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

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended June 30, 2021

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _________ to _____________

Commission file number: 001-38273

ACM Research, Inc.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**94-3290283**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*
42307 Osgood Road, Suite I **Fremont, California**	**94539**
(Address of Principal Executive Offices)	*(Zip Code)*

Registrant's telephone number, including area code: **(510) 445-3700**

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on which Registered
Class A Common Stock, $0.0001 par value	**ACMR**	**NASDAQ Global Market**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data file required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

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

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	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 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Class	Number of Shares Outstanding
Class A Common Stock, $0.0001 par value	17,680,409 shares outstanding as of August 3, 2021
Class B Common Stock, $0.0001 par value	1,707,605 shares outstanding as of August 3, 2021

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We conduct our business operations principally through ACM Research (Shanghai), Inc., or ACM Shanghai, a subsidiary of ACM Research, Inc., or ACM Research. Unless the context requires otherwise, references in this report to "our company," "our," "us," "we" and similar terms refer to ACM Research, Inc. and its subsidiaries, including ACM Shanghai, collectively.

For purposes of this report, certain amounts in Renminbi, or RMB, have been translated into U.S. dollars solely for the convenience of the reader. The translations have been made based on the conversion rates published by the State Administration of Foreign Exchange of the People's Republic of China.

SAPS, TEBO, ULTRA C and ULTRA FURNACE are our trademarks. For convenience, these trademarks appear in this report without ™ symbols, but that practice does not mean that we will not assert, to the fullest extent under applicable law, our rights to the trademarks. This report also contains other companies' trademarks, registered marks and trade names, which are the property of those companies.

FORWARD-LOOKING STATEMENTS AND STATISTICAL DATA

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this report regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management are forward-looking statements. 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, including those described or incorporated by reference in “Item 1A. Risk Factors” of Part II of this report, 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.

The information included under the heading “Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations – Overview,” of Part I of this report contains statistical data and estimates, including forecasts, that are based on information provided by Gartner, Inc., or Gartner, in “Forecast: Semiconductor Wafer Fab Equipment, Worldwide, 4Q20 Update” (December 22, 2020), or the Gartner Report. The Gartner Report represents research opinions or viewpoints that are published, as part of a syndicated subscription service, by Gartner and are not representations of fact. The Gartner Report speaks as of its original publication date (and not as of the date of this report), and the opinions expressed in the Gartner Report are subject to change without notice. While we are not aware of any misstatements regarding any of the data presented from the Gartner Report, estimates, and in particular forecasts, involve numerous assumptions and are subject to risks and uncertainties, as well as change based on various factors, that could cause results to differ materially from those expressed in the data presented below.

Any forward-looking statement made by us in this report 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 report, and the documents that we reference in this report and have filed as exhibits to this report, 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.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

ACM RESEARCH, INC.
Condensed Consolidated Balance Sheets
(In thousands, except per share data)
(Unaudited)

	June 30, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 70,209	$ 71,766
Trading securities (note 16)	31,257	28,239
Accounts receivable, less allowance for doubtful accounts of $0 as of June 30, 2021 and December 31, 2020 (note 4)	71,357	56,441
Other receivables	10,733	9,679
Inventories (note 5)	136,852	88,639
Prepaid expenses	8,953	5,892
Total current assets	329,361	260,656
Property, plant and equipment, net (note 6)	8,985	8,192
Land use right, net (note 7)	9,642	9,646
Operating lease right-of-use assets, net (note 11)	5,209	4,297
Intangible assets, net	630	554
Deferred tax assets (note 21)	14,691	11,076
Long-term investments (note 14)	7,006	6,340
Other long-term assets (note 8)	43,434	40,496
Total assets	418,958	341,257
Liabilities and Stockholders' Equity		
Current liabilities:		
Short-term borrowings (note 9)	22,162	26,147
Current portion of long-term borrowings (note 12)	1,799	1,591
Accounts payable	67,031	35,603
Advances from customers	43,845	17,888
Deferred revenue	2,348	1,343
Income taxes payable (note 21)	482	31
FIN-48 payable (note 21)	83	83
Other payables and accrued expenses (note 10)	21,871	18,805
Current portion of operating lease liability (note 11)	2,437	1,417
Total current liabilities	162,058	102,908
Long-term borrowings (note 12)	18,717	17,979
Long-term operating lease liability (note 11)	2,772	2,880
Deferred tax liability (note 21)	1,298	1,286
Other long-term liabilities (note 13)	4,557	8,034
Total liabilities	189,402	133,087
Commitments and contingencies (note 21)		
Stockholders' equity:		
Common stock – Class A, par value $0.0001: 50,000,000 shares authorized as of June 30, 2021 and December 31, 2020; 17,668,409 shares issued and outstanding as of June 30, 2021 and 16,896,693 shares issued and outstanding as of December 31, 2020 (note 18)	2	2
Common stock–Class B, par value $0.0001: 2,409,738 shares authorized as of June 30, 2021 and December 31, 2020; 1,707,605 shares issued and outstanding as of June 30, 2021 and 1,802,606 shares issued and outstanding as of December 31, 2020 (note 18)	-	-
Additional paid in capital	108,566	102,004
Accumulated surplus	46,324	34,287
Accumulated other comprehensive income	5,931	4,857
Total ACM Research, Inc. stockholders' equity	160,823	141,150
Non-controlling interests	68,733	67,020
Total stockholders' equity	229,556	208,170
Total liabilities and stockholders' equity	$ 418,958	$ 341,257

The accompanying notes are an integral part of these condensed consolidated financial statements.

ACM RESEARCH, INC.
Condensed Consolidated Statements of Operations and Comprehensive Income
(In thousands, except per share data)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	**2020**	**2021**	**2020**
Revenue (note 3)	$ 53,864	$ 39,049	$ 97,596	$ 63,397
Cost of revenue	32,184	19,693	57,871	33,813
Gross profit	21,680	19,356	39,725	29,584
Operating expenses:				
Sales and marketing	5,789	4,595	11,097	7,600
Research and development	7,933	5,221	13,437	8,898
General and administrative	3,627	2,204	7,410	4,532
Total operating expenses, net	17,349	12,020	31,944	21,030
Income from operations	4,331	7,336	7,781	8,554
Interest income	31	320	80	655
Interest expense	(194)	(228)	(383)	(339)
Change in fair value of financial liability	-	(5,431)	-	(5,431)
Unrealized gain on trading securities	3,783	-	2,736	-
Other income (expenses), net	(897)	149	(428)	826
Equity income in net income of affiliates	295	209	615	357
Income before income taxes	7,349	2,355	10,401	4,622
Income tax benefit (expense) (note 21)	(15)	(1,859)	2,755	(2,163)
Net income	7,334	496	13,156	2,459
Less: Net income attributable to non-controlling interests and redeemable non-controlling interests	767	577	1,119	835
Net income (loss) attributable to ACM Research, Inc.	$ 6,567	$ (81)	$ 12,037	$ 1,624
Comprehensive income:				
Net income	7,334	496	13,156	2,459
Foreign currency translation adjustment	3,000	242	1,668	(1,658)
Comprehensive Income	10,334	738	14,824	801
Less: Comprehensive income attributable to non-controlling interests and redeemable non-controlling interests	1,797	1,610	1,714	916
Comprehensive income (loss) attributable to ACM Research, Inc.	$ 8,537	$ (872)	$ 13,110	$ (115)
Net income (loss) attributable to ACM Research, Inc. per common share (note 2):				
Basic	$ 0.34	$ (0.00)	$ 0.63	$ 0.09
Diluted	$ 0.30	$ (0.00)	$ 0.56	$ 0.08
Weighted average common shares outstanding used in computing per share amounts (note 2):				
Basic	19,123,659	18,050,841	18,956,195	18,085,602
Diluted	21,807,744	21,516,175	21,679,528	21,197,203

The accompanying notes are an integral part of these condensed consolidated financial statements.

ACM RESEARCH, INC.
Condensed Consolidated Statements of Changes in Stockholders' Equity
For the Six Months Ended June 30, 2021 and 2020
(In thousands, except per share data)
(Unaudited)

	Common Stock Class A		Common Stock Class B						
	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Surplus	Accumulated Other Comprehensive Income	Non-controlling interests	Total Stockholders' Equity
Balance at December 31, 2020	**16,896,693**	**$ 2**	**1,802,606**	**$ -**	**$ 102,004**	**$ 34,287**	**$ 4,857**	**$ 67,020**	**$ 208,170**
Net income	-	-	-	-	-	12,037	-	1,119	13,156
Foreign currency translation adjustment	-	-	-	-	-	-	1,074	594	1,668
Exercise of stock options	434,034	-	-	-	2,197	-	-	-	2,197
Stock-based compensation	-	-	-	-	2,545	-	-	-	2,545
Exercise of warrants	242,681	-	-	-	1,820	-	-	-	1,820
Conversion of Class B common stock to Class A common stock	95,001	-	(95,001)	-	-	-	-	-	-
Balance at June 30, 2021	**17,668,409**	**$ 2**	**1,707,605**	**$ -**	**$ 108,566**	**$ 46,324**	**$ 5,931**	**$ 68,733**	**$ 229,556**

	Common Stock Class A		Common Stock Class B						
	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Surplus	Accumulated Other Comprehensive Loss	Non-controlling interests	Total Stockholders' Equity
Balance at December 31, 2019	**16,182,151**	**$ 2**	**1,862,608**	**$ -**	**$ 83,487**	**$ 15,507**	**$ (1,675)**	**$ -**	**$ 97,321**
Net income	-	-	-	-	-	1,624	-	192	1,816
Foreign currency translation adjustment	-	-	-	-	-	-	(1,740)	928	(812)
Exercise of stock options	185,903	-	-	-	873	-	-	-	873
Stock-based compensation	-	-	-	-	1,544	-	-	-	1,544
Conversion of class B common shares to Class A common shares	60,002	-	(60,002)	-	-	-	-	-	-
Share repurchase	(242,681)	-	-	-	(9,715)	-	-	-	(9,715)
Exercise of stock warrants	64,717	-	-	-	-	-	-	-	-
Reclassification of redeemable non-controlling interest	-	-	-	-	-	-	-	59,958	59,958
Balance at June 30, 2020	**16,250,092**	**$ 2**	**1,802,606**	**$ -**	**$ 76,189**	**$ 17,131**	**$ (3,415)**	**$ 61,078**	**$ 150,985**

The accompanying notes are an integral part of these condensed consolidated financial statements.

ACM RESEARCH, INC.
Condensed Consolidated Statements of Changes in Stockholders' Equity
For the Three Months Ended June 30, 2021 and 2020
(In thousands, except per share data)
(Unaudited)

	Common Stock Class A		Common Stock Class B						
	Shares	**Amount**	**Shares**	**Amount**	**Additional Paid-in Capital**	**Accumulated Surplus**	**Accumulated Other Comprehensive Loss**	**Non-controlling interests**	**Total Stockholders' Equity**
Balance at March 31, 2021	**17,239,967**	**$ 2**	**1,769,272**	**$ -**	**$ 104,591**	**$ 39,757**	**$ 3,961**	**$ 66,936**	**$ 215,247**
Net income	-	-	-	-	-	6,567	-	767	7,334
Foreign currency translation adjustment	-	-	-	-	-	-	1,970	1,030	3,000
Exercise of stock options	124,094	-	-	-	820	-	-	-	820
Stock-based compensation	-	-	-	-	1,335	-	-	-	1,335
Exercise of warrants	242,681	-	-	-	1,820	-	-	-	1,820
Conversion of class B common shares to Class A common shares	61,667	-	(61,667)	-	-	-	-	-	-
Balance at June 30, 2021	**17,668,409**	**$ 2**	**1,707,605**	**$ -**	**$ 108,566**	**$ 46,324**	**$ 5,931**	**$ 68,733**	**$ 229,556**

	Common Stock Class A		Common Stock Class B						
	Shares	**Amount**	**Shares**	**Amount**	**Additional Paid-in Capital**	**Accumulated Surplus**	**Accumulated Other Comprehensive Loss**	**Non-controlling interests**	**Total Stockholders' Equity**
Balance at March 31, 2020	**16,317,346**	**$ 2**	**1,862,608**	**$ -**	**$ 84,351**	**$ 17,212**	**$ (2,623)**	**$ -**	**$ 98,942**
Net income (loss)	-	-	-	-	-	(81)	-	192	111
Foreign currency translation adjustment	-	-	-	-	-	-	(792)	928	136
Exercise of stock options	115,425	-	-	-	698	-	-	-	698
Stock-based compensation	-	-	-	-	855	-	-	-	855
Conversion of class B common shares to Class A common shares	60,002	-	(60,002)	-	-	-	-	-	-
Share repurchase	(242,681)	-	-	-	(9,715)	-	-	-	(9,715)
Reclassification of redeemable non-controlling interest	-	-	-	-	-	-	-	59,958	59,958
Balance at June 30, 2020	**16,250,092**	**$ 2**	**1,802,606**	**$ -**	**$ 76,189**	**$ 17,131**	**$ (3,415)**	**$ 61,078**	**$ 150,985**

The accompanying notes are an integral part of these condensed consolidated financial statements.

ACM RESEARCH, INC.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended June 30, 2021	Six Months Ended June 30, 2020
Cash flows from operating activities:		
Net income	$ 13,156	$ 2,459
Adjustments to reconcile net income from operations to net cash used in operating activities		
Depreciation and amortization	1,031	441
Loss on disposals of property, plant and equipment	-	1
Equity income in net income of affiliates	(615)	(357)
Unrealized gain on trading securities	(2,736)	-
Deferred income taxes	(3,502)	(507)
Stock-based compensation	2,545	1,544
Change in fair value of financial liability	-	5,431
Net changes in operating assets and liabilities:		
Accounts receivable	(14,279)	(28,474)
Other receivables	(610)	(3,271)
Inventory	(47,432)	(5,630)
Prepaid expenses	(3,001)	(1,176)
Other long-term assets	(2,939)	(836)
Accounts payable	31,200	14,954
Advances from customers	25,912	(283)
Income tax payable	452	(1,419)
Other payables and accrued expenses	2,270	3,537
Deferred revenue	2,348	474
Other long-term liabilities	(3,559)	2,461
Net cash provided by (used in) operating activities	241	(10,651)
Cash flows from investing activities:		
Purchase of property and equipment	(2,353)	(1,529)
Purchase of intangible assets	(431)	(55)
Prepayment for land-use-right and property	-	(15,438)
Purchase of long-term investments	-	(14,130)
Net cash used in investing activities	(2,784)	(31,152)
Cash flows from financing activities:		
Proceeds from short-term borrowings	17,653	25,807
Repayments of short-term borrowings	(21,753)	(13,563)
Proceeds from long-term borrowings	1,548	-
Repayments of long-term borrowings	(794)	-
Repayments of notes payable	-	(1,820)
Proceeds from stock option exercise to common stock	2,197	873
Proceeds from warrant exercise to common stock	1,820	-
Net cash provided by financing activities	671	11,297
Effect of exchange rate changes on cash, cash equivalents and restricted cash	$ 315	$ (956)
Net decrease in cash, cash equivalents and restricted cash	$ (1,557)	$ (31,462)
Cash, cash equivalents and restricted cash at beginning of period	71,766	117,859
Cash, cash equivalents and restricted cash at end of period	$ 70,209	$ 86,397
Supplemental disclosure of cash flow information:		
Interest paid, net of capitalized interest	$ 383	$ 339
Cash paid for income taxes	$ 463	$ 4,104
Reconciliation of cash, cash equivalents and restricted cash in condensed consolidated statements of cash flows:		
Cash and cash equivalents	70,209	86,397
Restricted cash	-	-
Cash, cash equivalents and restricted cash	$ 70,209	$ 86,397
Non-cash used in financing activities:		
Warrant conversion to common stock	$ -	$ 399
Share cancellation	$ -	$ 9,715
Cashless exercise of stock options	$ 118	$ -

The accompanying notes are an integral part of these condensed consolidated financial statements.

NOTE 1 – DESCRIPTION OF BUSINESS

ACM Research, Inc. (“ACM”) and its subsidiaries (collectively with ACM, the “Company”) develop, manufacture and sell wet cleaning and other equipment used to improve the manufacturing process and yield for advanced integrated chips. The Company markets and sells its wet-cleaning equipment under the brand name “Ultra C,” based on the Company’s proprietary Space Alternated Phase Shift (“SAPS”), Timely Energized Bubble Oscillation (“TEBO”), and Tahoe 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”). ACM Shanghai was formed to help establish and build relationships with integrated circuit manufacturers in the PRC, and the Company initially financed its Shanghai operations in part through sales of non-controlling equity interests 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. 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. In August 2018, the Company introduced its Ultra-C Tahoe wafer cleaning tool, which can deliver high cleaning performance with significantly less sulfuric acid than typically consumed by conventional high-temperature single-wafer cleaning tools. Based on its electro-chemical plating (“ECP”) technology, in 2019 the Company introduced its Ultra ECP ap, or “Advanced Packaging,” tool for bumping, or applying copper, tin and nickel to semiconductor wafers at the die-level, and its Ultra ECP map, or “Multi-Anode Partial Plating,” tool to deliver advanced electrochemical copper plating for copper interconnect applications in front-end wafer fabrication processes. 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.

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 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 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.

In August 2017 ACM purchased 18.77% of ACM Shanghai's equity interests held by Shanghai Science and Technology Venture Capital Co., Ltd. On November 8, 2017, ACM purchased the remaining 18.36% of ACM Shanghai's equity interest held by third parties, Shanghai Pudong High-Tech Investment Co., Ltd. ("PDHTI") and Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. ("ZSTVC"). At December 31, 2017, ACM owned all of the outstanding equity interests of ACM Shanghai, and indirectly through ACM Shanghai, owned all of the outstanding equity interests of ACM Wuxi.

On September 13, 2017, ACM effectuated a 1-for-3 reverse stock split of Class A and Class B common stock. Unless otherwise indicated, all share numbers, per share amount, share prices, exercise prices and conversion rates set forth in these notes and the accompanying consolidated financial statements have been adjusted retrospectively to reflect the reverse stock split.

On November 2, 2017, the Registration Statement on Form S-1 (File No. 333- 220451) for ACM's initial public offering of Class A common stock was declared effective by the U.S. Securities and Exchange Commission. Shares of Class A common stock began trading on the Nasdaq Global Market on November 3, 2017, and the closing for the offering was held on November 7, 2017.

In December 2017 ACM formed a wholly owned subsidiary in the Republic of Korea, ACM Research Korea CO., LTD. ("ACM Korea"), to serve customers based in Republic of Korea and perform sales, marketing, research and development activities for new products and solutions.

In March 2019 ACM Shanghai formed a wholly owned subsidiary in the PRC, Shengwei Research (Shanghai), Inc. ("ACM Shengwei"), to manage activities related to addition of future long-term production capacity.

In April 2019 CleanChip formed a wholly owned subsidiary in California, ACM Research (CA), Inc. ("ACM California"), to provide procurement services on behalf of ACM Shanghai.

In June 2019 ACM announced plans to complete, over the following three years, a listing (the "STAR Listing") of shares of ACM Shanghai on the Shanghai Stock Exchange's new Sci-Tech innovAtion boaRd, known as the STAR Market, and a concurrent initial public offering (the "STAR IPO") of ACM Shanghai shares in the PRC. ACM Shanghai is currently ACM's primary operating subsidiary, and at the time of announcement, was wholly owned by ACM. To meet a STAR Listing requirement that it have multiple independent stockholders in the PRC, ACM Shanghai completed private placements of its shares in June and November 2019, following which, as of September 30, 2020, the private placement investors held a total of 8.3% of the outstanding shares of ACM Shanghai and ACM Research held the remaining 91.7%. As part of the STAR Listing process, in June 2020 the ownership interests held by the private investors were reclassified from redeemable non-controlling interests to non-controlling interests as the redemption feature was terminated (note 19).

In preparation for the STAR IPO, ACM completed a reorganization in December 2019 that included the sale of all of the shares of CleanChip by ACM to ACM Shanghai for $3,500. The reorganization and sale had no impact on ACM's consolidated financial statements.

The Company has direct or indirect interests in the following subsidiaries:

Name of subsidiaries	Place and date of incorporation	Effective interest held as at June 30, 2021	Effective interest held as at December 31, 2020
ACM Research (Shanghai), Inc.	PRC, May 2005	91.7%	91.7%
ACM Research (Wuxi), Inc.	PRC, July 2011	91.7%	91.7%
CleanChip Technologies Limited	Hong Kong, June 2017	91.7%	91.7%
ACM Research Korea CO., LTD.	Korea, December 2017	91.7%	91.7%
Shengwei Research (Shanghai), Inc.	PRC, March 2019	91.7%	91.7%
ACM Research (CA), Inc.	USA, April 2019	91.7%	91.7%
ACM Research (Cayman), Inc.	Cayman Islands, April 2019	100.0%	100.0%

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Principles of Consolidation

The Company's condensed consolidated financial statements include the accounts of ACM and its subsidiaries, including ACM Shanghai and its subsidiaries, which include ACM Wuxi, ACM Shengwei and CleanChip (the subsidiaries of which include ACM California and ACM Korea). ACM's subsidiaries are those entities in which ACM, directly or indirectly, controls a majority of the voting power. All significant intercompany transactions and balances have been eliminated upon consolidation.

The accompanying condensed consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and the rules and regulations of the Securities and Exchange Commission for reporting on Form 10-Q. Accordingly, they do not include all the information and footnotes required by GAAP for complete financial statements. The accompanying condensed consolidated financial statements should be read in conjunction with the historical consolidated financial statements of the Company for the year ended December 31, 2020 included in ACM's Annual Report on Form 10-K for the year ended December 31, 2020.

The accompanying condensed consolidated balance sheet as of June 30, 2021, condensed consolidated statements of operations and comprehensive income for the three and six months ended June 30, 2021 and 2020, condensed consolidated statements of changes in stockholders' equity for the three and six months ended June 30, 2021 and 2020, and condensed consolidated statements of cash flows for the six months ended June 30, 2021 and 2020 are unaudited. In the opinion of management, these unaudited condensed consolidated financial statements of the Company reflect all adjustments that are necessary for a fair presentation of the Company's financial position and results of operations. Such adjustments are of a normal recurring nature, unless otherwise noted. The balance sheet as of June 30, 2021 and the results of operations for the three and six months ended June 30, 2021 are not necessarily indicative of the results to be expected for any future period.

COVID-19 Assessment

The outbreak of COVID-19, the coronavirus, has grown both in the United States and globally, and related government and private sector responsive actions have adversely affected the Company's business operations. In December 2019 a series of emergency quarantine measures taken by the PRC government disrupted domestic business activities during the weeks after the initial outbreak of COVID-19. Since that time, an increasing number of countries, including the United States, have imposed restrictions on travel to and from the PRC and elsewhere, as well as general movement restrictions, business closures and other measures imposed to slow the spread of COVID-19 and its variants. The situation continues to develop, and it is impossible to predict the effect and ultimate impact of the COVID-19 outbreak on the Company's business operations and results. While the quarantine, social distancing and other regulatory measures instituted or recommended in response to COVID-19 are expected to be temporary, the duration of the business disruptions and related financial impact cannot be estimated at this time. The COVID-19 outbreak has been declared a worldwide health pandemic that could adversely affect the economies and financial markets of many countries, resulting in an economic downturn and changes in global economic policy that could reduce demand for the Company's products and its customers' chips and have a material adverse impact on the Company's business, operating results and financial condition. Through June 30, 2021 the Company had not experienced a significant negative impact of COVID-19 on its operations, capital and financial resources, including overall liquidity position. The Company continues to monitor the impact of the COVID-19 pandemic on all aspects of its business.

The Company conducts substantially all of its product development, manufacturing, support and services in the PRC, and those activities have been directly impacted by the COVID-19 outbreak and related restrictions on transportation and public appearances. In February 2020 ACM Shanghai's headquarters were closed for an additional six days beyond the normal Lunar New Year Holiday in accordance with Shanghai government restrictions related to the outbreak. The Company cannot assure that further closures or reductions of its PRC operations or production may not be necessary in upcoming months as the result of business interruptions arising from protective measures being taken by the PRC and other governmental agencies or of other consequences of the COVID-19 outbreak.

The Company's corporate headquarters are located in Alameda County in the San Francisco Bay Area of California. In order to attempt to mitigate the COVID-19 pandemic, in March 2020 (a) the State of California declared a state of emergency related to the spread of COVID-19, (b) the San Francisco Department of Public Health announced aggressive recommendations to reduce the spread of the virus, (c) the health officers of six San Francisco Bay Area counties, including Alameda County, issued shelter-in-place orders, which (i) direct all individuals living in those counties to shelter at their places of residence (subject to limited exceptions), (ii) direct all businesses and governmental agencies to cease non-essential operations at physical locations in those counties, (iii) prohibit all non-essential gatherings of any number of individuals, (iv) order cessation of all non-essential travel, and (d) the Governor of California and the State Public Health Officer and Director of the California Department of Public Health ordered all individuals living in the State of California to stay at their place of residence for an indefinite period of time (subject to limited exceptions). The effects of these types of actions in the future may negatively impact productivity, disrupt the business of the Company and delay timelines, the magnitude of which will depend, in part, on the length and severity of the restrictions and other limitations on the Company's ability to conduct its business in the ordinary course.

The prolonged and broad-based shift to a remote working environment continues to create inherent productivity, connectivity, and oversight challenges and could affect our ability to enhance, develop and support existing products and services, detect and prevent spam and problematic content, hold product sales and marketing events, and generate new sales leads, among others. In addition, the changed environment under which the Company is operating could have an effect on its internal controls over financial reporting as well as the Company's ability to meet a number of its compliance requirements in a timely or quality manner. Additional and/or extended, governmental lockdowns, restrictions or new regulations could significantly impact the ability of our employees and vendors to work productively. Governmental restrictions have been globally inconsistent and it remains unclear when a return to worksite locations or travel will be permitted or what restrictions will be in place in those environments. As the Company continues to return its workforce in more office locations in 2021, it may experience increased costs as it prepares its facilities for a safe return to work environment and experiment with hybrid work models, in addition to potential effects on its ability to compete effectively and maintain its corporate culture.

Extended periods of interruption to the Company's corporate, development or manufacturing facilities due to the COVID-19 outbreak could cause the Company to lose revenue and market share, which would depress its financial performance and could be difficult to recapture. The Company's business may also be harmed if travel to or from the PRC or the United States continues to be restricted or inadvisable or if members of management and other employees are absent because they contract the coronavirus, they elect not to come to work due to the illness affecting others in the Company's office or laboratory facilities, or they are subject to quarantines or other governmentally imposed restrictions.

Use of Estimates

The preparation of the 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 fair value of trading securities, 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.

Basic and Diluted Net Income per Common Share

Basic and diluted net income per common share are calculated as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Numerator:				
Net income	$ 7,334	$ 496	$ 13,156	$ 2,459
Less: Net income attributable to non-controlling interests and redeemable non-controlling interests	767	577	1,119	835
Net income (loss) available to common stockholders, basic and diluted	$ 6,567	$ (81)	$ 12,037	$ 1,624
Weighted average shares outstanding, basic	19,123,659	18,050,841	18,956,195	18,085,602
Effect of dilutive securities	2,684,085	3,465,334	2,723,333	3,111,601
Weighted average shares outstanding, diluted	21,807,744	21,516,175	21,679,528	21,197,203
Net income (loss) per common share:				
Basic	$ 0.34	$ (0.00)	$ 0.63	$ 0.09
Diluted	$ 0.30	$ (0.00)	$ 0.56	$ 0.08

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 during the three and six months ended June 30, 2021 and 2020, the net income 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 condensed consolidated statements of operations and comprehensive income and in the above computation of net income per common share.

Diluted net income per common share reflects the potential dilution from securities, including stock options and issued warrants, that could share in ACM's earnings. Certain potential dilutive securities were excluded from the net income per share calculation because the impact would be anti-dilutive. ACM's potential dilutive securities consist of warrants and stock options for the three and six months ended June 30, 2021 and 2020.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to credit risk consist principally of cash and cash equivalents, restricted cash and accounts receivable. The Company deposits and invests its cash with financial institutions that management believes are creditworthy.

The Company is potentially subject to concentrations of credit risks in its accounts receivable. For the six months ended June 30, 2021 and 2020, the Company's three largest customers accounted for 67.1% and 92.4%, respectively, of revenue. For the three months ended June 30, 2021 and 2020, the Company's three largest customers accounted for 81.2% and 91.0%, respectively, of revenue. As of June 30, 2021 and December 31, 2020, the Company's three largest customers accounted for 67.1% and 75.8%, respectively, of the Company's accounts receivables. The Company believes that the receivable balances from these largest customers do not represent a significant credit risk based on past collection experience.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. ASU 2019-12 simplifies the accounting for income taxes by removing certain exceptions to the general principles in Topic 740. It also improves consistent application of and simplifies GAAP for other areas of Topic 740 by clarifying and amending existing guidance. The Company adopted ASU 2019-12 on January 1, 2021. The adoption of ASU 2019-12 did not have a material impact on the Company's condensed consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting. ASU 2020-04 provide optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform. The Company adopted ASU 2020-04 on January 1, 2021. The adoption of ASU 2020-04 did not have a material impact on the Company's condensed consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 replaced the pre-existing incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. ASU 2016-13 requires use of a forward-looking expected credit loss model for accounts receivables, loans and other financial instruments. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted.

In October 2019, the FASB issued ASU 2019-10, *Financial Instruments – Credit Losses (Topic 326), Derivatives and Hedging (Topic 815) and Leases (Topic 842)*, which defers the effective date for public filers that are considered small reporting companies ("SRC") as defined by the U.S. Securities and Exchange Commission ("SEC") to fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Since the Company was eligible to be an SRC based on its SRC determination as of November 15, 2019 (which is the issuance date of ASU 2019-10) in accordance with SEC regulations, the Company will adopt the standards for the year beginning January 1, 2023. Adoption of the standard requires using a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the effective date to align existing credit loss methodology with the new standard. The Company is evaluating the impact of this standard on its consolidated financial statements, including accounting policies, processes and systems and expects the standard will have a minor impact on its consolidated financial statements.

NOTE 3 – REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company assesses revenues based upon the nature or type of goods or services it provides and the geographic location of the related businesses. The following tables present disaggregated revenue information:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Single Wafer Cleaning, Tahoe and Semi-Critical Cleaning Equipment	$ 45,461	$ 33,340	$ 77,874	$ 56,124
ECP (front-end and packaging), Furnace and Other Technologies	-	4,490	5,550	4,490
Advanced Packaging (excluding ECP), Services & Spares	8,403	1,219	14,172	2,783
Total Revenue By Product Category	**$ 53,864**	**$ 39,049**	**$ 97,596**	**$ 63,397**
Wet cleaning and other front-end processing tools	$ 45,974	$ 37,830	$ 77,874	$ 60,614
Advanced packaging, other processing tools, services and spares	7,890	1,219	19,722	2,783
Total Revenue Front-end and Back-End	**$ 53,864**	**$ 39,049**	**$ 97,596**	**$ 63,397**

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Mainland China	$ 53,736	$ 39,004	$ 97,432	$ 63,293
Other Regions	128	45	164	104
	$ 53,864	**$ 39,049**	**$ 97,596**	**$ 63,397**

NOTE 4 – ACCOUNTS RECEIVABLE

At June 30, 2021 and December 31, 2020 accounts receivable consisted of the following:

	June 30, 2021	December 31, 2020
Accounts receivable	$ 71,357	$ 56,441
Less: Allowance for doubtful accounts	-	-
Total	$ 71,357	$ 56,441

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. No allowance for doubtful accounts was considered necessary at June 30, 2021 and December 31, 2020.

NOTE 5 – INVENTORIES

At June 30, 2021 and December 31, 2020 inventory consisted of the following:

	June 30, 2021	December 31, 2020
Raw materials	$ 48,801	$ 32,391
Work in process	24,084	23,871
Finished goods	63,967	32,377
Total inventory	$ 136,852	$ 88,639

At June 30, 2021 and December 31, 2020, the Company held an inventory reserve of $1,118 and $1,140, respectively. System shipments of first-tools to an existing or prospective customer, for which ownership does not transfer until customer acceptance, are classified as finished goods inventory and carried at cost until ownership is transferred.

NOTE 6 – PROPERTY, PLANT AND EQUIPMENT, NET

At June 30, 2021 and December 31, 2020, property, plant and equipment consisted of the following:

	June 30, 2021	December 31, 2020
Manufacturing equipment	$ 6,333	$ 5,966
Office equipment	1,425	1,047
Transportation equipment	216	216
Leasehold improvement	2,724	2,398
Total cost	10,698	9,627
Less: Total accumulated depreciation	(4,681)	(3,745)
Construction in progress	2,968	2,310
Total property, plant and equipment, net	$ 8,985	$ 8,192

Depreciation expense was $467 and $189 for the three months ended June 30, 2021 and 2020, respectively, and $906 and $374 for the six months ended June 30, 2021 and 2020, respectively.

NOTE 7 – LAND USE RIGHT, NET

A summary of land use right is as follows:

	June 30, 2021	December 31, 2020
Land use right purchase amount	$ 9,839	$ 9,744
Less: Accumulated amortization	(197)	(98)
Land use right, net	$ 9,642	$ 9,646

In 2020 ACM Shanghai, through its wholly owned subsidiary ACM Shengwei, entered into an agreement for a 50-year land use right in the Lingang region of Shanghai. In July 2020 ACM Shengwei began a multi-year construction project for a new 1,000,000 square foot development and production center that will incorporate new manufacturing systems and automation technologies, and will provide floor space to support significantly increase production capacity and related research and development activities.

Amortization expense was $49 for the three months ended June 30, 2021, and $98 for the six months ended June 30, 2021.

The annual amortization of land use right for each of the five succeeding years is as follows:

Year ending December 31,	
2021	$ 197
2022	197
2023	197
2024	197
2025	197

NOTE 8 – OTHER LONG-TERM ASSETS

At June 30, 2021 and December 31, 2020, other long-term assets consisted of the following:

	June 30, 2021	December 31, 2020
Prepayment for property - Lingang	$ 40,372	$ 39,450
Prepayment for property, plant and equipment and other non-current assets	1,463	-
Prepayment for property - lease deposit	610	-
Security deposit for land use right	763	756
Others	226	290
Total other long-term assets	$ 43,434	$ 40,496

The prepayment for property - Lingang is for the housing in Lingang, Shanghai, which consists of (1) the contractual amount to acquire the property and (2) capitalized interest charges on the long-term loan related to acquisition of the property, which amounted to $541 as of June 30, 2021. The property is pledged for a long-term loan from China Merchants Bank (note 12).

NOTE 9 – SHORT-TERM BORROWINGS

At June 30, 2021 and December 31, 2020, short-term and long-term borrowings consisted of the following:

	June 30, 2021	December 31, 2020
Line of credit up to RMB 80,000 from China Everbright Bank,		
1)due on April 1, 2021 with an annual interest rate of 4.70%. *1 and fully repaid on March 23, 2021.	-	4,599
2)due on June 27, 2021 with an annual interest rate of 4.25%. *1 and fully repaid on June 28, 2021.	-	1,380
3)due on April 29, 2021 with an annual interest rate of 2.80%. *1 and fully repaid on March 23, 2021.	-	820
4)due on June 27, 2021 with an annual interest rate of 2.70%. *1 and fully repaid on June 25, 2021.	-	2,080
5)due on September 30, 2021 with an annual interest rate of 2.50%. *1	2,854	-
Line of credit up to RMB 20,000 from Bank of Communications,		
1)due on April 12, 2021 with an annual interest rate of 4.65% and fully repaid on April 12, 2021.	-	1,533
2)due on May 24, 2021 with an annual interest rate of 3.65% and fully repaid on May 24, 2021.	-	1,533
Line of credit up to RMB 70,000 from Bank of Shanghai Pudong Branch,		
1)due on May 27, 2021 with an annual interest rate of 4.68%. *2 and fully repaid on May 27, 2021.	-	2,575
2)due on June 27, 2021 with an annual interest rate of 4.68%. *2 and fully repaid on March 29, 2021.	-	1,380
3)due on May 28, 2021 with an annual interest rate of 3.48%. *2 and fully repaid on May 28, 2021.	-	2,442
4)due on June 7, 2021 with an annual interest rate of 3.50%. *2 and fully repaid on June 7, 2021.	-	1,521
5)due on June 16, 2021 with an annual interest rate of 3.50%. *2 and fully repaid on June 16, 2021.	-	1,838
Line of credit up to RMB 80,000 from China Merchants Bank,		
1)due on August 10, 2021 with annual interest rate of 3.85%.	1,393	1,380
2)due on August 25, 2021 with annual interest rate of 3.85%.	3,096	3,066
3)due on February 1, 2022 with annual interest rate of 3.85%.	1,393	-
4)due on May 26, 2022 with annual interest rate of 3.9%.	1,393	-
5)due on February 2, 2022 with annual interest rate of 3.95%.	1,471	-
6)due on February 2, 2022 with annual interest rate of 3.95%.	1,471	-
7)due on February 2, 2022 with annual interest rate of 3.95%.	1,393	-
Line of credit up to RMB 100,000 from Bank of Shanghai Pudong Branch,		
1)due on June 7, 2022 with an annual interest rate of 2.7%. *3.	4,618	-
Line of credit up to RMB 40,000 from Bank of China,		
1)due on June 15, 2022 with an annual interest rate of 3.86%.	3,080	-
Total	$ 22,162	$ 26,147

*1 Guaranteed by ACM's Chief Executive Officer
*2 Guaranteed by ACM's Chief Executive Officer and CleanChip
*3 Guaranteed by CleanChip

For the three months ended June 30, 2021 and 2020, interest expense related to short-term borrowings amounted to $191 and $228, respectively, and $380 and $339 for the six months ended June 30, 2021 and 2020.

NOTE 10 – OTHER PAYABLE AND ACCRUED EXPENSES

At June 30, 2021 and December 31, 2020, other payable and accrued expenses consisted of the following:

	June 30, 2021	December 31, 2020
Accrued commissions	9,426	7,127
Accrued warranty	4,471	3,975
Accrued payroll	2,659	3,068
Accrued professional fees	53	384
Accrued machine testing fees	1,758	1,595
Others	3,504	2,656
Total	$ 21,871	$ 18,805

NOTE 11 – LEASES

The Company leases space under non-cancelable operating leases for several office and manufacturing locations. These leases do not have significant rent escalation holidays, concessions, leasehold improvement incentives, or other build-out clauses. Further, the leases do not contain contingent rent provisions.

Most leases include one or more options to renew. The exercise of lease renewal options is typically at the Company's sole discretion; therefore, the majority of renewals to extend the lease terms are not included in the Company's right-of-use assets and lease liabilities as they are not reasonably certain of exercise. The Company regularly evaluates the renewal options, and when they are reasonably certain of exercise, the Company includes the renewal period in its lease term.

As most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at the lease commencement date in determining the present value of the lease payments. The Company has a centrally managed treasury function; therefore, based on the applicable lease terms and the current economic environment, it applies a portfolio approach for determining the incremental borrowing rate.

The components of lease expense were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Operating lease cost	$ 660	$ 378	$ 1,175	$ 755
Short-term lease cost	74	47	153	97
Lease cost	$ 734	$ 425	$ 1,328	$ 852

Supplemental cash flow information related to operating leases was as follows for the three months ended June 30, 2021 and 2020:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash outflow from operating leases	$ 734	$ 425	$ 1,328	$ 852

Maturities of lease liabilities for all operating leases were as follows as of June 30, 2021:

	December 31,
2021	1,274
2022	2,312
2023	1,027
2024	918
2025	20
Total lease payments	5,551
Less: Interest	(342)
Present value of lease liabilities	$ 5,209

The weighted average remaining lease terms and discount rates for all operating leases were as follows as of June 30, 2021 and December 31, 2020:

	June 30, 2021	December 31, 2020
Remaining lease term and discount rate:		
Weighted average remaining lease term (years)	1.80	2.11
Weighted average discount rate	4.59%	5.14%

NOTE 12 – LONG-TERM BORROWINGS

At June 30, 2021 and December 31, 2020, long-term borrowings consisted of the following:

	June 30, 2021	December 31, 2020
Loan from China Merchants Bank	$ 18,968	$ 19,570
Loan from Bank of China	$ 1,548	-
Less: Current portion	(1,799)	(1,591)
	$ 18,717	$ 17,979

The loan from China Merchants Bank is for the purpose of purchasing property in Lingang, Shanghai. The loan is repayable in 120 installments with the last installment due in November 2030, with an annual interest rate of 4.65%. The loan is pledged by the property of ACM Shengwei and guaranteed by ACM Shanghai. As of June 30, 2021, the right certificate of the pledged property has not been obtained and the procedures of the formal pledge registration in the bank had not been completed.

The loan from Bank of China is for the purpose of funding ACM Shanghai project expenditures. The loan bears interest at an annual rate of 2.6% and is repayable in 6 installments, with the last installment due in June 2024.

Scheduled principal payments for the outstanding long-term loan as of June 30, 2021 are as follows:

Year ending December 31, 2021	
2021	$ 890
2022	1,837
2023	1,917
2024	3,007
2025 and onwards	12,865
	$ 20,516

For the three months ended June 30, 2021, interest related to long-term borrowings of $227 was incurred, of which $3 was charged to interest expenses and $224 was capitalized as other long-term assets. For the six months ended June 30, 2021, interest related to long-term borrowings of $544 was incurred, of which $3 was charged to interest expenses and $541 was capitalized as other long-term assets.

NOTE 13 – 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. As of June 30, 2021 and December 31, 2020, other long-term liabilities consisted of the following unearned government subsidies:

	June 30, 2021	December 31, 2020
Subsidies to Stress Free Polishing project, commenced in 2008 and 2017	$ 1,260	$ 1,266
Subsidies to Electro Copper Plating project, commenced in 2014	1,922	2,156
Subsidies to Polytetrafluoroethylene, commenced in 2018	-	130
Subsidies to Tahoe-Single Bench Clean, commenced in 2020	600	1,544
Subsidies to Backside Clean-YMTC National Project, commenced in 2020	370	2,591
Other	405	347
Total	$ 4,557	$ 8,034

NOTE 14 – LONG-TERM INVESTMENT

On September 6, 2017, ACM and Ninebell Co., Ltd. ("Ninebell"), a Korean company that is one of the Company's principal material suppliers, entered into an ordinary share purchase agreement, effective as of September 11, 2017, pursuant to which Ninebell issued to ACM ordinary shares representing 20% of Ninebell's post-closing equity for a purchase price of $1,200, and a common stock purchase agreement, effective as of September 11, 2017, pursuant to which ACM issued 133,334 shares of Class A common stock to Ninebell for a purchase price of $1,000 at $7.50 per share. The investment in Ninebell is accounted for under the equity method.

On June 27, 2019, ACM Shanghai and Shengyi Semiconductor Technology Co., Ltd. ("Shengyi"), a company based in Wuxi, China that is one of the Company's component suppliers, entered into an agreement pursuant to which Shengyi issued to ACM Shanghai shares representing 15% of Shengyi's post-closing equity for a purchase price of $109. The investment in Shengyi is accounted for under the equity method.

On September 5, 2019, ACM Shanghai, entered into a Partnership Agreement with six other investors, as limited partners, and Beijing Shixi Qingliu Investment Co., Ltd., as general partner and manager, with respect to the formation of Hefei Shixi Chanheng Integrated Circuit Industry Venture Capital Fund Partnership (LP), a Chinese limited partnership based in Hefei, China. Pursuant to such Partnership Agreement, on September 30, 2019, ACM Shanghai invested RMB 30,000 ($4,200), which represented 10% of the partnership's total subscribed capital. The investment in Hefei Shixi Chanheng Integrated Circuit Industry Venture Capital Fund Partnership (LP) is accounted for under the equity method in accordance with ASC 323-30-S99-1.

The Company treats the equity investment in the consolidated financial statements under the equity method. Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Company's share of the incorporated-date fair values of the investee's identifiable net assets over the cost of the investment (if any). Thereafter, the investment is adjusted for the post incorporation change in the Company's share of the investee's net assets and any impairment loss relating to the investment.

	June 30, 2021	December 31, 2020
Ninebell	$ 2,271	$ 1,666
Shengyi	192	134
Hefei Shixi	4,543	4,540
Total	$ 7,006	$ 6,340

The Company's share of equity investees' net income was $295 and $209, for the three months ended June 30, 2021 and 2020, respectively, and $615 and $357 for the six-months ended June 30, 2021 and 2020, respectively, which amounts were included in equity income in net income of affiliates in the accompanying condensed consolidated statements of operations and comprehensive income.

NOTE 15 – FINANCIAL LIABILITY CARRIED AT FAIR VALUE

In December 2016 Shengxin (Shanghai) Management Consulting Limited Partnership ("SMC") paid 20,123,500 RMB ($2,981 as of the date of funding) (the "SMC Investment") to ACM Shanghai as an investment pursuant to terms to be subsequently negotiated. SMC is a PRC limited partnership partially owned by employees of ACM Shanghai.

In March 2017 (a) ACM issued to SMC a warrant (the "2017 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 $2,981, and (b) ACM Shanghai agreed to repay the SMC Investment within 60 days after the exercise of the 2017 Warrant. In March 2018 SMC exercised the 2017 Warrant in full, as a result of which (1) ACM issued 397,502 shares of Class A common stock to SMC (the "2017 Warrant Shares"), (2) SMC borrowed the funds to pay the 2017 Warrant exercise price pursuant to a senior secured promissory note (the "SMC Note") in the principal amount of $2,981 issued to ACM Shanghai, which in turn issued to ACM a promissory note (the "Intercompany Note") in the principal amount of $2,981 in payment of the 2017 Warrant exercise price. Each of the SMC Note and the Intercompany Note bore interest at a rate of 3.01% per annum and matured on August 17, 2023. The SMC Note was secured by a pledge of the 2017 Warrant Shares.

In connection with its follow-on public offering of Class A common stock in August 2019, ACM agreed to purchase a total of 154,821 of the 2017 Warrant Shares from SMC at a per share price of $13.195, of which (a) $1,161 was applied to reduce SMC's obligations to ACM Shanghai under the SMC Note, and which ACM then withheld for its own account and applied to reduce ACM Shanghai's obligations to ACM under the Intercompany Note, and (b) the remaining $882 was paid to SMC. In a separate transaction, ACM Shanghai repaid $1,161 of the SMC Investment in cash, which reduced the amount of the SMC Investment due to SMC to $1,820.

The SMC Note and SMC Investment were offsetting items in the Company's consolidated balance sheet in accordance with ASC 210-20-45-1 up to April 30, 2020.

In preparation for the STAR IPO, ACM Shanghai was required to terminate its financial relationship with SMC. In order to facilitate such termination, on April 30, 2020, ACM entered into two agreements relating to outstanding obligations among ACM Research, ACM Shanghai and SMC. Pursuant to such agreements: (i) ACM Shanghai assigned to ACM its rights under the SMC Note, including the right to receive payment of the $1,820 payable thereunder; (ii) ACM cancelled the outstanding $1,820 obligation of ACM Shanghai under the Intercompany Note; (iii) SMC surrendered its remaining 242,681 2017 Warrant Shares to ACM Research; and (iv) in exchange for such 242,681 2017 Warrant Shares, ACM agreed to deliver to SMC certain consideration ("SMC Consideration") agreed upon by ACM Research and SMC, subject to obtaining certain PRC regulatory approvals. Under the agreements, if the required approvals were not obtained by December 31, 2023, ACM would cancel the SMC Note as consideration for the 242,681 2017 Warrant Shares. In a separate transaction in April 2020, ACM Shanghai repaid the remaining $1,820 of the SMC Investment in cash.

Beginning April 30, 2020, the SMC Consideration was accounted for as a financial liability, and the Company applied the fair value measurement option to value the SMC Consideration in accordance with ASC 825-10-15-4a. On April 30, 2020, the SMC Consideration was $9,715, which reflected cancellation of the 2017 Warrant Shares and was recorded in equity. The financial liability was remeasured to fair value as of the end of each subsequent reporting period.

On July 29, 2020, ACM and SMC entered into an amended agreement under which, in settlement of the SMC Consideration, ACM issued to SMC a warrant (the "2020 Warrant") to purchase 242,681 shares of Class A common stock at a purchase price of $7.50 per share, and ACM cancelled the SMC Note. The financial liability was remeasured to fair value of $21,679 as of July 29, 2020, and was retired with the issuance of the 2020 Warrant. The Company recognized a change in fair value of financial liability of $11,964 for the year ended December 31, 2020, which was reflected in the consolidated statement of operations. The Company recorded the difference of $19,859 between the 2020 Warrant of $21,679 and the SMC Note of $1,820 into equity.

The 2020 Warrant was initially measured at fair value at the issuance date and classified as equity permanently in accordance with ASC 815. The fair value of the 2020 Warrant amounted to $21,679, based on the grant date using the Black-Scholes valuation model with the following assumptions:

	July 29, 2020
Fair value of common share(1)	$ 89.28
Expected term in years(2)	3.42
Volatility(3)	47.42%
Risk-free interest rate(4)	0.15%
Expected dividend(5)	0%

(1) Fair value of Class A common stock was the closing market price of the Class A common stock on July 29, 2020.
(2) Expected term of share options was based on the average of the vesting period and the contractual term for each grant according to Staff Accounting Bulletin 110.
(3) Volatility was calculated based on the historical volatility of the stock of companies comparable to ACM in the period equal to the expected term of each grant.
(4) Risk-free interest rate was 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 was assumed to be 0%, as ACM had no history or expectation of paying a dividend on its common stock.

On June 9, 2021, subsequent to its obtaining the necessary PRC approvals, SMC exercised the 2020 Warrant by paying the $1,820 exercise price to ACM and surrendering the 2020 Warrant to ACM. In return, ACM delivered 242,681 shares of ACM Class A common stock to SMC.

NOTE 16 – TRADING SECURITIES

Pursuant to a Partnership Agreement dated June 9, 2020 (the “Partnership Agreement”) and a Supplementary Agreement thereto dated June 15, 2020 (the “Supplementary Agreement”), ACM Shanghai became a limited partner of Qingdao Fortune-Tech Xinxing Capital Partnership (L.P.), a Chinese limited partnership based in Shanghai, China (the “Partnership”) of which China Fortune-Tech Capital Co., Ltd serves as general partner and thirteen unaffiliated entities serve, with ACM Shanghai, as limited partners. The Partnership was formed to establish a special fund that would purchase, in a strategic placement, shares of Semiconductor Manufacturing International Corporation, (“SMIC”) to be listed on the STAR Market. SMIC is a Shanghai-based foundry that has been a customer of the Company’s single-wafer wet-cleaning tools. The limited partners of the Partnership contributed to the fund a total of RMB 2.224 billion ($315,000), of which ACM Shanghai contributed RMB 100 million ($14.2 million), or 4.3% of the total contribution, on June 18, 2020.

Upon the closing of the SMIC offering in July 2020, the initial number of SMIC shares owned by the Partnership was apportioned to all of the limited partners in proportion to their respective capital contributions (4.3% in the case of ACM Shanghai). All of the SMIC shares acquired by the Partnership are subject, under applicable Chinese laws, to lock-up restrictions that prevent sales of the shares for one year after the shares were acquired. Thereafter an individual limited partner will be able to instruct the general partner to sell, on behalf of the limited partner, all or a portion of the limited partner’s apportioned shares, subject to compliance with all laws, regulations, trading rules, the Partnership Agreement and the Supplementary Agreement. Alternatively, following the lock-up period, limited partners holding at least thirty percent of the total SMIC shares held by the Partnership will be able, pursuant to a call auction in accordance with the Supplementary Agreement, to cause the general partner to arrange to sell all of the shares desired to be offered by each of the limited partners that complies with procedural requirements provided in the Supplementary Agreement.

As SMIC was listed on the STAR Market in July 2020, ACM Shanghai’s investment is accounted for as trading securities and is stated at fair market value, which is classified as Level 2 of the hierarchy established under ASC 820 with valuations based on quoted prices for identical securities in active markets, less a discount applied to reflect the remaining lock-up period.

The components of trading securities were as follows:

	June 30, 2021	December 31, 2020
Trading securities listed in Shanghai Stock Exchange		
Cost	$ 15,167	$ 15,020
Market value	$ 31,257	$ 28,239

Unrealized gain on trading securities, net of exchange difference amounted to $3,783 for the three months ended June 30, 2021, and $2,736 for the six months ended June 30, 2021.

NOTE 17 – RELATED PARTY BALANCES AND TRANSACTIONS

Prepaid expenses	June 30, 2021	December 31, 2020
Ninebell	$ 1,732	$ 1,607

Accounts payable	June 30, 2021	December 31, 2020
Ninebell	$ 5,331	$ 2,898
Shengyi	594	1,195
Total	$ 5,925	$ 4,093

	Three Months Ended June 30,		Six Months Ended June 30,	
Purchase of materials	2021	2020	2021	2020
Ninebell	$ 7,496	$ 3,370	$ 14,378	$ 5,523
Shengyi	287	456	645	514
Total	$ 7,783	$ 3,826	$ 15,023	$ 6,037

	Three Months Ended June 30,		Six Months Ended June 30,	
Service fee charged by	2021	2020	2021	2020
Shengyi	$ 117	$ 144	$ 259	$ 190
Ninebell	-	-	-	-
Total	$ 117	$ 144	$ 259	$ 190

NOTE 18 – COMMON STOCK

ACM is authorized to issue 50,000,000 shares of Class A common stock and 2,409,738 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 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 stockholders.

During the three months ended June 30, 2021, ACM issued 124,094 shares of Class A common stock upon option exercises by employees and non-employees, and an additional 61,667 shares of Class A common stock upon conversion of an equal number of shares of Class B common stock.

During the six months ended June 30, 2021, ACM issued 434,034 shares of Class A common stock upon option exercises by employees and non-employees, and an additional 95,001 shares of Class A common stock upon conversion of an equal number of shares of Class B common stock.

During the three and six months ended June 30, 2021, ACM issued 242,681 shares of Class A common stock upon the warrant exercise by SMC (Note 15).

During the three months ended June 30, 2020, ACM issued 115,425 shares of Class A common stock upon option exercises by employees and non-employees, and an additional 60,002 shares of Class A common stock upon conversion of an equal number of shares of Class B common stock.

During the six months ended June 30, 2020, ACM issued 185,903 shares of Class A common stock upon option exercises by employees and non-employees, and an additional 60,002 shares of Class A common stock upon conversion of an equal number of shares of Class B common stock. During the six months ended June 30, 2020, ACM issued 64,717 shares of Class A common stock upon a cashless warrant exercise by a non-employee.

During the three and six months ended June 30, 2020, SMC transferred its ownership of 242,681 shares of Class A common stock to ACM in exchange for the SMC Consideration. The 242,681 shares were cancelled during the three and six months ended June 30, 2020. (Note 15)

At June 30, 2021 and December 31, 2020, the number of shares of Class A common stock issued and outstanding was 17,668,409, and 16,896,693, respectively.

At June 30, 2021 and December 31, 2020, the number of shares of Class B common stock issued and outstanding was 1,707,605 and 1,802,606, respectively.

NOTE 19 – REDEEMABLE NON-CONTROLLING INTERESTS

During the second quarter of 2020, the redemption feature of the private placement funding terminated and the aggregate proceeds of the funding therefore were reclassified from redeemable non-controlling interests to non-controlling interests. At June 30, 2020, the balance of redeemable non-controlling interest was nil.

The components of the change in the redeemable non-controlling interests for the six months ended June 30, 2020 are presented in the following table:

Balance at December 31, 2019	**$**	**60,162**
Net income attributable to redeemable non-controlling interests		643
Effect of foreign currency translation gain attributable to redeemable non-controlling interests		(847)
Reclassification of redeemable non-controlling interest		(59,958)
Balance at June 30, 2020	**$**	**-**

NOTE 20 – STOCK-BASED COMPENSATION

In January 2020 ACM Shanghai adopted a 2019 Stock Option Incentive Plan (the “Subsidiary Stock Option Plan”) that provides for, among other incentives, the granting to officers, directors, employees of options to purchase shares of ACM Shanghai’s common stock. The fair value of the stock options granted is estimated at the date of grant based on the Black-Scholes option pricing model using assumptions generally consistent with those used for ACM’s stock options. Because ACM Shanghai shares are not publicly traded, the expected volatility is estimated with reference to the average historical volatility of a group of publicly traded companies that are believed to have similar characteristics to ACM Shanghai.

ACM’s stock-based compensation consists of employee and non-employee awards issued under its 1998 Stock Option Plan, its 2016 Omnibus Incentive Plan, and as standalone options. ACM granted stock options to employees under the 2016 Omnibus Incentive Plan during the three and six months ended June 30, 2021. The vesting condition may consist of a service period determined by the Board of Directors for a grant or certain performance conditions determined by the Board of Directors for a grant. The fair value of the stock options granted with service period based condition is estimated at the date of grant using the Black-Scholes option pricing model. The fair value of the stock options granted with market based condition is estimated at the date of grant using the Monte Carlo simulation model.

The following table summarizes the components of stock-based compensation expense included in the consolidated statements of operations:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Stock-Based Compensation Expense:				
Cost of revenue	$ 110	$ 43	$ 181	$ 88
Sales and marketing expense	478	164	983	258
Research and development expense	279	188	508	375
General and administrative expense	468	460	873	823
	$ 1,335	$ 855	$ 2,545	$ 1,544

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Stock-based compensation expense by type:				
Employee stock purchase plan	$ 1,217	$ 635	$ 2,302	$ 1,066
Non-employee stock purchase plan	30	140	70	312
Subsidiary option grants	88	80	173	166
	$ 1,335	$ 855	$ 2,545	$ 1,544

The following table summarizes the Company’s employee share option activities during the six months ended June 30, 2021:

	Number of Option Share	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2020	**3,191,411**	**$ 5.13**	**$ 12.73**	**7.13 years**
Granted	106,400	50.67	111.98	
Exercised	(336,216)	2.27	5.74	
Forfeited/cancelled	(19,212)	30.33	69.14	
Outstanding at June 30, 2021	**2,942,383**	**$ 6.94**	**$ 16.75**	**6.99 years**
Vested and exercisable at June 30, 2021	1,845,023			

As of June 30, 2021 and December 31, 2020, $11,033 and $8,733, respectively, of total unrecognized employee stock-based compensation expense, net of estimated forfeitures, related to stock-based awards for ACM were expected to be recognized over a weighted-average period of 1.82 years and 1.89 years, respectively. Total recognized compensation cost may be adjusted for future changes in estimated forfeitures.

The fair value of options granted to employee with a service period based condition is estimated on the grant date using the Black-Scholes valuation.

	Six Months Ended June 30, 2021
Fair value of common share(1)	$ 111.98
Expected term in years(2)	5.50-6.25
Volatility(3)	48.53%
Risk-free interest rate(4)	1.00%
Expected dividend(5)	0%

(1) Equal to closing value on the grant date.
(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.

Non-employee Awards

The following table summarizes the Company's non-employee share option activities during the six-months ended June 30, 2021:

	Number of Option Shares	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2020	**836,038**	**$ 1.02**	**$ 3.07**	**4.92 years**
Granted	-	-	-	
Exercised	(97,818)	1.03	3.91	
Expired	-	-	-	
Forfeited/cancelled	(250)	0.30	0.75	
Outstanding at June 30, 2021	**737,970**	**$ 1.02**	**$ 2.96**	**4.43 years**
Vested and exercisable at June 30, 2021	724,220			

As of June 30, 2021 and December 31, 2020, $125 and $195, respectively, of total unrecognized non-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 0.07 years and 0.09 years, respectively. Total recognized compensation cost may be adjusted for future changes in estimated forfeitures.

ACM Shanghai Option Grants

The following table summarizes the ACM Shanghai employee stock option activities during the three months ended June 30, 2021:

	Number of Option Shares in ACM Shanghai	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2020	**5,423,654**	**$ 0.23**	**$ 1.89**	**3.50 years**
Granted	-	-	-	
Exercised	-	-	-	
Expired	-	-	-	
Forfeited/cancelled	(46,154)	0.24	2.01	
Outstanding at June 30, 2021	**5,377,500**	**$ 0.24**	**$ 2.01**	**3.01 years**
Vested and exercisable at June 30, 2021	-			

As of June 30, 2021 and December 31, 2020, $693 and $822, respectively, of total unrecognized non-employee stock-based compensation expense, net of estimated forfeitures, related to ACM Shanghai stock-based awards were expected to be recognized over a weighted-average period of 2.01 years and 2.5 years, respectively. Total recognized compensation cost may be adjusted for future changes in estimated forfeitures.

NOTE 21 – INCOME TAXES

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period during which such rates are enacted.

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.

As of each reporting date, management considers new evidence, both positive and negative, that could affect its view of the future realization of deferred tax assets. Prior to September 30, 2019, the Company had recorded a valuation allowance for the full amount of net deferred tax assets in the United States, as the realization of deferred tax assets was uncertain. Since September 30, 2019, the Company has not maintained a valuation allowance except for a partial valuation allowance on certain U.S. deferred tax assets. In order to recognize the remaining U.S. deferred tax assets that continue to be subject to a valuation allowance, the Company will need to generate sufficient U.S. taxable income in future periods before the expiration of the deferred tax assets governed by the tax code.

ACM Shanghai has shown a three-year historical cumulative profit and has projections of future income. As a result, the Company does not maintain a valuation allowance.

The Company accounts for uncertain tax positions in accordance with the authoritative guidance on income taxes under which the Company may only recognize or continue to recognize tax positions that meet a more likely than not threshold. The Company recognizes accrued interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes.

The Company’s effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes and 12.5% to 25% for Chinese income tax purposes due to the effects of the valuation allowance and certain permanent differences from book-tax differences. As a result, the Company recorded income tax benefit (expense) of $2,755 and $(2,163) during the six months ended June 30, 2021 and 2020, respectively.

As of June 30, 2021, the Company’s total unrecognized tax benefits were $570 of which $422 would affect the effective tax rate if recognized. The Company will recognize interest and penalties, when they occur, related to uncertain tax provisions as a component of tax expense. No interest or penalties were recognized for the six months ended June 30, 2021.

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, 2002 through December 31, 2020. 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’s effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes and 12.5% to 25% for Chinese income tax purposes due to the effects of the valuation allowance and certain permanent differences as it pertains to book-tax differences in the treatment of stock-based compensation and non-US research expenses. The Company’s three PRC subsidiaries, ACM Shanghai, ACM Wuxi and ACM Shengwei, are liable for PRC corporate income taxes at the rates of 12.5%, 25% and 25%, respectively. Pursuant to the Corporate Income Tax Law of the PRC, ACM’s 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 and 2018, with an effective period of three years. In 2021, ACM Shanghai was certified as an eligible integrated circuit production enterprise and is entitled to a preferential income tax rate of 12.5% from January 1, 2020 to December 31, 2022.

ACM files 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 2020. To the extent ACM has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the U.S. Internal Revenue Service or state or foreign tax authorities to the extent utilized in a future period.

In December 2019, the FASB issued ASU No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes, which enhances and simplifies various aspects of the income tax accounting guidance, including requirements such as the elimination of exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period, the recognition of deferred tax liabilities for outside basis differences, ownership changes in investments, and tax basis step-up in goodwill obtained in a transaction that is not a business combination. The guidance is effective for public companies for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The impact of the adoption by the Company on its condensed consolidated financial statements and disclosures is immaterial.

Income tax benefit (expense) was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Total income tax benefit (expense)	$ (15)	$ (1,859)	$ 2,755	$ (2,163)

NOTE 22 – COMMITMENTS AND CONTINGENCIES

The Company leases offices under non-cancelable operating lease agreements. See note 8 for future minimum lease payments under non-cancelable operating lease agreements with initial terms of one year or more.

As of June 30, 2021, the Company had $2,942 of open capital commitments.

Covenants in ACM Shengwei's Grant Contract for State-owned Construction Land Use Right in Shanghai City with the China (Shanghai) Pilot Free Trade Zone Lingang Special Area Administration require, among other things, that ACM Shengwei pay liquidated damages in the event that (a) it does not make a total investment (including the costs of construction, fixtures, equipment and grant fees) of at least RMB 450.0 million ($63,400) or (b) within six years after the land use right is obtained, the Company does not (i) generate a minimum specified amount of annual sales of products manufactured on the granted land or (ii) pay to the PRC at least RMB 157.6 million ($22,000) in annual total taxes (including value-added taxes, corporate income tax, personal income taxes, urban maintenance and construction taxes, education surcharges, stamp taxes, and vehicle and shipping taxes) as a result of operations in connection with the granted land. As of June 30, 2021, the Company had paid in total $10,328 for its Lingang-related investments.

In the normal course of business, the Company is subject to contingencies, including legal proceedings and environmental claims arising out of the normal course of businesses that relate to a wide range of matters, including among others, contracts breach liability. The Company records accruals for such contingencies based upon the assessment of the probability of occurrence and, where determinable, an estimate of the liability. Management may consider many factors in making these assessments including past history, scientific evidence and the specifics of each matter. Some of these contingencies involve claims that are subject to substantial uncertainties and unascertainable damages.

The Company's management has evaluated all such proceedings and claims that existed as of June 30, 2021 and December 31, 2020. In the opinion of management, no provision for liability nor disclosure was required as of June 30, 2021 related to any claim against the Company because: (a) there is not a reasonable possibility that a loss exceeding amounts already recognized (if any) may be incurred with respect to such claim; (b) a reasonably possible loss or range of loss cannot be estimated; or (c) such estimate is immaterial.

As of June 30, 2021, the Company had one outstanding legal proceeding. On December 21, 2020, a putative class action lawsuit against ACM and three of its officers was filed in the U.S. District Court for the Northern District of California under the caption *Kain v. ACM Research, Inc., et al.*, No. 3:20-cv-09241. The complaint alleges claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder, and seeks monetary damages in an unspecified amount as well as costs and expenses incurred in the litigation. On April 15, 2021, the court appointed Mr. Kain as lead plaintiff, finding that no better-suited candidates emerged during the statutory sixty-day period following public notice of the lawsuit. On May 27, 2021, defendants filed a motion to dismiss Mr. Kain's complaint. Defendants' motion to dismiss is fully briefed and currently scheduled to be heard by the court on September 9, 2021. ACM's management believes the claims are without merit and intends to vigorously defend this litigation. The Company is currently unable to predict the outcome of this lawsuit and therefore cannot determine the likelihood of loss or estimate a range of possible loss.

NOTE 23 – SUBSEQUENT EVENT

On July 13, 2021, the Company filed a certificate of amendment to our restated certificate of incorporation with the Secretary of State of the State of Delaware. The amendment i) increased the authorized number of shares of Class A common stock from 50,000,000 to 150,000,000 with 60,000,000 of the 100,000,000 additional authorized shares of Class A common stock reserved for issuance only as dividends on outstanding shares of Class A common stock; ii) increased the authorized number of shares of Class B common stock from 2,409,738 to 5,307,816, with all of the authorized but unissued shares of Class B common stock being available for issuance only as dividends on outstanding shares of Class B common stock; and iii) removed a now-obsolete provision related to the automatic conversion of Class B common stock into Class A common stock.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion of our financial condition and results of operations together with our condensed consolidated financial statements and the related notes and other financial information included elsewhere in this report and our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, or our Annual Report. The following discussion contains forward-looking statements that reflect our plans, estimates, and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed in Part I, Item 1A. "Risk Factors" in our Annual Report, as well as those discussed below and elsewhere in this report, particularly in the section titled "Item 1A. Risk Factors" in Part II below.

Overview

We supply advanced, innovative capital equipment developed for the global semiconductor industry. Fabricators of advanced integrated circuits, or chips, can use our wet-cleaning and other front-end processing tools in numerous steps to improve product yield, even at increasingly advanced process nodes. We have designed these tools for use in fabricating foundry, logic and memory chips, including dynamic random-access memory, or DRAM, and 3D NAND-flash memory chips. We also develop, manufacture and sell a range of advanced packaging tools to wafer assembly and packaging customers.

Revenue from wet cleaning and other front-end processing tools totaled $46.0 million, or 85.4% of total revenue, for the three months ended June 30, 2021, as compared to $37.8 million, or 96.9% of total revenue, for the same period in 2020. Revenue from wet cleaning and other front-end processing tools totaled $77.9 million, or 79.8% of total revenue, for the six months ended June 30, 2021, as compared to $60.6 million, or 95.6% of total revenue, for the same period in 2020. Selling prices for our wet-cleaning and other front-end processing tools range from $1 million to more than $5 million. Our customers for wet-cleaning and other front-end processing tools have included Semiconductor Manufacturing International Corporation, Shanghai Huali Microelectronics Corporation, The Huahong Group, SK Hynix Inc., Yangtze Memory Technologies Co., Ltd, and ChangXin Memory Technologies.

Revenue from advanced packaging, other processing tools, services and spares totaled $7.9 million, or 14.6% of total revenue for the three months ended June 30, 2021, as compared to $1.2 million, or 3.1% of total revenue for the same period in 2020. Revenue from advanced packaging, other processing tools, services and spares totaled $19.7 million, or 20.2% of total revenue for the six months ended June 30, 2021, as compared to $2.8 million, or 4.4% of total revenue for the same period in 2020. Selling prices for these tools range from $0.5 million to more than $4 million. Our customers for advanced packaging, and other processing tools have included Jiangyin Changdian Advanced Packaging Co. Ltd., a leading PRC-based wafer bumping packaging house that is a subsidiary of JCET Group Co., Ltd.; Nantong Tongfu Microelectronics Co., Ltd., a PRC-based chip assembly and testing company that is a subsidiary of Nantong Fujitsu Microelectronics Co., Ltd.; Nepes Co., Ltd., a semiconductor packaging company based in South Korea which acquired the operations of Deca Technologies' Philippines manufacturing facility in 2020; and Wafer Works Corporation, a leading PRC-based wafer supplier.

We estimate, based on third-party reports and on customer and other information, that our current product portfolio addresses more than $5 billion of the global wafer equipment market. By product line, we estimate an approximately $2.5 billion market opportunity is addressed by our wafer cleaning equipment, $1.7 billion by our furnace equipment, $500 million by our electro-chemical plating, or ECP equipment, and more than $300 million by our stress-free polishing, or SFP, advanced packaging, wafer processing, and other back-end processing equipment. By major equipment segment, Gartner estimates a 2020 global market size of $3.5 billion for wafer cleaning equipment (auto wet stations, single-wafer processors, batch spray processors, and other clean process equipment), $2.4 billion for furnace equipment (tube CVD, oxidation/diffusion furnace, and batch atomic layer deposition), and $546 million for ECD (electro-chemical deposition). Based on Gartner's estimates, the total available global market for these equipment segments increased by 15% from $5.6 billion in 2019 to $6.4 billion in 2020, and is expected to increase by 6% to $6.8 billion in 2021.

We have focused our selling efforts on establishing a referenceable base of leading foundry, logic and memory chip makers, whose use of our products can influence decisions by other manufacturers. We believe this customer base has helped us penetrate the mature chip manufacturing markets and build credibility with additional industry leaders. We have used a "demo-to-sales" process to place evaluation equipment, or "first tools," with a number of selected customers.

Since 2009 we have delivered more than 170 wet cleaning and other front-end processing tools, more than 145 of which have been accepted by customers and thereby generated revenue to us. The balance of the delivered tools are awaiting customer acceptance should contractual conditions be met. To date, a substantial majority of our sales of equipment have been 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 foreseeable future. We have begun to add to our efforts to further address customers in North America, Western Europe and Southeast Asia by expanding our direct sales and services teams and increasing our global marketing activities.

We are focused on building a strategic portfolio of intellectual property to support and protect our key innovations. Our tools have been developed using our key proprietary technologies:

- *Space Alternated Phase Shift, or SAPS, technology for flat and patterned (deep via or deep trench with stronger structure) wafer surfaces.* SAPS technology employs alternating phases of megasonic waves to deliver megasonic energy 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, with increasing relative effectiveness at more advanced production nodes.
- *Timely Energized Bubble Oscillation, or TEBO, technology for patterned wafer surfaces at advanced process nodes*. TEBO technology has been developed to provide effective, damage-free cleaning for 2D and 3D patterned wafers with fine feature sizes. We have demonstrated the damage-free cleaning capabilities of TEBO technology on patterned wafers for feature nodes as small as 1xnm (16 to 19 nanometers, or nm), and we have shown TEBO technology can be applied in manufacturing processes for patterned chips with 3D architectures having aspect ratios as high as 60-to-1.
- *Tahoe technology for cost and environmental savings.* Tahoe technology delivers high cleaning performance using significantly less sulfuric acid and hydrogen peroxide than is typically consumed by conventional high-temperature single-wafer cleaning tools.
- *ECP technology for advanced metal plating.* Our Ultra ECP ap, or Advanced Packaging, technology was developed for back-end assembly processes to deliver a more uniform metal layer at the notch area of wafers prior to packaging. Our Ultra ECP map, or Multi-Anode Partial Plating, technology was developed for front-end wafer fabrication processes to deliver advanced electrochemical copper plating for copper interconnect applications. Ultra ECP map offers improved gap-filling performance for ultra-thin seed layer applications, which is critical for advanced nodes at 14nm and beyond.

In 2020 we introduced and delivered a range of new tools intended to broaden our revenue opportunity with global semiconductor manufacturers. Product extensions include the Ultra SFP ap tool for advanced packaging solutions, the Ultra C VI 18-chamber single wafer cleaning tool for advanced memory devices, and the Ultra ECP 3d platform for through-silicon-via, or tsv, application. New product lines include the Ultra fn Furnace, our first dry processing tool, and a suite of semi-critical cleaning systems which include single wafer back side cleaning, scrubber, and auto bench cleaning tools.

We have been issued more than 350 patents in the United States, the People’s Republic of China or PRC, Japan, Singapore, South Korea and Taiwan.

We conduct a substantial majority of our product development, manufacturing, support and services in the PRC, with additional product development and subsystem production in South Korea. Substantially all of our integrated tools are built to order at our manufacturing facilities in the Pudong region of Shanghai, which facilities now encompass a total of 236,000 square feet of floor space for production capacity, with an additional 100,000 square feet having been added in 2021 with the lease of a second building at our second facility in the Pudong region of Shanghai. In May 2020 ACM Shanghai, through its wholly owned subsidiary Shengwei Research (Shanghai), Inc., entered into an agreement for a land use right in the Lingang region of Shanghai. In July 2020 Shengwei Research (Shanghai), Inc. began a multi-year construction project for a new 1,000,000 square foot development and production center that will incorporate state-of-the-art manufacturing systems and automation technologies, and will provide floor space to support significantly increase production capacity and related research and development activities. Our experience has shown that chip manufacturers in the PRC and throughout Asia demand equipment meeting their specific technical requirements and prefer building relationships with local suppliers. We will continue to seek to leverage our local presence in the PRC to address the growing market for semiconductor manufacturing equipment in the region by working closely with regional chip manufacturers to understand their specific requirements, encourage them to adopt our technologies, and enable us to design innovative products and solutions to address their needs.

Corporate Background

ACM Research was incorporated in California in 1998 and redomesticated in Delaware in 2016. We perform strategic planning, marketing, and financial activities at our global corporate headquarters in Fremont, California.

Initially we focused on developing tools for chip 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 2007 we began to focus our development efforts on single-wafer wet-cleaning solutions for the front-end chip fabrication process. Since that time, we have strategically built our technology base and expanded our product offerings:

- In 2009 we introduced *SAPS* megasonic technology, which can be applied in wet wafer cleaning at numerous steps during the chip fabrication process.
- In 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 August 2018 we introduced the *Ultra C Tahoe* wafer cleaning tool, which delivers high cleaning performance with significantly less sulfuric acid than typically consumed by conventional high temperature single-wafer cleaning tools.
- In March 2019 we introduced (a) the *Ultra ECP AP* or Advanced Wafer Level Packaging tool, a back-end assembly tool used for bumping, or applying copper, tin and nickel to wafers at the die-level prior to packaging, and (b) the *Ultra ECP MAP* or Multi Anode Plating tool, a front-end process tool that utilizes our proprietary technology to deliver world-class electrochemical copper planting for copper interconnect applications.
- In April 2020 we introduced the *Ultra Furnace*, our first system developed for multiple dry processing applications.
- In May 2020 we introduced the *Ultra C Family* of semi-critical cleaning systems, including the *Ultra C b* for backside clean, the *Ultra C wb* automated wet bench, and the *Ultra C s* scrubber.

To help us establish and build relationships with chip manufacturers in the PRC, in 2006 we moved our operational center to Shanghai and began to conduct our business through our subsidiary ACM Shanghai. Since that time, we have expanded our geographic presence:

- In 2011 we formed a wholly owned subsidiary in the PRC, *ACM Research (Wuxi), Inc.*, which now is a wholly owned subsidiary of ACM Shanghai, to manage sales and service operations.
- In June 2017 we formed a subsidiary in Hong Kong, *CleanChip Technologies Limited*, which now is a wholly owned subsidiary of ACM Shanghai, 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.
- In December 2017 we formed a subsidiary in the Republic of Korea, *ACM Research Korea CO., LTD.*, which now is a wholly owned subsidiary of ACM Shanghai, to serve our customers based in the Republic of Korea and perform sales, marketing, and research and development activities.
- In March 2019 ACM Shanghai formed a wholly owned subsidiary in the PRC, *Shengwei Research (Shanghai), Inc*., to manage activities related to addition of future long-term production capacity.

We currently conduct the majority of our product development, support and services, and substantially all of our manufacturing, at ACM Shanghai. Our Shanghai operations position us to be near many of our current and potential new customers in the PRC (including Taiwan), Korea and throughout Asia, providing convenient access and reduced shipping and manufacturing costs.

- Our initial factory is located in the Pudong Region of Shanghai and has a total of 36,000 square feet of available floor space.
- Our second production facility is located in the Chuansha district of Pudong, approximately 11 miles from our initial factory. In September 2018 we announced the opening of the first building of our second production facility. The first building initially had a total of 50,000 square feet of available floor space for production capacity, which was increased by 50,000 square feet in the second quarter of 2020. In February 2021, we leased a second building immediately adjacent to our second factory, which increased our available floor space for production by another 100,000 square feet, bringing to total available floor space for production capacity of second production facility to 200,000 square feet.
- In July 2020 ACM Shanghai began a multi-year construction project to build a development and production center in the Lingang region of Shanghai. The new facility is expected to have a total of 1,000,000 square feet of available floor space for production. capacity.

Recent Developments

STAR Market Listing and IPO

In June 2019 we announced our intention to complete, within the following three years:

- a listing, which we refer to as the STAR Listing, of shares of ACM Shanghai on the Shanghai Stock Exchange's Sci-Tech innovAtion boaRd, known as the STAR Market; and
- a concurrent initial public offering, which we refer to as the STAR IPO, of ACM Shanghai shares in the PRC, at a pre-offering valuation of not less than RMB 5.15 billion ($747.1 million).

We believe the STAR Listing will help us scale our business in mainland PRC, as we continue to seek to broaden our markets in Europe, Japan, South Korea, Taiwan and the United States. Our global headquarters will continue to be located in Fremont, California, and we are committed to maintaining the listing of Class A common stock on the Nasdaq Global Market.

To qualify for the STAR Listing, ACM Shanghai was required to have multiple independent stockholders in the PRC. In June and November 2019, ACM Shanghai entered into private placement agreements with fifteen investors pursuant to which the investors purchased ACM Shanghai shares for a total of RMB 416.1 million ($59.7 million as of the investment dates). As of June 30, 2020, 91.7% of the outstanding shares of ACM Shanghai were owned by ACM Research and 8.3% were owned by the private placement investors.

Upon the submission of application documents by ACM Shanghai for the STAR Listing and STAR IPO to the Shanghai Stock Exchange during the second quarter of 2020, the shares of ACM Shanghai issued to the private placement investors were reclassified from redeemable non-controlling interests to non-controlling interests. Upon the termination of such redemption feature, we released the aggregate proceeds of the private placement funding from reserved cash, which we previously had voluntarily imposed in light of a potential redemption.

On September 30, 2020, the application was approved by the Listing Committee of the STAR Market. The Listing Committee subsequently determined to reassess the approval application in light of allegations regarding our business and operations that were contained in a report issued by J Capital Research USA Ltd. on October 8, 2020 and an ensuing putative class action lawsuit against our company and three of our executive officers filed on December 21, 2020 (See "Item 1. Legal Proceedings" of Part II of this report).

Following the completion of the Listing Committee's reassessment, on June 10, 2021, the application for registration for the STAR Market IPO was submitted by the Shanghai Stock Exchange Commission (the "SSEC") to the China Securities Regulatory Commission. The STAR Listing remains subject to review and approval by the China Securities Regulatory Commission.

ACM Shanghai currently proposes to offer up to ten percent of its shares in the STAR IPO. The net proceeds of the STAR IPO are expected to be used to fund:

- the land lease for, and construction of, ACM Shanghai's proposed development and production center in the Lingang region of Shanghai;
- product development to upgrade and expand our process equipment targeted at more advanced process nodes, including technical improvement and development of TEBO megasonic cleaning equipment, Tahoe single wafer wet bench combined cleaning equipment, front-end brush scrubbing equipment, auto bench cleaning equipment, front end process electroplating equipment, Stress Free Polish equipment and vertical furnace equipment, additional new products to expand our product portfolio; and
- working capital.

COVID–19 Outbreak

Following its initial outbreak in December 2019, COVID–19, or the coronavirus, spread across the PRC, the United States and globally. The COVID–19 outbreak has affected our business and operating results since the first quarter of 2020. Since that time, our personnel have been largely unable to travel between our offices in the United States and our facilities in the PRC, which may impact our ability to effectively operate our company and to oversee our operations. The COVID–19 situation continues to evolve, including as the result of variants, and it is impossible for us to predict the effect and ultimate impact of the COVID–19 outbreak on our business operations and results. We continue to monitor the impact of the COVID-19 pandemic on all aspects of our business, including our operations, customers, suppliers and projects. While the quarantine, social distancing and other regulatory measures instituted or recommended in response to COVID–19 are expected to be temporary, the duration of the business disruptions, and related financial impact, of the outbreak cannot be estimated at this time. For an explanation of some of the risks we potentially face, please read carefully the information provided under "Item 1A. Risk Factors—Risks Related to the COVID–19 Outbreak," of Part I of our Annual Report.

The following summary reflects our expectations and estimates based on information known to us as of the date of this filing:

- *Operations*: We conduct substantially all of our product development, manufacturing, support and services in the PRC, and those activities have been directly impacted by the COVID–19 outbreak and related restrictions on transportation and public appearances. In February 2020 our ACM Shanghai headquarters were closed for an additional six days beyond the normal Lunar New Year Holiday in accordance with Shanghai government restrictions related to the outbreak. We took steps before and after the Lunar New Year to ensure no employees took unreasonable risks to rush back to work. Currently substantially all of our staff have returned to work at both of our Shanghai facilities. To date we have not experienced absenteeism of management or other key employees, other than certain of our executive officers being delayed in traveling back to the PRC after working from our California office in February 2021. Our corporate headquarters are located in Alameda County in the San Francisco Bay Area of California and are the subject of a number of state and county public health directives and orders. These actions have not negatively impacted our business to date, however, because of the limited number of employees at our headquarters and the nature of the work they generally perform.
- *Customers:* Our customers' business operations have been, and are continuing to be, subject to business interruptions arising from the COVID–19 outbreak. Historically a majority of our revenue from sales of single-wafer wet cleaning equipment for front-end manufacturing has been derived from customers located in the PRC and surrounding areas that have been impacted by COVID–19. Three customers that accounted for 75.8% of our revenue in 2020, 73.8% in 2019 and 87.6% of our revenue in 2018 are based in the PRC and South Korea. One of those customers, Yangtze Memory Technologies Co., Ltd. — which accounted for 26.8% of our 2020 revenue, 27.5% of our 2019 revenue and 39.6% of our 2018 revenue — is based in Wuhan. While Yangtze Memory Technologies Co., Ltd. and other key customers continued to operate their fabrication facilities without interruption during and after the first quarter of 2020, they were forced to restrict access of service personnel and deliveries to and from their facilities. A portion of the shipments we previously had expected to deliver in the first quarter of 2020 were postponed due to these factors, and were subsequently delivered in the second quarter of 2020.
- *Suppliers*: Our global supply chain includes components sourced from the PRC, Japan, Taiwan, the United States and Europe. While the COVID–19 outbreak has resulted in significant governmental measures being implemented to control the spread of COVID–19 around the world, to date we have not experienced material issues with our supply chain. As with our customers, we continue to be in close contact with our key suppliers to help ensure we are able to identify any potential supply issues that may arise.
- *Projects*: Our strategy includes a number of plans to support the growth of our core business, including the STAR Listing and STAR IPO with respect to shares of ACM Shanghai described above as well as ACM Shanghai's recent acquisition of a land use right in the Lingang area of Shanghai where we began construction of a new research and development center and factory in July 2020. The extent to which COVID–19 impacts these projects will depend on future developments that are highly uncertain, but to date, the timing of these ongoing projects has not been delayed or disrupted by COVID–19 or related government measures.

PRC Government Research and Development Funding

ACM Shanghai has received six special government grants from the PRC's Ministry of Science and Technology, the Shanghai Municipal Commission of Economy and Information, and the Shanghai Science and Technology Committee. 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 third grant was made in 2014 and relates to the development of electro copper-plating technology. The fourth grant was made in June 2018 and related to development of polytetrafluoroethylene. The fifth grant was made in 2020, and relates to the development of Tahoe single bench cleaning technologies. The sixth grant was made in 2020, and relates to the development of backside cleaning technologies. These governmental authorities provide the majority of the funding, although ACM Shanghai is also required to invest certain amounts in the projects.

The 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 recorded as reductions of those expenses in the periods in which the current expenses are recorded. For the six months ended June 30, 2021 and 2020, related government subsidies recognized as reductions of relevant expenses in the consolidated statements of operations and comprehensive income were $4.2 million and $0.3 million, respectively.
- 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, 2021 and 2020, related government subsidies recognized as other income in the consolidated statements of operations and comprehensive income were $80,000 and $73,000, respectively.

Unearned government subsidies received are deferred for recognition and recorded as other long-term liabilities (see note 13 in the notes to condensed consolidated financial statements included herein under "Item 1. Financial Statements") in the balance sheet until the criteria for such recognition are satisfied.

Net Income Attributable to Non-Controlling Interests and Redeemable Non-Controlling Interests

As described above under "—Recent Developments—STAR Market Listing and IPO", in 2019, ACM Shanghai sold a total number of shares representing 8.3% of its outstanding ACM Shanghai shares. ACM Research continues to hold the remaining 91.7% of ACM Shanghai's outstanding shares. During the second quarter of 2020, the redemption feature of the private placement funding terminated and the aggregate proceeds of the funding were reclassified from redeemable non-controlling interests to non-controlling interests. As a result, we reflect, as net income attributable to non-controlling interests and redeemable non-controlling interests, the portion of our net income allocable to the minority holders of ACM Shanghai shares.

How We Evaluate Our Operations

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

- We define "shipments" of tools to include (a) a "repeat" delivery to a customer of a type of tool that the customer has previously accepted, for which we recognize revenue upon delivery, and (b) a "first-time" delivery of a "first tool" to a customer on an approval basis, for which we may recognize revenue in the future if contractual conditions are met and customer acceptance is received.
- 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 shipments, 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.

Shipments, 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.

Shipments

Shipments consist of two components:

- a shipment to a customer of a type of tool that the customer has previously accepted, for which we recognize revenue when the tool is delivered; and
- a shipment to a customer of a type of tool that the customer is receiving and evaluating for the first time, in each case a "first tool," for which we may recognize revenue at a later date, subject to the customer's acceptance of the tool upon the tool's satisfaction of applicable contractual requirements.

"First tool" shipments can be made to either an existing customer that not previously accepted that specific type of tool in the past ─ for example, a delivery of a SAPS V tool to a customer that previously had received only SAPS II tools ─ or to a new customer that has never purchased any tool from us.

Shipments in the three months ended June 30, 2021 totaled $82 million, as compared to $45 million in the three months ended June 30, 2020, and $74 million in the three months ended March 31, 2021.

The dollar amount attributed to a "first tool" shipment is equal to the consideration we expect to receive if any and all contractual requirements are satisfied and the customer accepts the tool. There are a number of limitations related to the use of shipments in evaluating our business, including that customers have significant discretion in determining whether to accept our tools and their decision not to accept delivered tools is likely to result in our inability to recognize revenue from the delivered tools.

Adjusted EBITDA

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, 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, the most directly comparable GAAP financial measure, to adjusted EBITDA:

	Six Months Ended June 30,	
	2021	**2020**
	(in thousands)	
Adjusted EBITDA Data:		
Net Income	$ 13,156	$ 2,459
Interest expense (income), net	303	(316)
Income tax expense (benefit)	(2,755)	2,163
Depreciation and amortization	1,031	441
Stock based compensation	2,545	1,544
Change in fair value of financial liability	-	5,431
Unrealized gain on trading securities	(2,736)	-
Adjusted EBITDA	$ 11,544	$ 11,722

The $0.2 million decrease in adjusted EBITDA for the six-months ended June 30, 2021 as compared to the same period in 2020 reflected an increase of $10.7 million in net income, a $0.6 million increase due to net interest expense versus net income, a decrease of $4.9 million due to an income tax benefit versus an income tax expense, an increase of $0.6 million in depreciation and amortization, an increase of $1.0 million in stock-based compensation, a decrease of $5.4 million due to no contribution from change in fair value of financial liability, and a decrease of $2.7 million due to unrealized gain on trading securities.

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."

Free Cash Flow

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

	Six Months Ended June 30,	
	2021	**2020**
	(in thousands)	
Free Cash Flow Data:		
Net cash provided by (used in) operating activities	$ 241	$ (10,651)
Purchase property and equipment	(2,353)	(1,529)
Purchase of intangible assets	(431)	(55)
Prepayment for land-use-right and property	-	(15,438)
Purchase of long-term investments	-	(14,130)
Free cash flow	$ (2,543)	$ (41,803)

The $39.3 million increase in free cash flow for the six months ended June 30, 2021 as compared to the same period in 2020 reflected a $10.9 million increase due to net cash provided by operating activities versus net used by operating activities, a $15.4 million increase due to no prepayments in 2021 for land-use right and property, and a $14.1 million increase due to no purchase of investment securities in 2021, and a $0.8 million increase in purchase of property and equipment, and a $0.4 million increase in purchase of intangible assets. 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

Adjusted operating income excludes stock-based compensation from income 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 and our cash holdings would be less. The following tables reflect the exclusion of stock-based compensation, or SBC, from line items comprising income from operations:

	Six Months Ended June 30,					
	2021			2020		
	Actual (GAAP)	SBC	Adjusted (Non-GAAP)	Actual (GAAP)	SBC	Adjusted (Non-GAAP)
	(in thousands)					
Revenue	$ 97,596	$ -	$ 97,596	$ 63,397	$ -	$ 63,397
Cost of revenue	(57,871)	(181)	(57,690)	(33,813)	(88)	(33,725)
Gross profit	39,725	(181)	39,906	29,584	(88)	29,672
Operating expenses:						
Sales and marketing	(11,097)	(983)	(10,114)	(7,600)	(258)	(7,342)
Research and development	(13,437)	(508)	(12,929)	(8,898)	(375)	(8,523)
General and administrative	(7,410)	(873)	(6,537)	(4,532)	(823)	(3,709)
Income from operations	7,781	(2,545)	10,326	8,554	(1,544)	10,098

Adjusted operating income for the six months ended on June 30, 2021 increased by $0.2 million, as compared with the same period in 2020, due to a $0.8 million decrease in income from operations, offset by a $1 million increase in stock-based compensation expense.

Critical Accounting Policies and Estimates

There were no significant changes in our critical accounting policies or significant judgments or estimates during the six months ended June 30, 2021 to augment the critical accounting estimates disclosed under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report, other than those described in the notes to the condensed consolidated financial statements included in this report, including the adoption of the Financial Accounting Standards Board’s Accounting Standards Update 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* and 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* effective January 1, 2021. For information regarding the impact of recently adopted accounting standards, refer to note 2 to the condensed consolidated financial statements included in this report.

Recent Accounting Pronouncements

A discussion of recent accounting pronouncements is included in our Annual Report and is updated in note 2 to the condensed consolidated financial statements included in this report.

Results of Operations

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Revenue	100.0%	100.0%	100.0%	100.0%
Cost of revenue	59.8	50.4	59.3	53.3
Gross margin	40.2	49.6	40.7	46.7
Operating expenses:				
Sales and marketing	10.7	11.8	11.4	12.0
Research and development	14.7	13.4	13.8	14.0
General and administrative	6.7	5.6	7.6	7.1
Total operating expenses, net	32.1	30.8	32.7	33.2
Income from operations	8.1	18.8	8.0	13.5
Interest income (expense), net	(0.3)	0.2	(0.3)	0.5
Change in fair value of financial liability	-	(13.9)	-	(8.6)
Unrealized gain on trading securities	7.0	-	2.8	-
Other income (expense), net	(1.7)	0.4	(0.4)	1.3
Equity income in net income of affiliates	0.5	0.5	0.6	0.6
Income before income taxes	13.6	6.0	10.7	7.3
Income tax benefit (expense)	0.0	(4.8)	2.8	(3.4)
Net income	13.6	1.2	13.5	3.9
Less: Net income attributable to non-controlling interests and redeemable non-controlling interests	1.4	1.5	1.1	1.3
Net income attributable to ACM Research, Inc.	12.2%	(0.3)%	12.3%	2.6%

Comparison of Three Months Ended June 30, 2021 and 2020

Revenue

	Three Months Ended June 30,		% Change
	2021	2020	2021 v 2020
	(in thousands)		
Single Wafer Cleaning, Tahoe and Semi-Critical Cleaning Equipment	$ 45,461	$ 33,340	36.4%
ECP (front-end and packaging), Furnace and Other Technologies	$ -	$ 4,490	-100.0%
Advanced Packaging (excluding ECP), Services & Spares	$ 8,403	$ 1,219	589.6%
Total Revenue by Product Category	**$ 53,864**	**$ 39,049**	**37.9%**
Wet cleaning and other front-end processing tools	$ 45,974	$ 37,830	21.5%
Advanced packaging, other processing tools, services and spares	$ 7,890	$ 1,219	547.3%
Total Revenue Front and Back-End	**$ 53,864**	**$ 39,049**	**37.9%**

Revenue increased by $14.8 million in the three months ended June 30, 2021 as compared to the same period in 2020. The increase was due to a $7.6 million increase in revenue from wet cleaning and other front-end processing tools revenue, and a $7.2 million increase from advanced packaging and other processing tools, services and spares.

Cost of Revenue and Gross Margin

	Three Months Ended June 30,		% Change
	2021	2020	2021 v 2020
	(in thousands)		
Cost of revenue	$ 32,184	$ 19,693	63.4%
Gross profit	21,680	19,356	12.0%
Gross margin	40.2%	49.6%	-9.4%

Cost of revenue increased $12.5 million and gross profit increased $2.3 million in the three months ended June 30, 2021 as compared to the corresponding period in 2020 due to the increased sales volume, partly offset by a 9.4% point decrease in gross margin, that reflected differences in product mix.

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 40.0% and 45.0% for the foreseeable future, with direct manufacturing costs approximating 50.0% to 55.0% of revenue and overhead costs totaling 5.0% of revenue.

Operating Expenses

	Three Months Ended June 30,		% Change
	2021	**2020**	**2021 v 2020**
	(in thousands)		
Sales and marketing expense	$ 5,789	$ 4,595	26.0%
Research and development expense	7,933	5,221	51.9%
General and administrative expense	3,627	2,204	64.6%
Total operating expenses	$ 17,349	$ 12,020	44.3%

Sales and marketing expense increased by $1.2 million in the three months ended June 30, 2021 as compared to the corresponding period in 2020. The increase was due in part to the addition of resources to support sales and marketing efforts in North America and Europe, and other factors. Sales and marketing expense consists primarily of:

- compensation of personnel associated with pre- and after-sale 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;
- cost of trade shows;
- travel and entertainment; and
- allocated overhead for rent and utilities.

Research and development expense increased by $2.7 million in the three months ended June 30, 2021 as compared to the corresponding period in 2020, principally as a result of increases in new product development, testing fees and personnel costs. Research and development expense represented 14.7% and 13.4% of our revenue in the three months ended June 30, 2021 and 2020, respectively. Without reduction by grant amounts received from PRC governmental authorities (see "—Government Research and Development Funding"), gross research and development expense totaled $10.2 million, or 18.8% of total revenue, in the three months ended June 30, 2021 and $5.3 million, or 13.7% of revenue, in the corresponding period in 2020. 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.

General and administrative expense increased $1.4 million in the three months ended June 30, 2021 as compared to the corresponding period in 2020. 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 corporate legal and defense fees;
- other corporate expenses including insurance; and
- allocated overhead for rent and utilities.

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

Unrealized gain from trading securities

We recorded an unrealized gain of $3.8 million for the three months ended June 30, 2021 based on a change in market value of ACM Shanghai's indirect investment in SMIC shares on the STAR Market as is described in note 16 to the condensed consolidated financial statements included in this report.

	Three Months Ended June 30,	
	2021	**2020**
	(in thousands)	
Unrealized gain on trading securities	3,783	-

Other Income and Expenses

	Three Months Ended June 30,		% Change
	2021	**2020**	**2021 v 2020**
	(in thousands)		
Interest Income	$ 31	$ 320	-90.3%
Interest Expense	(194)	(228)	-14.9%
Interest Income (expense), net	$ (163)	$ 92	-277.2%
Other income (expense), net	$ (897)	$ 149	-702.0%

Interest income consists of interest earned on our cash and equivalents and restricted cash accounts, offset by interest expense incurred from outstanding short-term borrowings. We incurred $163,000 of interest expense, net in the three months ended June 30, 2021 as compared to $92,000 of net interest income in the corresponding period in 2020. This was a result of a lower balance of cash and equivalents and lower interest rates on these balances, offset by increased borrowings under short-term bank loans.

Other income, net primarily reflects (a) gains or losses recognized from the impact of exchange rates on our foreign currency-denominated working-capital transactions and (b) depreciation of assets acquired with government subsidies, as described under "—Government Research and Development Funding" above. Other income (expense), declined by $1 million in the three months ended June 30, 2021 as compared to Other income (expense) in the corresponding period in 2020, due primarily to a realized loss of $894,000 resulting from changes in the RMB-to-U.S. dollar exchange rate, compared to a realized loss of $85,000 in the prior year period.

Income Tax Benefit (Expense)

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

	Three Months Ended June 30,	
	2021	**2020**
	(in thousands)	
Total income tax expense	$ (15)	$ (1,859)

We recognized a tax expense of $15,000 for the three months ended June 30, 2021 as compared to a tax expense of $1.9 million for the prior year period. The decreased tax expense in 2021 primarily resulted from tax deductions related to the exercise of stock options during the period, as compared to smaller deductions for the same item in the prior year period.

Our effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes and 12.5% to 25% for Chinese income tax purposes due to the treatment of stock-based compensation including the impact from stock option exercises and non-US research expenses. 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 12.5%. ACM Shanghai was certified as an "advanced and new technology enterprise" in 2012 and again in 2016 and 2018, with an effective period of three years. In 2021, ACM Shanghai was certified as an eligible integrated circuit production enterprise and is entitled to a preferential income tax rate of 12.5% from January 1, 2020 to December 31, 2022.

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 2020. 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.

Net Income Attributable to Non-Controlling Interests and Redeemable Non-Controlling Interests

	Three Months Ended June 30,		
	2021	**2020**	**% Change 2021 v 2020**
	(in thousands)		
Net income attributable to non-controlling interests	$ 767	$ 577	32.9%

As described above under "—STAR Market Listing and IPO," in 2019, ACM Shanghai sold a total number of shares representing 8.3% of its outstanding ACM Shanghai shares. ACM Research continues to hold the remaining 91.7% of ACM Shanghai's outstanding shares. As a result, commencing with the three months ended September 30, 2019, we reflect, as net income attributable to non-controlling interests and redeemable non-controlling interests, the portion of our net income allocable to the minority holders of ACM Shanghai shares. In the three months ended June 30, 2021, this amount totaled $767,000 as compared to $577,000 in the corresponding period in 2020.

Comparison of Six Months Ended June 30, 2021 and 2020

Revenue

	Six Months Ended June 30,		
	2021	**2020**	**% Change 2021 v 2020**
	(in thousands)		
Single Wafer Cleaning, Tahoe and Semi-Critical Cleaning Equipment	$ 77,874	$ 56,124	38.8%
ECP (front-end and packaging), Furnace and Other Technologies	5,550	4,490	23.6%
Advanced Packaging (excluding ECP), Services & Spares	14,172	2,783	409.4%
Total Revenue By Product Category	**$ 97,596**	**$ 63,397**	**53.9%**
Wet cleaning and other front-end processing tools	$ 77,874	$ 60,614	28.5%
Advanced packaging, other processing tools, services and spares	19,722	2,783	608.8%
Total Revenue Front-end and Back-End	**$ 97,596**	**$ 63,397**	**53.9%**

Revenue increased by $34.2 million in the six months ended June 30, 2021 as compared to the same period in 2020. The increase was due to a $17.3 million increase in revenue from wet cleaning and other front-end processing tools revenue, and a $16.9 million increase from advanced packaging and other processing tools, services and spares.

Cost of Revenue and Gross Margin

	Six Months Ended June 30, 2021	Six Months Ended June 30, 2020	% Change 2021 v 2020
	(in thousands)		
Cost of revenue	$ 57,871	$ 33,813	71.2%
Gross profit	39,725	29,584	34.3%
Gross margin	40.7%	46.7%	-6.0%

Cost of revenue increased $24.1 million and gross profit increased $10.1 million in the six months ended June 30, 2021 as compared to the corresponding period in 2020 due to the increased sales volume, partly offset by a 6.0% point decrease in gross margin, which reflected differences in product mix.

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 40.0% and 45.0% for the foreseeable future, with direct manufacturing costs approximating 50.0% to 55.0% of revenue and overhead costs totaling 5.0% of revenue.

Operating Expenses

	Six Months Ended June 30, 2021	Six Months Ended June 30, 2020	% Change 2021 v 2020
	(in thousands)		
Sales and marketing expense	$ 11,097	$ 7,600	46.0%
Research and development expense	13,437	8,898	51.0%
General and administrative expense	7,410	4,532	63.5%
Total operating expenses	$ 31,944	$ 21,030	51.9%

Sales and marketing expense increased by $3.5 million in the six months ended June 30, 2021 as compared to the corresponding period in 2020. The increase was due in part to the addition of resources to support sales and marketing efforts in North America and Europe, and other factors. Sales and marketing expense consists primarily of:

- compensation of personnel associated with pre- and after-sale 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;
- cost of trade shows;
- travel and entertainment; and
- allocated overhead for rent and utilities.

Research and development expense increased by $4.5 million in the six months ended June 30, 2021 as compared to the corresponding period in 2020, principally as a result of increases in new product development, testing fees and personnel costs. Research and development expense represented 13.8% and 14.0% of our revenue in the six months ended June 30, 2021 and 2020, respectively. Without reduction by grant amounts received from PRC governmental authorities (see "—Government Research and Development Funding"), gross research and development expense totaled $17.6 million, or 18.1% of total revenue, in the six months ended June 30, 2021 and $9.2 million, or 14.5% of revenue, in the corresponding period in 2020. 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.

General and administrative expense increased $2.9 million in the six months ended June 30, 2021 as compared to the corresponding period in 2020. 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 corporate legal and defense fees;
- other corporate expenses including insurance; and
- allocated overhead for rent and utilities.

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

Unrealized gain from trading securities

We recorded an unrealized gain of $2.7 million for the six months ended June 30, 2021 based on a change in market value of ACM Shanghai's indirect investment in SMIC shares on the STAR Market as is described in note 16 to the condensed consolidated financial statements included in this report.

	Six Months Ended June 30,	
	2021	**2020**
	(in thousands)	
Unrealized gain on trading securities	2,736	-

Other Income and Expenses

	Six Months Ended June 30,		% Change
	2021	**2020**	**2021 v 2020**
	(in thousands)		
Interest Income	$ 80	$ 655	-87.8%
Interest Expense	(383)	(339)	13.0%
Interest Income (expense), net	$ (303)	$ 316	-195.9%
Other income, net	$ (428)	$ 826	-151.8%

Interest income consists of interest earned on our cash and equivalents and restricted cash accounts, offset by interest expense incurred from outstanding short-term borrowings. We incurred $303,000 of interest expense, net in the six months ended June 30, 2021 as compared to $316,000 of net interest income in the corresponding period in 2020. This was a result of a lower balance of cash and equivalents and lower interest rates on these balances, offset by increased borrowings under short-term bank loans.

Other income, net primarily reflects (a) gains or losses recognized from the impact of exchange rates on our foreign currency-denominated working-capital transactions and (b) depreciation of assets acquired with government subsidies, as described under "—Government Research and Development Funding" above. Other income (expense), declined by $1.2 million in the six months ended June 30, 2021 as compared to Other income (expense) in the corresponding period in 2020, due primarily to a realized loss of $483,000 resulting from changes in the RMB-to-U.S. dollar exchange rate, compared to a realized gain of $490,000 in the prior year period.

Income Tax Benefit (Expense)

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

	Six Months Ended June 30,	
	2021	**2020**
	(in thousands)	
Total income tax benefit (expense)	$ 2,755	$ (2,163)

We recognized a tax benefit of $2.8 million for the six months ended June 30, 2021 as compared to a tax expense of $2.2 million for prior year period. The benefit in 2021 primarily resulted from tax deductions related to the exercise of stock options during the period, as compared to smaller deductions for the same item in the prior year period.

Our effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes and 12.5% to 25% for Chinese income tax purposes due to the treatment of stock-based compensation including the impact from stock option exercises and non-US research expenses. Our two PRC subsidiaries, ACM Shanghai and ACM Wuxi, are liable for PRC corporate income taxes at the rates of 12.5% 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 and 2018, with an effective period of three years. In 2021, ACM Shanghai was certified as an eligible integrated circuit production enterprise and is entitled to a preferential income tax rate of 12.5% from January 1, 2020 to December 31, 2022.

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 2020. 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.

Net Income Attributable to Non-Controlling Interests and Redeemable Non-Controlling Interests

	Six Months Ended June 30,		% Change
	2021	**2020**	**2021 v 2020**
	(in thousands)		
Net income attributable to non-controlling interests	$ 1,119	$ 835	34.0%

As described above under “—STAR Market Listing and IPO,” in 2019, ACM Shanghai sold a total number of shares representing 8.3% of its outstanding ACM Shanghai shares. ACM Research continues to hold the remaining 91.7% of ACM Shanghai’s outstanding shares. As a result, commencing with the three months ended September 30, 2019, we reflect, as net income attributable to non-controlling interests and redeemable non-controlling interests, the portion of our net income allocable to the minority holders of ACM Shanghai shares. In the six months ended June 30, 2021, this amount totaled $1.1 million as compared to $0.8 million in the corresponding period in 2020.

Liquidity and Capital Resources

During the first six months of 2021, we funded our technology development and operations principally through our beginning cash balance and short-term borrowings by ACM Shanghai from local financial institutions.

We believe our existing cash and cash equivalents, our cash flow from operating activities, and short-term bank borrowings by ACM Shanghai 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 and short-term bank borrowings are insufficient to fund our future activities in accordance with our strategic plan, we may determine to raise additional funds through public or private debt or equity financings or additional bank credit arrangements. 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 necessary or desirable, we may not be able to obtain bank credit arrangements or to affect an equity or debt financing on terms acceptable to us or at all.

In 2020 ACM Shanghai, through its wholly owned subsidiary Shengwei Research (Shanghai), Inc., entered into a Grant Contract for State-owned Construction Land Use Right in Shanghai City (Category of R&D Headquarters and Industrial Projects), or the Grant Agreement, with the China (Shanghai) Pilot Free Trade Zone Lin-gang Special Area Administration. Shengwei Research (Shanghai), Inc. obtained rights to use approximately 43,000 square meters (10.6 acres) of land in the Lingang Heavy Equipment Industrial Zone of Lin-gang Special Area of China (Shanghai) Pilot Free Trade Zone for a period of fifty years, commencing on the date of delivery of the land in July 2020, which we refer to as the Delivery Date.

In exchange for its land use rights, Shengwei Research (Shanghai), Inc. paid aggregate grant fees of RMB 61.7 million ($9.5 million), and a performance deposit of RMB 12.3 million ($1.9 million), which is equal to 20% of the aggregate grant fees, to secure its achievement of the following performance milestones:

- the start of construction within 6 months after the Delivery Date (60% of the performance deposit);
- the completion of construction within 30 months after the Delivery Date (20% of the performance deposit); and
- the start of production within 42 months after the Delivery Date (20% of the performance deposit.

Upon satisfaction of a milestone, the portion of the performance deposit attributable to that milestone will be repayable to Shengwei Research (Shanghai), Inc. within ten business days. If the achievement of any of the above milestones is delayed or abandoned, Shengwei Research (Shanghai), Inc. may be subject to additional penalties and may lose its rights to both the use of the granted land and any partially completed facilities on that land.

Covenants in the Grant Agreement require that, among other things, Shengwei Research (Shanghai), Inc. will be required to pay liquidated damages in the event that (a) it does not make a total investment (including the costs of construction, fixtures, equipment and grant fees) of at least RMB 450.0 million ($63.4 million) or (b) within six years after the Delivery Date, we do not (i) generate a minimum specified amount of annual sales of products manufactured on the granted land or (ii) pay to the PRC at least RMB 157.6 million ($22.2 million) in annual total taxes (including value-added taxes, corporate income tax, personal income taxes, urban maintenance and construction taxes, education surcharges, stamp taxes, and vehicle and shipping taxes) as a result of operations in connection with the granted land.

Sources of Funds

Cash Flow from Operating Activities. Our operations provided cash flow of $0.2 million in the first six months of 2021. Our cash flow from operating activities is influenced by (a) the level of net income, (b) the amount of cash we invest in personnel and technology development to support anticipated future growth in our business, (c) increases in the number of customers using our products, and (d) the amount and timing of payments by customers.

Equity and Equity-related Securities. During the six months ended June 30, 2021, we received proceeds of $2.2 million from sales of Class A common stock pursuant to option exercises, and we received proceeds of $1.8 million pursuant to a warrant exercise for shares of Class A common stock.

Short-Term and Long-Term Loan Facilities. We have short-term and long-term borrowings with five banks, as follows:

Lender	**Agreement Date**	**Maturity Date**	**Annual Interest Rate**	**Maximum Borrowing Amount(1)**	**Amount Outstanding at June 30, 2021**
				(in thousands)	
Bank of Shanghai Pudong Branch	June 2021	June 2022	2.70%	RMB100,000	RMB29,829
				$ 15,480	$ 4,618
China Everbright Bank	April 2020	September 2021	2.50%	RMB80,000	RMB18,439
				$ 12,384	$ 2,854
China Merchants Bank	August 2020	August 2021 - May 2022	3.85%-3.95%	RMB80,000	RMB75,000
				$ 12,384	$ 11,610
Bank of China	June 2021	June 2022	3.86%	RMB40,000	RMB19,900
				$ 6,192	$ 3,080
China Merchants Bank	November 2020	Repayable by installments and the last installments repayable in November 2030	4.65%	RMB128,500	RMB122,529
				$ 19,892	$ 18,968
Bank of China	June 2021	Repayable by installments and the last installments repayable in June 2024	2.60%	RMB10,000	RMB10,000
				$ 1,548	$ 1,548
Industrial Bank of Korea	July 2020	July 2021	3.99%	KRW500,000	NIL
				$ 443	$ -
				$ 68,323	$ 42,678

(1) Converted from RMB to dollars as of June 30, 2021. All of the amounts owing under the line of credit with China Everbright Bank are guaranteed by Dr. David Wang, our Chief Executive Officer, President and Chair of the Board. All of the amounts owing under the line of credit with Bank of Shanghai Pudong Branch are guaranteed by CleanChip Technologies LTD, a wholly owned subsidiary of ACM Shanghai. All of the amounts owing under the line of credit with Industrial Bank of Korea are guaranteed by YY Kim, Chief Executive Officer of ACM Research (Korea).

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. ACM Shanghai received cash payments of $0.6 million related to such grants in the first six months of 2021, as compared to received cash payments of $2.8 million in the same period of 2020. Not all grant amounts are received in the year in which a grant is awarded. 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, 2021
	(in thousands)
Cash and cash equivalents	$ 70,209
Accounts receivable, less allowance for doubtful amounts	71,357
Inventory	136,852
Working capital	$ 278,418

Our cash and cash equivalents at June 30, 2021 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. 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.

We have never declared or paid cash dividends on our capital stock. We intend to retain all available funds and any future earnings to support the operation of and to finance the growth and development of our business and do not anticipate paying any cash dividends in the foreseeable future.

Uses of Funds

Capital Expenditures. We incurred $2.8 million in capital expenditures during the six months ended June 30, 2021, versus $1.6 million in capital expenditures in the same period of 2020. Capital expenditures in the six months ended June 30, 2021 were incurred principally for the addition of production capacity and general maintenance and improvements to our global facilities.

Off-Balance Sheet Arrangements

As of June 30, 2021, 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.

Item 3. Quantitative and Qualitative Disclosures About Market Risks

Our market risks and the ways we manage them are summarized in the section captioned "Part II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report. There have been no material changes in the first six months of 2021 to our market risks or to our management of such risks.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our company's disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, or the Exchange Act, as of December 31, 2020. The evaluation included certain internal control areas in which we have made and are continuing to make changes to improve and enhance controls. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs. The effectiveness of the disclosure controls and procedures is also necessarily limited by the staff and other resources available to management and the geographic diversity of our company's operations. As a result of the COVID-19 pandemic, beginning in 2020 we have faced additional challenges in operating and monitoring our disclosure controls and procedures as a result of employees working remotely and management travel being limited. In addition, we face potential heightened cybersecurity risks as our level of dependence on our IT networks and related systems increases, stemming from employees working remotely, and the number of malware campaigns and phishing attacks preying on the uncertainties surrounding the COVID-19 pandemic increases.

Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2021, our company's disclosure controls and procedures were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting and Remediation Efforts

There were no changes in our internal control over financial reporting during the three months ended June 30, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We will continue to review and document our disclosure controls and procedures, including our internal control over financial reporting and may from time to time make changes to enhance their effectiveness and ensure that our systems evolve with our business.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Securities Class Action Lawsuit

On December 21, 2020, a putative class action lawsuit against our company and three of our executive officers was filed in the U.S. District Court for the Northern District of California under the caption *Kain v. ACM Research, Inc., et al.*, No. 3:20-cv-09241, which we refer to as the Securities Class Action. The complaint alleges claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder, and seeks monetary damages in an unspecified amount as well as costs and expenses incurred in the litigation. On April 15, 2021, the court appointed Mr. Kain as lead plaintiff, finding that no better suited candidates emerged during the statutory sixty-day period following public notice of the lawsuit. On May 27, 2021, defendants filed a motion to dismiss Mr. Kain's complaint. Defendants' motion to dismiss is fully briefed and currently scheduled to be heard by the court on September 9, 2021. Our management believes the claims are without merit and intend to vigorously defend this litigation. We are currently unable to predict the outcome of this lawsuit and therefore cannot determine the likelihood of loss nor estimate a range of possible loss.

From time to time we may become involved in other legal proceedings or may be subject to claims arising in the ordinary course of our business. Although the results of these proceedings 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.

ITEM 1A. RISK FACTORS

Except as set forth below, there were no material changes to the risk factors discussed in "Item 1A, Risk Factors" of Part I in our Annual Report. In addition to the other information set forth in this report, you should carefully consider those risk factors, which could materially affect our business, financial condition and future operating results. Those risk factors are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may have a material adverse effect on our business, financial condition and operating results.

Our ability to sell our tools to Chinese customers may be restricted by regulatory actions.

The Bureau of Industry and Security of the U.S. Department of Commerce, or BIS, recently has imposed, and is likely to continue to impose additional restrictions, including licensing requirements, under the Export Administration Regulations, or EAR, with respect to certain PRC companies that impact the supply to such companies of U.S. products and certain non-U.S. products incorporating U.S. content or manufactured using certain U.S. technology or software and the sourcing of U.S. items by non-U.S. companies for use in manufacturing products for such companies. For example, over the last year BIS has added a number of PRC entities to the Entity List under the EAR, which means that any items subject to the EAR, including certain non-U.S. produced products with U.S. content, require a BIS license for supply to the listed entities.

Among other companies, Semiconductor Manufacturing International Corporation or SMIC, one of the largest chip manufacturers in the PRC and a customer of our semiconductor capital equipment tools, was added to the Entity List in December 2020. In July 2021 several members of Congress sent a letter to Commerce Secretary Raimondo urging her to add one of our customers, Yangtze Memory Technologies Co., Ltd., or YMTC to the Entity List under the EAR. YMTC is a leading PRC memory chip company and accounted, with its subsidiaries, for 26.8%, 27.5% and 39.6% of our revenue in 2020, 2019 and 2018, respectively. Challenges faced by SMIC and, if added to the Entity List, YMTC, as well as their key suppliers, as a result of listing could indirectly, but materially, impact SMIC's and YMTC's demand for our products.

We cannot be certain what additional actions the U.S. government may take with respect to PRC entities, including changes to the Entity List restrictions, other export regulations, tariffs or other trade restrictions, or whether the PRC government may take any actions in response to U.S. government action that may adversely affect our ability to do business with our customers. Even in the absence of new restrictions, tariffs or trade actions imposed by the U.S. or PRC government, our PRC-based customers may take actions to reduce dependence on the supply of products subject to potential U.S. trade regulations, which could have a material adverse effect on our operating results. We are unable to predict the duration of the restrictions imposed by the U.S. government or of any additional governmental actions that may impact our PRC-based customers, any of which could have a long-term adverse effect on our business, operating results and financial condition.

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 most of our revenue from a limited number of customers. A total of three customers accounted for 75.8% of our revenue in 2020, 73.8% of our revenue in 2019 and 87.6% of our revenue in 2018.

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 business practices of 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.

We could be adversely affected if proposed legislation is adopted regarding improved access to audit and other information and audit inspections of accounting firms, including registered public accounting firms operating in the PRC such as our auditor, or if Nasdaq's proposals requiring additional criteria to companies operating in "restrictive markets" become effective.

BDO China, our independent registered public accounting firm, is not inspected by the U.S. Public Company Accounting Oversight Board, or PCAOB, as described in "Item 1A. Risk Factors—Regulatory Risks—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." in our Annual Report. We are one of 283 companies named in PCAOB's list of "Public Companies that are Audit Clients of PCAOB-Registered Firms from Non-U.S. Jurisdictions where the PCAOB is Denied Access to Conduct Inspections."

On March 24, 2021, the U.S. Securities and Exchange Commission, or SEC, adopted interim final amendments to implement congressionally mandated submission and disclosure required of the U.S. Holding Foreign Companies Accountable Act. These interim final amendments will apply to registrants that the SEC identifies as having filed an annual report on Forms 10-K and other forms with an audit report issued by a registered public accounting firm that is located in a foreign jurisdiction and that the PCAOB has determined it is unable to inspect or investigate completely because of a position taken by an authority in that jurisdiction. The SEC will implement a process for identifying such a registrant and any such identified registrant will be required to submit documentation to the SEC establishing that it is not owned or controlled by a governmental entity in that foreign jurisdiction, and will also require disclosure in the registrant's annual report regarding the audit arrangements of, and governmental influence on, such a registrant. This action is the latest in a series of recent proposed actions:

- In December 2018 the SEC and the PCAOB issued a joint statement highlighting continued challenges faced by U.S. regulators in their oversight of financial statement audits of U.S.-listed reporting companies with significant operations in the PRC.

- In June 2019 a bipartisan group of lawmakers introduced bills in both houses of the U.S. Congress that, if passed, would have required the SEC to maintain a list of foreign reporting companies for which the PCAOB is not able to inspect or investigate an auditor report issued by a foreign public accounting firm. The proposed Ensuring Quality Information and Transparency for Abroad-Based Listings on our Exchanges Act, also referred to as the EQUITABLE Act, would have prescribed increased disclosure requirements for these reporting companies and, beginning in 2025, provided for the delisting from U.S. stock exchanges of reporting companies included on the SEC's list for three consecutive years.

- In May 2020 Nasdaq requested approval by the SEC of proposals that would impact companies with businesses principally administered in jurisdictions defined as "restrictive markets," which likely would encompass the PRC. These proposals contemplate, among other things, the application of more stringent listing criteria if a listed company's auditor does not demonstrate a PCAOB inspection record (as is the case with our auditor), employee expertise and training, or geographic or other resources sufficient to perform the company's audit satisfactorily. Examples of more stringent criteria that Nasdaq could apply include requiring: (a) higher levels of equity, assets, earnings or liquidity than are otherwise needed; (b) that any public offering to be underwritten on a firm commitment basis (involving more due diligence by the underwriter); and (c) the imposition of lock-up restrictions on directors and officers to allow market mechanisms to determine an appropriate price for shares before the insiders could sell. Alternatively, Nasdaq could deny continued listing to a company.

- In April 2020 the SEC and the PCAOB issued a joint statement highlighting the significant disclosure, financial reporting and other risks associated with emerging market investments, including the PCAOB's continued inability to inspect audit work papers of auditors in the PRC.

- The Holding Foreign Companies Accountable Act, which became law in December 2020, includes requirements for the SEC to identify issuers whose audit work is performed by auditors that the PCAOB is unable to inspect or investigate completely because of a restriction imposed by a non-U.S. authority in the auditor's local jurisdiction. The Holding Foreign Companies Accountable Act also requires that, to the extent that the PCAOB has been unable to inspect an issuer's auditor for three consecutive years since 2021, the SEC shall prohibit its securities registered in the United States from being traded on any national securities exchange or over-the-counter market in the United States.

If we are unable to implement our strategy to expand our PRC operations by completing an initial public offering and listing on the STAR Market, our ability to strengthen our market position and operations in the PRC, including our ability to increase our revenues and augment our product line, could be materially impaired.

In June 2019 we announced plans to complete over the following three years the STAR Listing, which consists of a listing of shares of ACM Shanghai on the Shanghai Stock Exchange's STAR Market, and the STAR IPO, which would be a concurrent initial public offering of ACM Shanghai shares in the PRC. ACM Shanghai is our principal operating company and, prior to the STAR Listing process, was a wholly owned subsidiary of ACM Research. Following the STAR Listing and the STAR IPO, ACM Shanghai will be a majority owned subsidiary of ACM Research. We may not be able to complete the STAR Listing and the STAR IPO for a number of reasons, many of which are outside our control. ACM Shanghai must succeed in obtaining PRC governmental approvals required to permit the STAR Listing and the STAR IPO, and one or more of those approvals may be denied, or significantly delayed, by the PRC regulators for reasons outside our control or unknown to us.

The PRC government has recently implemented new requirements for PRC-based companies looking to list their shares on public exchanges in the United States, which has negatively impacted the valuations of several PRC-based companies currently listed in the United States. It is unknown to us at this time whether these new requirements will impact our valuation or impair our ability to complete the STAR IPO. Similarly, the STAR Listing application may be denied or delayed by the Shanghai Stock Exchange in its discretion. See also "—Risks Related to the COVID-19 Outbreak—The COVID-19 outbreak could negatively impact our currently planned projects and investments in the PRC, including the STAR IPO."

If we are unable to complete the STAR Listing and the STAR IPO, we may not otherwise be able to realize the advantages to our PRC operations contemplated by our business strategy, including improving our ability to market our products, building our brand in the PRC markets, assisting our sales efforts to new customers and encouraging additional purchases of our tools by existing customers. Because it may be more than three years before we know whether the STAR Listing and the STAR IPO will be completed, we may, in the interim, forego or postpone other alternative actions to strengthen our market position and operations in the PRC.

PRC companies are critical to the global semiconductor industry, and our current business is substantially concentrated in the PRC market. Our inability to build, or any delay in growing, our PRC-based operations over the next three years would materially and adversely limit our operations and operating results, including our revenue growth. In addition, during that time, the process underlying the STAR Listing and the STAR IPO could result in significant diversion of management time as well as substantial out-of-pocket costs, which could further impair our ability to expand our business.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

In the six months ended June 30, 2021, we issued, pursuant to the exercise of stock options at a per share exercise price of $0.75 per share, an aggregate of 109,152 shares of Class A common stock that were not registered under the Securities Act of 1933. We believe the offer and sale of those shares were exempt from registration under the Securities Act of 1933 by virtue of Section 4(a)(2) thereof (or Regulation D promulgated thereunder) because they did not involve a public offering. The recipients of the shares 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 recorded with respect to the shares.

In the six months ended June 30, 2021, we issued, pursuant to the exercise of a warrant at a per share exercise price of $7.50, an aggregate of 242,681 shares of ACM Class A common stock that were not registered under the Securities Act of 1933. We believe the offer and sale of those shares were exempt from registration under the Securities Act of 1933 by virtue of Section 4(a)(2) thereof (or Regulation D promulgated thereunder) because they did not involve a public offering. The recipient of the shares 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 recorded with respect to the shares.

Item 6. Exhibits

The following exhibits are filed as part of this report:

Exhibit No.	Description
31.01	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.02	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.01	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in exhibit 101)

* Unofficial English translation of original document prepared in Mandarin Chinese.

\+ Certain annexes have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted exhibit will be furnished to the Securities Exchange Commission or its staff upon request.

± Certain information redacted and replaced with “[***]”.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

	ACM RESEARCH, INC.
Date: August 6, 2021	By: /s/ Mark McKechnie
	Mark McKechnie
	Chief Financial Officer, Executive Vice President and Treasurer
	(Principal Financial Officer)

Exhibit 31.01

**CERTIFICATION OF PRINCIPAL EXECUTIVE
OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, David H. Wang, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ACM Research, Inc.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report.

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d- 15(f)), for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2021

/s/ David H. Wang

David H. Wang
Chief Executive Officer and President
(Principal Executive Officer)

Exhibit 31.02

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mark McKechnie, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ACM Research, Inc.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report.

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d- 15(f)), for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2021

/s/ Mark McKechnie
Mark McKechnie
Chief Financial Officer, Executive Vice President and Treasurer
(Principal Financial Officer)

Exhibit 32.01

CERTIFICATION PURSUANT TO 18 U.S.C. 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of ACM Research, Inc. for the quarterly period ended June 30, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his or her knowledge on the date hereof:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of ACM Research, Inc. for the period presented therein.

Date: August 6, 2021	/s/ David H. Wang
	David H. Wang Chief Executive Officer and President *(Principal Executive Officer)*
Date: August 6, 2021	/s/ Mark McKechnie
	Mark McKechnie Chief Financial Officer, Executive Vice President and Treasurer *(Principal Financial Officer)*

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.