



ACM Research Expands Advanced Packaging Portfolio with Introduction of Frame Wafer Cleaning Tool

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Achieves residue-free performance for post-debonding cleaning while minimizing environmental impact

FREMONT, Calif., May 08, 2024 (GLOBE NEWSWIRE) -- [ACM Research, Inc.](#) ("ACM") (NASDAQ: ACMR), a leading supplier of wafer processing solutions for semiconductor and advanced wafer-level packaging applications, today introduced its Frame Wafer Cleaning Tool for advanced packaging. The tool effectively cleans semiconductor wafers during the post-debonding cleaning process. The Frame Wafer Cleaning Tool also includes an innovative solvent reclamation system that provides environmental and cost benefits. This feature enables nearly 100% recovery and filtration of the solvents, thus reducing the use of consumables used during the production process. ACM also announced today that it has successfully completed the installation and qualification of the first tool with a major Chinese manufacturer.

"We believe ACM's industry experience and customer relationships position us to support the evolving demands of advanced packaging," said ACM President and Chief Executive Officer Dr. David Wang. "We believe our Frame Wafer Cleaning Tool will prove attractive to our customer base as the semiconductor industry shifts to advanced packaging and 3D integration for back-end designs. We are committed to addressing sustainability demands by offering our customers with tools that can recover solvents, thereby reducing waste and lowering the total cost of ownership in the production process."

The tool seamlessly handles standard wafers and tape frame wafers. The chambers and load port are configured to accommodate simultaneous processing of both types of wafers, providing flexible and efficient operational capabilities. ACM's proprietary handling allows the tool to process thin wafers with thicknesses above 150µm. The cleaning process utilizes ACM's patented Smart Megasonix technology for thorough, damage-free cleaning across the wafer. It provides photoresist residue removal, particularly edge bead removal, leaving a residue-free surface post-cleaning.

Key features of the Frame Wafer Cleaning Tool include:

- A specially engineered vacuum chuck that ensures minimal backside damage to wafers, setting a new standard for precision in extreme cleaning conditions.
- Use of ACM's patented fixed method, which guarantees unparalleled stability for tape-frame processing during high-speed rotation.
- State-of-the-art anti-static performance using an ion bar in the equipment front-end module and each chamber module, complemented by a DI-CO2 mixer, to safeguard wafers against static electricity impact throughout the processing cycle.

About the Frame Wafer Cleaning Tool

The Frame Wafer Cleaning Tool is equipped with four chambers and provides configuration versatility through options like high-purity solvent, MegPie solvent, deionized water, nano solvent and an isopropyl alcohol nozzle, allowing seamless adaptation to diverse processes. Moreover, it achieves efficient cleaning and drying by accomplishing both tasks in a single chamber. It is available in 8-inch and 12-inch configurations for both standard wafers and tape frame wafers.

FORWARD LOOKING STATEMENTS

Certain statements contained in this press release are not historical facts and may be forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "plans," "expects," "believes," "anticipates," "designed," and similar words are intended to identify forward-looking statements. Forward-looking statements are based on ACM management's current expectations and beliefs, and involve a number of risks and uncertainties that are difficult to predict and that could cause actual results to differ materially from those stated or implied by the forward-looking statements. A description of certain of these risks, uncertainties and other matters can be found in filings ACM makes with the U.S. Securities and Exchange Commission, all of which are available at www.sec.gov. Because forward-looking statements involve risks and uncertainties, actual results and events may differ materially from results and events currently expected by ACM. ACM undertakes no obligation to publicly update these forward-looking statements to reflect events or circumstances that occur after the date hereof or to reflect any change in its expectations with regard to these forward-looking statements or the occurrence of unanticipated events.

About ACM Research, Inc.

ACM develops, manufactures and sells semiconductor process equipment for single-wafer or batch wet cleaning, electroplating, stress-free polishing and thermal processes that are critical to advanced semiconductor device manufacturing, as well as wafer-level packaging. ACM is committed to delivering customized, high-performance, cost-effective process solutions that semiconductor manufacturers can use in numerous manufacturing steps to improve productivity and product yield. For more information, visit www.acmrcsh.com.

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