other charges paid or payable in connection with or in respect of such Expenses, judgments, liabilities, fines, penalties and amounts paid in settlement) actually and reasonably incurred by Indemnitee or on his behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company and, in the case of a criminal Proceeding had no reasonable cause to believe that his conduct was unlawful. The parties hereto intend that this Agreement shall provide to the fullest extent permitted by law for indemnification in excess of that expressly permitted by statute, including any indemnification provided by the Certificate of Incorporation, the Bylaws, vote of its stockholders or disinterested directors or applicable law.

4. Indemnity in Proceedings by or in the Right of the Company. The Company shall indemnify Indemnitee in accordance with the provisions of this Section 4 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 4, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses actually and reasonably incurred by him or on his behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company. If applicable law so provides, no indemnification for Expenses shall be made under this Section 4 in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudged by a court to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery or any court in which the Proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification.

5. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provisions of this Agreement, to the fullest extent permitted by applicable law and to the extent that Indemnitee is a party to (or a participant in) and is successful, on the merits or otherwise, in any Proceeding or in defense of any claim, issue or matter therein, in whole or in part, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or on his behalf in connection with or related to each successfully resolved claim, issue or matter to the fullest extent permitted by law. For purposes of this Section and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

6. Indemnification For Expenses of a Witness. Notwithstanding any other provision of this Agreement, to the fullest extent permitted by applicable law and to the extent Indemnitee is, by reason of his Corporate Status, a witness or otherwise asked to participate in any aspect of a Proceeding to which Indemnitee is not a party, he shall be indemnified against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith.

7. Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of Expenses, but not, however, for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled.

8. Additional Indemnification. Notwithstanding any limitation in Sections 3, 4 or 5, the Company shall indemnify Indemnitee to the fullest extent permitted by applicable law if Indemnitee is a party to or threatened to be made a party to or a participant in any Proceeding (including a Proceeding by or in the right of the Company to procure a judgment in its favor) against all Expenses, judgments, fines and amounts paid in settlement (including all interest, assessments and other charges paid or payable in connection with or in respect of such Expenses, judgments, fines and amounts paid in settlement) actually and reasonably incurred by or on behalf of Indemnitee in connection with the Proceeding.

(a) For purposes of Section 8(a), the meaning of the phrase "*to the fullest extent permitted by applicable law*" shall include:

(i) to the fullest extent permitted by the provision of the DGCL that authorizes or contemplates additional indemnification by agreement, or the corresponding provision of any amendment to or replacement of the DGCL; and

(ii) to the fullest extent authorized or permitted by any amendments to or replacements of the DGCL adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its officers and directors.

9. Exclusions. Notwithstanding any other provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnification payment in connection with any claim made against Indemnitee:

(a) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision; or

(b) for (i) an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Exchange Act (as defined in Section 2(b) hereof) or similar provisions of state statutory law or common law, or (ii) any reimbursement of the Company by the Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by the Indemnitee from the sale of securities of the Company, as required in each case under the Exchange Act (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "*Sarbanes-Oxley Act*"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act); or

(c) except as provided in Section 14(d) of this Agreement, in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees, unless (i) the Board authorized the Proceeding (or any part of any Proceeding) prior to its initiation, (ii) such payment arises in connection with any mandatory counterclaim or cross-claim or affirmative defense brought or raised by Indemnitee in any Proceeding (or any part of any Proceeding), or (iii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law.

10. Advances of Expenses. Notwithstanding any provision of this Agreement to the contrary (other than Section 14(d)), the Company shall advance, to the extent not prohibited by law, the Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding (or any part of any Proceeding) not initiated by Indemnitee, and such advancement shall be made within thirty calendar days after the receipt by the Company of a statement or statements requesting such advances from time to time (which shall include invoices received by Indemnitee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be so included), whether prior to or after final disposition of any Proceeding. Advances shall be unsecured and interest free. Advances shall be made without regard to Indemnitee's ability to repay the Expenses and without regard to Indemnitee's ultimate entitlement to indemnification under the other provisions of this Agreement. In accordance with Section 14(d), advances shall include any and all reasonable Expenses incurred pursuing an action to enforce this right of advancement, including Expenses incurred preparing and forwarding statements to the Company to support the advances claimed. The Indemnitee shall qualify for advances upon the execution and delivery to the Company of this Agreement, which shall constitute an undertaking providing that the Indemnitee undertakes to repay the amounts advanced (without interest) to the extent that it is ultimately determined that Indemnitee is not entitled to be indemnified by the Company. No other form of undertaking shall be required other than the execution of this Agreement. This Section 10 shall not apply to any claim made by Indemnitee for which indemnity is excluded pursuant to Section 9.

11. Procedure for Notification and Defense of Claim. Indemnitee shall notify the Company in writing of any matter with respect to which Indemnitee intends to seek indemnification or advancement of Expenses hereunder as soon as reasonably practicable following the receipt by Indemnitee of written notice thereof or Indemnitee's becoming aware thereof. The written notification to the Company shall include a description of the nature of the Proceeding and the facts underlying the Proceeding, in each case to the extent known to Indemnitee. To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of such Proceeding. The failure by Indemnitee to notify the Company hereunder will not relieve the Company from any liability that it may have to Indemnitee hereunder or otherwise than under this Agreement, and any delay in so notifying the Company shall not constitute a waiver by Indemnitee of any rights under this Agreement, except to the extent (solely with respect to the indemnity hereunder) that such failure or delay materially prejudices the Company. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board in writing that Indemnitee has requested indemnification. The Company will be entitled to participate in the Proceeding at its own expense. The Company shall not settle any Proceeding (in whole or in part) if such settlement would impose any Expense, judgment, liability, fine, penalty or limitation on Indemnitee that Indemnitee is not entitled to be indemnified hereunder without the Indemnitee's prior written consent.

12. Procedure Upon Application for Indemnification.

(a) Upon written request by Indemnitee for indemnification pursuant to Section 11(a), a determination, if required by applicable law, with respect to Indemnitee's entitlement thereto shall be made in the specific case: (i) if a Change in Control shall have occurred, by Independent Counsel in a written opinion to the Board, a copy of which shall be delivered to Indemnitee; or (ii) if a Change in Control shall not have occurred, (A) by a majority vote of the Disinterested Directors, even though less than a quorum of the Board, (B) by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum of the Board, (C) if there are no such Disinterested Directors or, if such Disinterested Directors so direct, by Independent Counsel in a written opinion to the Board, a copy of which shall be delivered to Indemnitee or (D) if so directed by the Board, by the stockholders of the Company; and, if it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within ten calendar days after such determination. Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or Expenses (including attorneys' fees and disbursements) incurred by or on behalf of Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom. The Company promptly will advise Indemnitee in writing with respect to any determination that Indemnitee is or is not entitled to indemnification, including a description of any reason or basis for which indemnification has been denied.

(b) In the event the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 12(a) hereof, the Independent Counsel shall be selected as provided in this Section 12(b). If a Change in Control shall not have occurred, the Independent Counsel shall be selected by the Board, and the Company shall give written notice to Indemnitee advising him of the identity of the Independent Counsel so selected. If a Change in Control shall have occurred, the Independent Counsel shall be selected by Indemnitee (unless Indemnitee shall request such selection be made by the Board, in which event the preceding sentence shall apply), and Indemnitee shall give written notice to the Company advising it of the identity of the Independent Counsel so selected. In either event, Indemnitee or the Company, as the case may be, may, within ten calendar days after such written notice of selection shall have been given, deliver to the Company or to Indemnitee, as the case may be, a written objection to such selection; *provided*, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 2 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or the Delaware Court has determined that such objection is without merit. If, within twenty calendar days after the later of submission by Indemnitee of a written request for indemnification pursuant to Section 11(a) hereof and the final disposition of the Proceeding, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Delaware Court for resolution of any objection, which shall have been made by the Company or Indemnitee to the other's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by such court or by such other person as such court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 12(a) hereof. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 14(a) of this Agreement, Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

(c) If the Company disputes a portion of the amounts for which indemnification is requested, the undisputed portion shall be paid and only the disputed portion withheld pending resolution of any such dispute.

13. Presumptions and Effect of Certain Proceedings.

(a) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall, to the fullest extent not prohibited by law, presume that Indemnitee is entitled to indemnification under this Agreement if Indemnitee has submitted a request for indemnification in accordance with Section 11(a) of this Agreement, and the Company shall, to the fullest extent not prohibited by law, have the burden of proof to overcome that presumption in connection with the making by any person, persons or entity of any determination contrary to that presumption. Neither the failure of the Company (including by its directors or Independent Counsel) to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Company (including by its directors or Independent Counsel) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

(b) Subject to Section 14(e), if the person, persons or entity empowered or selected under Section 12 of this Agreement to determine whether Indemnitee is entitled to indemnification shall not have made a determination within sixty calendar days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall, to the fullest extent not prohibited by law, be deemed to have been made and Indemnitee shall be entitled to such indemnification, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law; *provided*, however, that such sixty-day period may be extended for a reasonable time, not to exceed an additional thirty calendar days, if the person, persons or entity making the determination with respect to entitlement to indemnification in good faith requires such additional time for the obtaining or evaluating of documentation and/or information relating thereto; and *provided*, further, that the foregoing provisions of this Section 13(b) shall not apply (x) if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 12(a) of this Agreement and if (A) within fifteen calendar days after receipt by the Company of the request for such determination the Board has resolved to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy-five calendar days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within fifteen calendar days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty calendar days after having been so called and such determination is made thereat, or (y) if the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 12(a) of this Agreement.

(c) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner that he reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his conduct was unlawful.

(d) For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise, including financial statements, or on information supplied to Indemnitee by the directors or officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with the reasonable care by the Enterprise. The provisions of this Section 13(d) shall not be deemed to be exclusive or to limit in any way the other circumstances in which the Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement. Whether or not the foregoing provisions of this Section 13(d) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company.

(e) The knowledge and/or actions, or failure to act, of any director, officer, trustee, partner, managing member, fiduciary, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

14. Remedies of Indemnitee.

(a) Subject to Section 14(e), in the event that (i) a determination is made pursuant to Section 12 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 10 of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 12(a) of this Agreement within ninety calendar days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to Section 5, 6 or 7 or the last sentence of Section 12(a) of this Agreement within ten calendar days after receipt by the Company of a written request therefor, (v) payment of indemnification pursuant to Section 3, 4 or 8 of this Agreement is not made within ten calendar days after a determination has been made that Indemnitee is entitled to indemnification, or (vi) the Company or any other person or entity takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended to be provided to the Indemnitee hereunder, Indemnitee shall be entitled to an adjudication by a court of his entitlement to such indemnification or advancement of Expenses. Alternatively, Indemnitee, at his option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 180 calendar days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 14(a); *provided, however*, that the foregoing clause shall not apply in respect of a proceeding brought by Indemnitee to enforce his rights under Section 5 of this Agreement. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration.

(b) In the event a determination shall have been made pursuant to Section 12(a) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 14 shall be conducted in all respects as a *de novo* trial, or arbitration, on the merits and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 14 the Company shall have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be.

(c) If a determination shall have been made pursuant to Section 12(a) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 14, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) The Company shall, to the fullest extent not prohibited by law, be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 14 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement. It is the intent of the Company that, to the fullest extent permitted by law, the Indemnitee not be required to incur legal fees or other Expenses associated with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement by litigation or otherwise because the cost and expense thereof would substantially detract from the benefits intended to be extended to the Indemnitee hereunder. The Company shall, to the fullest extent permitted by law, indemnify Indemnitee against any and all Expenses and, if requested by Indemnitee, shall (within ten calendar days after receipt by the Company of a written request

therefor) advance, to the extent not prohibited by law, such Expenses to Indemnitee, which are incurred by or on behalf of Indemnitee in connection with any action brought by Indemnitee for indemnification or advancement of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company if, in the case of indemnification, Indemnitee is wholly successful on the underlying claims; if Indemnitee is not wholly successful on the underlying claims, then such indemnification shall be only to the extent Indemnitee is successful on such underlying claims or otherwise as permitted by law, whichever is greater.

(e) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement of Indemnitee to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding.

15. Non-exclusivity; Survival of Rights; Insurance; Subrogation.

(a) The rights of indemnification and to receive advancement of Expenses as provided by this Agreement (i) shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Certificate of Incorporation, the Bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise and (ii) shall be interpreted independently of, and without reference to, any other such rights to which Indemnitee may at any time be entitled. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his Corporate Status prior to such amendment, alteration or repeal. To the extent a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than would be afforded currently under the Bylaws, the Certificate of Incorporation and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees or agents of the Enterprise, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, officer, employee or agent under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of such claim or of the commencement of a Proceeding, as the case may be, to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.

(c) In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(d) The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable (or for which advancement is provided hereunder) hereunder if and to the extent Indemnitee has otherwise actually received such payment under any insurance policy, contract, agreement or otherwise.

(e) The Company's obligation to indemnify or advance Expenses hereunder to Indemnitee who is or was serving at the request of the Company as a director, officer, trustee, partner, managing member, fiduciary, employee or agent of any other corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of Expenses from such other corporation, limited liability company, partnership, joint venture, trust or other enterprise.

16. Term of Agreement. This Agreement shall continue until and terminate upon the later of: (a) [ten] years after the date that Indemnitee shall have ceased to serve as a director or an officer of the Company or (b) one year after the final termination of any Proceeding then pending in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any proceeding (including any appeal) commenced by Indemnitee pursuant to Section 14 of this Agreement relating thereto.

17. Successors and Assigns. This Agreement shall be binding upon and be enforceable by the parties hereto and their respective successors and assigns (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company), shall continue as to an Indemnitee who has ceased to be a director, officer, employee or agent of the Company or of any other Enterprise, and shall inure to the benefit of Indemnitee and his or her spouse, assigns, heirs, devisees, executors and administrators and other legal representatives.

18. Severability. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (a) the validity, legality and enforceability of the remaining provisions of this Agreement (including each portion of any Section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (b) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (c) to the fullest extent possible, the provisions of this Agreement (including each portion of any Section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

19. Enforcement. The Company expressly confirms and agrees that it has entered into this Agreement in order to induce Indemnitee to continue to serve as an officer or director of the Company, and acknowledges that Indemnitee is relying upon this Agreement in continuing in such capacity.

20. Entire Agreement. This Agreement sets forth the entire agreement of the parties hereto in respect of the subject matters contained herein and supersedes all prior agreements, whether oral or written, by any officer, employee or representative of any party hereto in respect of the subject matter contained herein; and any prior agreement of the parties hereto in respect of the subject matter contained herein is hereby terminated and cancelled. For avoidance of doubt, the parties confirm the foregoing does not apply to or limit Indemnitee's rights under Delaware law or the Certificate of Incorporation or Bylaws.

21. Modification and Waiver. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions of this Agreement nor shall any waiver constitute a continuing waiver.

22. Notice by Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter tat may be subject to indemnification or advancement of Expenses covered hereunder. The failure of Indemnitee to so notify the Company shall not relieve the Company of any obligation it may have to the Indemnitee under this Agreement or otherwise.

23. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt and: (a) personal delivery to the party to be notified; (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next Business Day; (c) five calendar days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (d) one Business Day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next Business Day delivery, with written verification of receipt. If notice is given to the Company, it shall be sent to ACM Research, Inc., 42307 Osgood Road, Suite I, Fremont, California 94539, Attention: Chief Executive Officer; email: dwang@acmrcsh.com, facsimile: 510-445-3708, and a copy (which shall not constitute notice) shall also be sent to Mark L. Johnson at K&L Gates LLP, State Street Financial Center, One Lincoln Street, Boston, Massachusetts 02111; email: mark.johnson@klgates.com, facsimile: 617-261-3175. All communications shall be sent to the Indemnitee at the address, email address or facsimile number set forth on the signature page of this Agreement. Notwithstanding the foregoing, either party may subsequently modify its address, email address or facsimile number for purposes of this Section 21 by delivering written notice to the other party in accordance with this Section 21.

24. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by or on behalf of Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (a) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (b) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

25. Governing Law. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the internal laws of the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of Delaware.

26. Consent to Jurisdiction. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 14(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (a) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Chancery Court of the State of Delaware (the "*Delaware Court*"), and not in any other state or federal court in the United States of America or any court in any other country, (b) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (c) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, irrevocably RL&F Service Corp., 920 North King Street, 2nd Floor, Wilmington, New Castle County, Delaware 19801 as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party

personally within the State of Delaware, (d) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court and (e) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

27. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement. A signed copy of this Agreement delivered by e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

28. Construction.

(a) headings used in this Agreement are for convenience of reference only and shall not, for any purpose, be deemed a part of this Agreement;

(b) the word "*day*" refers to a calendar day;

(c) the words "herein," "hereof," "hereby," "hereto" and "hereunder" refer to this Agreement as a whole;

(d) the words "include" and "including" as used herein shall not be construed so as to exclude any other thing not referred to or described;

(e) the word "or" is not exclusive;

(f) the definition given for any term in this Agreement shall apply equally to both the singular and plural forms of the term defined;

(g) whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms;

(h) unless the context otherwise requires, (i) references herein to an agreement, instrument or other document (including this Agreement) mean such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof and (ii) references herein to a statute means such statute as amended from time to time and includes any successor legislation thereto and any rules and regulations promulgated thereunder; and

(i) this Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed as of the date first above written.

ACM RESEARCH, INC.

By: _____
Name: David H. Wang
Title: President and Chief Executive Officer

[DIRECTOR OR OFFICER NAME]

_____
Address:

_____

_____

_____

ACM RESEARCH, INC.

Executive Retention Agreement

THIS AGREEMENT is entered into between ACM Research, Inc. and its subsidiary ACM Research (Shanghai), Inc. (each a "Company," and together the "Companies") and Min Xu (the "Executive") as of November 14, 2016.

As an inducement for and in consideration of the Executive accepting employment with the Companies effective as of the date hereof, the Companies agree that the Executive shall receive the severance benefits set forth in this Agreement in the event the Executive's employment with one or both of the Companies is terminated under the circumstances described below.

1. Key Definitions.

As used herein, the following terms shall have the meanings set forth below:

1.1. "Cause" means:

(a) any willful violation by the Executive of any material law or regulation applicable to either of the Companies or the business of either of the Companies;

(b) any conviction of the Executive for, or guilty plea of the Executive to, any felony or any crime involving moral turpitude, or any perpetration by the Executive of a common law fraud;

(c) the commission by the Executive of a material act of dishonesty that involves personal profit in connection with either of the Companies (or any successor, subsidiary, parent or affiliate) or any other entity having a material business relationship with either of the Companies; or

(d) the Executive's willful and continued failure to substantially perform his reasonable assigned duties as an officer of either of the Companies (other than any such failure resulting from incapacity due to physical or mental illness or any failure after the Executive gives notice of termination for Good Reason), which failure is not cured within twenty days after a written demand for substantial performance is received by the Executive from the Board of Directors of such Company that specifically identifies the manner in which such Board believes the Executive has not substantially performed the Executive's duties.

Any determination of Cause with respect to the Executive's employment with one of the Companies shall be deemed to constitute Cause with respect to his employment with both companies.

1.2. "Disability" means the Executive's absence from the full-time performance of the Executive's duties with ACM U.S. for 180 consecutive calendar days as a result of incapacity due to mental or physical illness that is determined to be total and permanent by a physician selected by ACM U.S. or its insurers and acceptable to the Executive or the Executive's legal representative.

1.3. "Good Reason" means the occurrence, without the Executive's written consent, of any of the events or circumstances set forth in clauses (a) through (e) below. Notwithstanding the occurrence of any such event or circumstance, such occurrence shall not be deemed to constitute Good Reason if, prior to the Termination Date specified in the Notice of Termination (each as defined in Section 2.1(a)) given by

the Executive in respect thereof, such event or circumstance has been fully corrected and the Executive has been reasonably compensated for any losses or damages resulting therefrom (*provided* that such right of correction by ACM U.S. shall only apply to the first Notice of Termination for Good Reason given by the Executive):

(a) the assignment to the Executive of duties inconsistent in any material respect with the Executive's position, authority or responsibilities with either of the Companies (including status, offices, titles and reporting requirements), or any other action or omission by either of the Companies that results in a material diminution in such position, authority or responsibilities;

(b) a material reduction in the Executive's annual base salary as in effect from time to time;

(c) the failure of the Companies to obtain the agreement from any successor to either of the Companies to assume and agree to perform this Agreement, as required by Section 5.1;

(d) any failure of the Companies to pay or provide to the Executive any portion of the Executive's compensation or benefits due under any then-existing medical, dental or vision plan within seven days of the date such compensation or benefits are due; or

(e) any other material breach by the Companies of any of their material obligations under this Agreement or any other employment-related agreement with the Executive.

1.4. "Term" means the period commencing as of the date hereof and continuing in effect through December 31, 2019, provided that commencing on January 1, 2018 and each January 1 thereafter, the Term shall be automatically extended for one additional year unless, not later than ninety days prior to the scheduled expiration of the Term (or any extension thereof), ACM U.S. shall have given the Executive written notice that the Term will not be extended.

1.5. Term of Agreement. This Agreement, and all rights and obligations of the parties hereunder, shall expire upon the earlier to occur of (a) the expiration of the Term and (b) the fulfillment by the Companies of all of their obligations under Section 3 if the Executive's employment with the Companies terminates prior to the expiration of the Term.

2. Termination.

2.1. Termination of Employment.

(a) Any termination of the Executive's employment by either of the Companies (other than as set forth in Section 2.3) or by the Executive (other than due to the death of the Executive) shall be communicated by a written notice to the other parties hereto (a "Notice of Termination") given in accordance with Section 6.5. Any Notice of Termination shall:

(i) indicate the specific termination provision (if any) of this Agreement relied upon by the party giving such notice,

(ii) to the extent applicable, set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated, and

(iii) specify the effective date of an employment termination (the "Termination Date"), which shall be the close of business on the date specified in the Notice of

Termination (which date may not be less than 15 days or more than 120 days after the date of delivery of such Notice of Termination), in the case of a termination other than one due to the Executive's death, or the date of the Executive's death, as the case may be.

The failure by the Executive or the Companies to set forth in a Notice of Termination any fact or circumstance that contributes to a showing of Good Reason or Cause shall not waive any right of the Executive or the Companies, respectively, hereunder or preclude the Executive or the Companies, respectively, from asserting any such fact or circumstance in enforcing the rights hereunder.

(b) In the event the Companies fail to satisfy the requirements of Section 2.1(a) regarding a Notice of Termination, the purported termination of the Executive's employment pursuant to such Notice of Termination shall not be effective for purposes of this Agreement.

2.2. Procedure Regarding Termination for Cause.

(a) Any Notice of Termination for Cause given by either of the Companies must be given within ninety days of the occurrence of the event or circumstance that constitutes Cause. Prior to any Notice of Termination for Cause being given (and prior to any termination for Cause being effective), the Executive shall be entitled to a hearing before the Board of Directors of such Company at which the Executive may, at his election, be represented by counsel and at which he shall have a reasonable opportunity to be heard. Such hearing shall be held on not less than 15 days' prior written notice to the Executive stating the intention of such Board to terminate the Executive for Cause and stating in detail the particular event or circumstance that such Board believes constitutes Cause for termination.

(b) Any Notice of Termination for Good Reason given by the Executive must be given within thirty days of the occurrence of the event or circumstance that constitutes Good Reason. The Executive shall cooperate in good faith with the Company, during the period from the date of delivery of such Notice of Termination to the Termination Date specified in such Notice of Termination, to correct each of such events and circumstances. Notwithstanding the occurrence of any such event or circumstance, such occurrence shall not be deemed to constitute Good Reason if, prior to the Termination Date specified in such Notice of Termination, each such event or circumstance has been fully corrected and the Executive has been reasonably compensated for any losses or damages resulting therefrom. The Executive's right to terminate the Executive's employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness.

2.3. Excluded Termination. Notwithstanding any other provision of this Agreement, the Executive's employment shall not be considered to be terminated for purposes of this Agreement if his employment is terminated without Cause by one, but not both, of the Companies, *provided* that the Executive's compensation and benefits from the other Company immediately after such termination are at least equivalent in all material respects to the Executive's combined compensation and benefits from both of the Companies immediately before such termination.

3. Benefits to Executive.

3.1. Termination Without Cause or for Good Reason. Subject to Section 6.1, if the Executive's employment is terminated by the Companies without Cause or by the Executive for Good Reason, then, *provided* that the Executive has delivered to the Companies (and the applicable revocation period has expired with respect to) a signed general release substantially in the form attached hereto as Exhibit A (the "General Release") during the 60 days following the Termination Date, the Companies shall pay to the Executive a lump sum in cash equal to the sum of:

(a) the sum of (1) the Executive's base salary through the Termination Date, (2) the amount of any compensation previously deferred by the Executive (together with any accrued interest or earnings thereon) and (3) any accrued vacation pay, in each case to the extent not previously paid;

(b) an amount equal to one year of the Executive's base salary as in effect immediately prior to the Termination Date;

(c) an amount equal to twelve months of premiums for continued coverage under the U.S. Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) for medical, dental and vision plans at the same level of coverage by both Companies as in effect on the Termination Date; and

(d) to the extent not previously paid or provided, any other amounts required to be paid or provided, or that the Executive is eligible to receive following the Executive's termination of employment, under any plan, program, policy, practice, contract or agreement of the Companies and their affiliated companies.

The foregoing lump sum amount will be payable in the first payroll period after the General Release becomes irrevocable, *provided* that if Termination Date occurs on or after November 3 in a calendar year, the payment will be made no earlier than the first payroll period of the following calendar year that occurs at least thirty days after the Executive's execution and non-revocation of the General Release (or such longer period as the Company may determine to be required by law).

3.2. Resignation Without Good Reason; Termination for Death or Disability. If the Executive voluntarily terminates his employment with either of the Companies during the Term, excluding a termination for Good Reason, or if the Executive's employment with the Companies is terminated by reason of the Executive's death or Disability during the Term, then the Companies shall pay or provide to the Executive (or the Executive's estate, if applicable), to the extent not previously paid or provided:

(a) within thirty days after the Termination Date, a lump sum in cash equal to the sum of (1) the Executive's base salary through the Termination Date and (2) any accrued vacation pay; and

(b) any other amounts or benefits required to be paid or provided or that the Executive is eligible to receive following the Executive's termination of employment under any plan, program, policy, practice, contract or agreement of the Companies and their affiliated companies, including any compensation previously deferred by the Executive (together with any accrued interest or earnings thereon).

3.1. Termination for Cause. If the Companies terminate the Executive's employment for Cause during the Term, then the Companies shall pay or provide to the Executive , to the extent not previously paid or provided:

(a) within thirty days after the Termination Date, a lump sum in cash equal to the Executive's base salary through the Termination Date; and

(b) any other amounts or benefits required to be paid or provided or that the Executive is eligible to receive following the Executive's termination of employment under any plan, program, policy, practice, contract or agreement of the Companies and their affiliated companies, including any compensation previously deferred by the Executive (together with any accrued interest or earnings thereon.

4. Disputes.

4.1. Claims. All claims by the Executive for benefits under this Agreement shall be directed to and determined by the Board and shall be in writing. Any denial by the Board of a claim for benefits under this Agreement shall be delivered to the Executive in writing and shall set forth the specific reasons for the denial and the specific provisions of this Agreement relied upon. The Board shall afford a reasonable opportunity to the Executive for a review of the decision denying a claim. Any further dispute or controversy arising under or in connection with this Agreement shall be settled exclusively in accordance with Sections 4.2 and 4.3.

4.2. Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the exclusive jurisdiction of the state courts of Delaware and any federal court located in the State of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or any federal court located in the State of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court. The parties agree that service of process with respect to any suit, action or other proceeding arising out of or based upon this Agreement may be made by providing notice in accordance with Section 6.5.

4.3. WAIVER OF JURY TRIAL. EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR THE SUBJECT MATTER HEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION 4.3 HAS BEEN FULLY DISCUSSED AND CONSIDERED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

5. Successors.

5.1. Successor to Either Company. Each Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of its business or assets expressly to assume and agree to perform this Agreement to the same extent that such Company would be required to perform it if no such succession had taken place. Failure of either Company to obtain an assumption of this Agreement at or prior to the effectiveness of any succession shall be a breach of this Agreement and shall constitute Good Reason if the Executive elects to terminate employment, except that for purposes of implementing the foregoing, the date on which any such succession becomes effective shall be deemed the Termination Date. As used in this Agreement, “Company” shall mean a Company as defined above and any successor to its business or assets as aforesaid that assumes and agrees to perform this Agreement, by operation of law or otherwise.

5.2. Successor to Executive. This Agreement shall inure to the benefit of and be enforceable by the Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to the Executive or his family hereunder if the Executive had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the executors, personal representatives or administrators of the Executive's estate.

6. Miscellaneous.

6.1. Non-disclosure and Invention Agreement. The Executive acknowledges and reaffirms the Executive's obligations reflected in the Non-disclosure and Inventions Agreement dated as of the date hereof. Notwithstanding any other provision of this Agreement, in the event the Executive is deemed by the Company to have violated such agreement, the Company shall provide notice to the Executive and, upon the deemed delivery of such notice pursuant to Section 6.5, all amounts payable or benefits to be provided by the Company under Section 3 shall no longer be due and payable or required to be provided.

6.2. Section 409A. This Agreement is intended to comply with the provisions of Section 409A of the Internal Revenue Code of 1986, as amended and the final Treasury regulations and guidance issued thereunder ("Section 409A") and the Agreement shall, to the extent practicable, be construed in accordance therewith. Terms defined in the Agreement shall have the meanings given such terms under Section 409A if and to the extent required in order to comply with Section 409A.

6.3. Not an Employment Contract. The Executive acknowledges that this Agreement does not constitute a contract of employment with or impose on either of the Companies any obligation to retain the Executive as an employee. The Companies acknowledge that this Agreement does not prevent the Executive from terminating employment with both of the Companies at any time.

6.4. Employment by Subsidiary. Subject to Section 2.3, for purposes of this Agreement the Executive's employment with either Company shall not be deemed to have terminated solely as a result of the Executive continuing to be employed by a wholly owned subsidiary of ACM U.S.

6.5. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt, or (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next Business Day, (c) five Business Days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one Business Day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next Business Day delivery, with written verification of receipt. All communications shall be sent to the parties at their addresses or e-mail addresses set forth on the signature page to this Agreement, or to such address or e-mail address as subsequently modified by written notice given by a party to the other parties in accordance with this Section 6.5. If notice is given to the Executive, a copy shall also be sent to _____, and if notice is given to either Company, a copy shall also be given to Mark L. Johnson (mark.johnson@klgates.com), K&L Gates LLP, One Lincoln Street, Boston, Massachusetts 02111.

6.6. Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

6.7. Governing Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the internal laws of the State of Delaware, without regard to conflicts of law principles.

6.8. Waivers. No waiver by a party at any time of any breach of, or compliance with, any provision of this Agreement to be performed by such party shall be deemed a waiver of that or any other provision at any subsequent time.

6.9. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.10. *Construction*. For purposes of this Agreement:

(a) the titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement;

(b) unless otherwise indicated, any references in this Agreement to a Section refer to a Section of this Agreement;

(c) the word "including" as used in this Agreement shall not be construed so as to exclude any other thing not referred to or described;

(d) the word "or" is not exclusive;

(e) the definition given for any term in this Agreement shall apply equally to both the singular and plural forms of the term defined; and

(f) this Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

6.11.

6.12. Tax Withholding. Any payments provided for hereunder shall be paid net of any applicable tax withholding required under any applicable law.

6.13. Entire Agreement. This Agreement sets forth the entire agreement of the parties hereto in respect of the subject matter contained herein and supersedes all prior agreements, promises, covenants, arrangements, communications, representations or warranties, whether oral or written, by any officer, employee or representative of any party hereto in respect of the subject matter contained herein; and any prior agreement of the parties hereto in respect of the subject matter contained herein is hereby terminated and cancelled.

6.14. Amendments. This Agreement may be amended or modified only by a written instrument executed by all of the parties.

6.15. Executive's Acknowledgements. The Executive acknowledges that he:

(a) has read understands the terms and consequences of this Agreement;

(b) has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of the Executive's own choice or has voluntarily declined to seek such counsel; and

(c) understands that the law firm of K&L Gates LLP is acting as counsel to the Companies in connection with the transactions contemplated by this Agreement, and is not acting as counsel for the Executive.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first set forth above.

ACM RESEARCH, INC.

By: /s/ David H. Wang
David H. Wang
President and Chief Financial Officer

Address:
42307 Osgood Road, Suite 1
Fremont, California 94539
USA

ACM RESEARCH (SHANGHAI), INC.

By: /s/ David H. Wang
David H. Wang
President and Chief Financial Officer

Address:
Building 4, No.1690
Cai Lun Road
Zhangjiang High-Tech Park
Shanghai 201203
P.R. China

MIN XU

/s/ Min Xu

Address:
11 Hillcrest Ave
Darien, CT 06820
U.S.A

GENERAL RELEASE OF CLAIMS

This General Release of Claims dated as of _____, 20__ (this "General Release") is being executed by Min Xu (the "Executive"), for and in consideration of certain amounts payable under the Executive Retention Agreement (the "Agreement") entered into between the Executive and ACM Research, Inc. and its subsidiary ACM Research (Shanghai), Inc. (each a "Company"), dated as of _____, 2016. The Executive agrees as follows:

The Executive, on behalf of the Executive and the Executive's agents, heirs, executors, administrators, successors and assigns, hereby fully, forever, irrevocably and unconditionally releases, remises and discharges each Company, its officers, directors, stockholders, corporate affiliates, subsidiaries, parent companies, agents and employees (each in their individual and corporate capacities) (hereinafter, the "Released Parties") from any and all claims, charges, complaints, demands, actions, causes of action, suits, rights, debts, sums of money, costs, accounts, reckonings, covenants, contracts, agreements, promises, doings, omissions, damages, executions, obligations, liabilities, and expenses (including attorneys' fees and costs), of every kind and nature that the Executive ever had or now has against the Released Parties, including, but not limited to, any and all claims arising out of or relating to the Executive's employment with and/or separation from either Company, including, but not limited to, all claims under Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e et seq., the Americans With Disabilities Act of 1990, 42 U.S.C. § 12101 et seq., the Age Discrimination in Employment Act, 29 U.S.C. § 621 et seq., the Family and Medical Leave Act, 29 U.S.C. § 2601 et seq., the Worker Adjustment and Retraining Notification Act ("WARN"), 29 U.S.C. § 2101 et seq., Section 806 of the Corporate and Criminal Fraud Accountability Act of 2002, 18 U.S.C. 1514(A), the Rehabilitation Act of 1973, 29 U.S.C. § 701 et seq., the Fair Credit Reporting Act, 15 U.S.C. § 1681 et seq., the Employee Retirement Income Security Act of 1974 ("ERISA"), 29 U.S.C. § 1001 et seq., Employee Order 11246, and Employee Order 11141, all as amended; all claims arising out of the [*to come regarding other statutes*], all as amended; all common law claims including, but not limited to, actions in defamation, intentional infliction of emotional distress, misrepresentation, fraud, wrongful discharge, and breach of contract, all claims to any non-vested ownership interest in either Company, contractual or otherwise, and any claim or damage arising out of the Executive's employment with and/or separation from either Company (including a claim for retaliation) under any common law theory or any federal, state or local statute or ordinance not expressly referenced above; *provided, however,* that (a) nothing in this General Release prevents the Executive from filing a charge with, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission[, *to come*] or a state fair employment practices agency (except that the Executive acknowledges that the Executive may not be able to recover any monetary benefits in connection with any such claim, charge or proceeding); and (b) this General Release does not include (i) any right to vested benefits to which the Executive may be entitled under any Company benefit plan; (ii) any rights the Executive may have under the terms of this General Release; (iii) any right to indemnification arising out of the Executive's employment with either Company pursuant to any policy of insurance maintained by either Company; and (iv) any rights that the Executive has under the Agreement.

The Executive acknowledges that the Executive has been given at least 21 days to consider this General Release, and that each Company advised the Executive to consult with an attorney of the Executive's own choosing prior to signing this General Release. The Executive understands that the Executive may revoke this General Release for a period of seven days after the Executive signs this General Release by notifying each Company's chief executive officer, in writing, and this General Release shall not be effective or enforceable until the expiration of this seven-day revocation period. The Executive understands and agrees that by entering into this General Release, the Executive is waiving any

and all rights or claims the Executive might have under the Age Discrimination in Employment Act, as amended by the Older Workers Benefits Protection Act, [*to come*], and that the Executive has received consideration beyond that to which the Executive was previously entitled.

IN WITNESS WHEREOF, the parties hereto have executed this General Release as of the day and year set forth above.

MIN XU

_____

ACM RESEARCH, INC.

By: _____
Title: _____

ACM RESEARCH (SHANGHAI), INC.

By: _____
Title: _____

Exhibit 21.01

ACM RESEARCH, INC.

LIST OF SUBSIDIARIES

Name of Subsidiary	Jurisdiction of Incorporation or Organization
ACM Research (Shanghai), Inc.	People's Republic of China
CleanChip Technologies Limited	Hong Kong
ACM Research (Wuxi), Inc.	People's Republic of China

Exhibit 23.01

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

ACM Research, Inc.
42307 Osgood Road, Suite I
Fremont, California 94539
United States

We hereby consent to the use in the Prospectus constituting a part of this Registration Statement on Form S-1 of ACM Research, Inc. of our report dated September 13, 2017, relating to the consolidated financial statements of ACM Research, Inc. for the years ended December 31, 2016 and 2015, which is contained in that Prospectus.

We also consent to the reference to us under the caption “Experts” in the Prospectus.

/s/ BDO China Shu Lun Pan Certified Public Accountants LLP

Shenzhen, the People’s Republic of China
September 13, 2017

September 13, 2017

Mark L. Johnson
mark.johnson@klgates.com

T +1 617 261 3260
F +1 617 261 3175

By EDGAR and FedEx

Securities and Exchange Commission
Division of Corporation Finance
100 F. Street, N.E.
Washington, DC 20549
Attention: Amanda Ravitz
Laurie Abbott

Re: ACM Research, Inc.
Registration Statement on Form S-1
CIK No. 0001680062

Ladies and Gentlemen:

We are submitting this letter on behalf of ACM Research, Inc. (the "*Company*"), in response to comments from the staff (the "*Staff*") of the Securities and Exchange Commission (the "*Commission*") received by letter dated June 1, 2017 relating to the Company's draft registration statement on Form S-1 confidentially submitted to the Commission on May 9, 2017 (the "*Draft S-1*"). Contemporaneously herewith, the Company is filing via EDGAR a registration statement on Form S-1 of the Company (the "*Form S-1*"). For the convenience of the Staff, we are delivering to the Staff by overnight courier a copy of this letter and marked copies of the Form S-1 to show changes from the Revised Draft S-1. Additionally, under separate cover we are submitting a supplemental response to comment number 8 in the letter dated February 27, 2017 from the Staff.

For convenience, we have set forth below, in italicized, bold type, the enumerated written comments provided in the Staff's letter to the Company dated June 1, 2017. The response of the Company to each comment is set forth immediately following the comment.

Management's Discussion and Analysis of Financial Condition and Results of Operations

How We Evaluate Our Operations, page 58

1. ***We note your revisions in response to comment 14 and that you now exclude PRC government grants from Free Cash Flow data and add expenses paid by application to PRC government subsidies to Adjusted EBITDA data. Please revise to disclose the reason for this presentation.***

In reviewing the referenced disclosures, the Company's management determined that the previously proposed approach was not consistent with management's use of the adjusted EBITDA and free cash flow information for purposes of understanding, evaluating and managing the Company's operations. The Company therefore has revised the adjusted EBITDA and free cash flow information accordingly. Consistent with the Staff's comment, the Company

has revised "Management's Discussion and Analysis of Financial Condition and Results of Operations—How We Evaluate Our Operations" in the Form S-1 to explain, in the last paragraph on page 61 and in the first paragraph on 62, the reasons for the Company's treatment of governmental grants for the purposes of determining and evaluating adjusted EBITDA and free cash flow.

Consolidated Financial Statements

Note 2: Summary of Significant Accounting Policies

Research and Development Costs, page F-11

2. ***In response to comment 27 you set forth that all costs incurred during the evaluation period are expensed. Please revise your research and development accounting policy to reflect your response and to clarify that your policy includes the capital equipment or tools being evaluated.***

The Company has revised the disclosure in "Note 2. Research and Development Costs" in the Form S-1 on page F-12 in response to this comment.

Note 19: Subsequent Events, page F-35

3. ***Please disclose your accounting treatment for the warrant issued to SMC.***

The Company respectfully submits that "Note 10. Warrant Liability" in the Form S-1 on page F-30 includes an appropriate description of the accounting treatment of the warrant issued to SMC.

* * *

Please do not hesitate to contact me at (617) 261-3260 if you have any questions or would like additional information regarding this matter.

Very truly yours,

/s/ Mark L. Johnson

Mark L. Johnson

cc: David H. Wang, ACM Research, Inc.
Min Xu, ACM Research, Inc.
Seo Salimi, Goodwin Procter LLP