

Nanometrics Selected for Third-Generation 3D-NAND Process Control

Atlas® Systems Extend Advanced Device Manufacturing Capability

MILPITAS, Calif., June 14, 2016 (GLOBE NEWSWIRE) -- Nanometrics Incorporated (NASDAQ:NANO), a leading provider of advanced process control systems, today announced the selection of the company's flagship Atlas optical critical dimension (OCD) metrology platform and NanoDiffract® modeling and analysis software, for development and production of third-generation 3D-NAND devices by a leading flash memory manufacturer. The systems will be used across all aspects of 3D-NAND device manufacturing, including control of critical thin film deposition and etch processes for the formation of high-aspect-ratio structures in this customer's most advanced devices.

"Our customers are continuing to invest in advanced research and development of next-generation 3D-NAND devices to drive increases in memory density, which has already surpassed hard disk drives, as well as to improve yield, which in turn translates to lower cost-per-bit and increased manufacturing capacity," commented Dr. Srinu Vedula, vice president of OCD/Thin Film Solutions at Nanometrics. "Together, the Atlas and NanoDiffract are playing a key role in accelerating manufacturing ramps and improving process performance, which meaningfully contributes to the competitiveness and financial performance of our customers. This latest selection highlights the extendibility and robustness of our technology platforms as well as our continued success in customer collaborations in the rapidly expanding 3D-NAND market."

Systems will be deployed through the remainder of this year as new factory phases are built out to support additional capacity for these third-generation 3D-NAND devices.

3D-NAND architectures continue to challenge process modules with ever more device layers and higher aspect ratios of key semiconductor features. Non-destructive in-line optical control has proven to be an essential part in the successful development and manufacturing of these devices. Nanometrics' Atlas systems and NanoDiffract software suite, in combination with Nanometrics' IMPULSE® and Trajectory® T3 integrated metrology systems, are proven enablers in comprehensive fab-wide process control. Since its initial launch in 2004, multiple generations of the Atlas system have been deployed across every fab segment for advanced logic, DRAM, 3D-NAND, advanced non-volatile memory, CMOS image sensor and power device manufacturing.

About Nanometrics

Nanometrics is a leading provider of advanced, high-performance process control metrology and inspection systems used primarily in the fabrication of semiconductors and other solid-state devices, including sensors, optoelectronic devices, high-brightness LEDs, discretes and data storage components. Nanometrics' automated and integrated metrology systems measure critical dimensions, device structures, topography and various thin film properties, including three-dimensional features and film thickness, as well as optical, electrical and material properties. The company's process control solutions are deployed throughout the fabrication process, from front-end-of-line substrate manufacturing, to high-volume production of semiconductors and other devices, to advanced three-dimensional wafer-level packaging applications. Nanometrics' systems enable advanced process control for device manufacturers, providing improved device yield at reduced manufacturing cycle time, supporting the accelerated product life cycles in the semiconductor and other advanced device markets. The company maintains its headquarters in Milpitas, California, with sales and service offices worldwide. Nanometrics is traded on NASDAQ Global Select Market under the symbol NANO. Nanometrics' website is <http://www.nanometrics.com>.

Forward Looking Statements

Certain statements in this press release are forward-looking statements that involve a number of risks and uncertainties that could cause actual results to differ materially from those described in this release. Although Nanometrics believes that the expectations reflected in the forward-looking statements are reasonable, actual results could differ materially from these expectations due to a variety of factors, including, but not limited to, shifts in the timing of product deliveries, the failure to achieve improved processes, the rate of adoption of our products, customer spending plans, and general economic conditions. For additional information and considerations regarding the risks faced by Nanometrics that could cause actual results to differ materially, see its annual report on Form 10-K for the year ended December 26, 2015, as filed with the Securities and Exchange Commission on February 24, 2016, including under the caption "Risk Factors," as well as other periodic reports filed with the SEC from time to time. Nanometrics disclaims any obligation to update information contained in any forward-looking statement, except as required by law.

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