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Ultratech Receives Multiple Commitments For Laser Melt Anneal System Evaluation

Ultratech's LM7 Laser Melt Anneal System Targeted to Enable Contact Scaling and Improve Transistor Performance for 7-nm and Below Nodes

SAN JOSE, Calif., April 5, 2017 /PRNewswire/ -- **Ultratech, Inc.** (Nasdaq: UTEK), a leading supplier of lithography, laser processing and inspection systems used to manufacture semiconductor devices and high-brightness LEDs (HBLEDs), as well as atomic layer deposition (ALD) systems, today announced that it has received multiple commitments for its LM7 laser melt anneal system. After its recent introduction in Q416, two leading North American semiconductor manufacturers will target use of the LM7 melt system at 7-nm and below nodes. Ultratech plans to ship both systems in the first half of 2017 to the customers' facilities in the U.S.

As the industry faces the challenges of device manufacturing at 7-nm and below, laser melt anneal technology has received attention as a solution not only for front-end-of-line, but also for middle- and back-end-of-line applications. In particular, scaling at these nodes has resulted in scrutiny of the contact structure between the transistor and the first metal layer. The focus is not solely on the transistor device performance, but issues related to the resistance at the contact, which are becoming a limiting factor in the operation of the transistor, increasing drive current and limiting overall speed. A paper presented in December at the 2016 IEEE International Electron Devices Meeting (IEDM), which used Ultratech's laser melt anneal system, provided data to support the system's capability to enable contact scaling consistent with transistor performance targets for the 7-nm node and beyond.

To view the paper: <http://ieeexplore.ieee.org/document/7838437/?reload=true>

"As we continue to scale to smaller nodes, contact resistance is widely acknowledged to be one of the gating issues that must be addressed," said Yun Wang, Ph.D., Senior Vice President and Chief Technologist, Laser Processing at Ultratech. "Ultratech's laser melt anneal technology addresses emerging annealing requirements for 7-nm and beyond, with applications spanning the front end where the focus is on device performance and leakage improvement, the middle-of-line for contact resistance, and at the back-end-of-line where the focus is on material modifications and reduction of resistive capacitive (RC) delay. Over the last few years, Ultratech has been engaged with multiple customers on all of these applications, running wafers at our facility using our laser melt anneal technology. We look forward to working with these two customers and to providing our laser melt technology to meet their aggressive technology roadmaps."

Ultratech LM7 Laser Melt Annealing System

The LM7 laser melt annealing system is based on the production-proven LSA201 laser spike anneal platform with ambient control. Built on this proven hardware/software platform, the LM7 provides a novel solution for melt annealing applications for 7-nm and below nodes. The LM7 uses a unique dual-laser process that provides nanosecond-scale melt anneal with reduced pattern effects compared to conventional melt anneal approaches. Ultratech's LM7 laser melt anneal system provides the industry with a low cost-of-ownership solution for advanced annealing requirements for high-volume manufacturing at 7-nm and beyond.

Safe Harbor

This release includes forward looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward looking statements can generally be identified by words such as "anticipates," "expects," "remains," "thinks," "intends," "believes," "estimates," and similar expressions and include management's current expectation of its longer term prospects for success. These forward looking statements are based on our current expectations, estimates, assumptions and projections about our business and industry, and the markets and customers we serve, and they are subject to numerous risks and uncertainties that may cause these forward looking statements to be inaccurate. Such risks and uncertainties include the timing and possible delays, deferrals and cancellations of orders by customers; quarterly revenue fluctuations; industry and sector cyclicality, instability and unpredictability; market demand for consumer devices utilizing semiconductors produced by our clients; our ability to manage costs; new product introductions, market acceptance of new products and enhanced versions of our existing products; reliability and technical acceptance of our products; our lengthy sales cycles, and the timing of system installations and acceptances; lengthy and costly development cycles for laser processing and lithography technologies and applications; competition and consolidation in the markets we serve; improvements, including in cost and technical features, of competitors' products; rapid technological change; pricing pressures and product discounts; our ability to collect receivables; customer and product concentration and lack of product revenue diversification; inventory obsolescence; general economic, financial market and political conditions and other factors outside of our control; domestic and international tax policies; cybersecurity threats in the United States and globally

that could impact our industry, customers, and technologies; and other factors described in our SEC reports including our Annual Report on Form 10K filed for the year ended December 31, 2016. Due to these and other factors, the statements, historical results and percentage relationships set forth herein are not necessarily indicative of the results of operations for any future period. We undertake no obligation to revise or update any forward looking statements to reflect any event or circumstance that may arise after the date of this release.

About Ultratech: Ultratech, Inc. (Nasdaq: UTEK) designs, builds and markets manufacturing systems for the global technology industry. Founded in 1979, Ultratech serves three core markets: frontend semiconductor, backend semiconductor, and nanotechnology. The company is the leading supplier of lithography products for bump packaging of integrated circuits and high brightness LEDs. Ultratech is also the market leader and pioneer of laser spike anneal technology for the production of advanced semiconductor devices. In addition, the company offers solutions leveraging its proprietary coherent gradient sensing (CGS) technology to the semiconductor wafer inspection market and provides atomic layer deposition (ALD) tools to leading research organizations, including academic and industrial institutions. Visit Ultratech online at: www.ultratech.com.

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