



Mattson Technology Sets New Standard With Alpine(TM) New Photoresist Strip Product for BEOL and FEOL Applications at Sub 65 Nanometer Nodes

Initial System Shipped to Major Semiconductor Manufacturer in Taiwan

FREMONT, Calif., May 8, 2008 /PRNewswire-FirstCall via COMTEX News Network/ -- Mattson Technology, Inc. (Nasdaq: MTSN), a leading supplier of advanced semiconductor process equipment used to manufacture Integrated Circuits (or ICs), today announced the release of the Alpine(TM) system, the Company's newest innovation targeted to meet the stringent requirements of advanced low temperature photoresist strip processes on back-end-of-line (BEOL) and front-end-of-line (FEOL) applications for future technology nodes with a single tool. The latest addition to Mattson's complete family of dry strip products, Alpine was developed to address the challenges of advanced low-k and other complex materials required to manufacture today's and future ICs. Alpine builds and expands on Mattson's latest production proven platform, the Suprema (TM); and is designed for reliable, high-productivity, low-cost-of-ownership (COO) manufacturing for 65 nanometers and below. The Company noted that it has shipped its initial Alpine system to a major semiconductor manufacturer in Taiwan.

(Photo: <http://www.newscom.com/cgi-bin/prnh/20080508/AQTH076>)

David Dutton, president and chief executive officer, commented, "Technology and productivity leadership is the foundation of the Company's success, and we are pleased to add this newest tool to our highly focused, market-leading product suite. Mattson Technology is the premier strip provider in the foundry market, and the bulk strip market leader. We expect that the Alpine BEOL strip applications will provide Mattson with further growth opportunities, doubling our served available strip market."

Dutton continued, "The launch of the new Alpine system is of significant importance to Mattson and our global customer base. We are introducing a tool with remarkable productivity advantages and with excellent on-wafer results to BEOL applications, which will provide a significant benefit to the industry. The majority of manufacturers are currently forced to sacrifice productivity in BEOL due to the use of expensive etchers that typically afford low throughput. In addition, Alpine is well suited to critical dry strip FEOL applications and strengthens the Company's positioning across the logic, foundry and memory market segments. The Alpine is another innovative technology that delivers advanced on-wafer performance, while delivering the leading productivity our customers expect from Mattson Technology. We are excited to add this new product to our portfolio, further positioning Mattson to outperform the industry as the next investment cycle unfolds."

Alpine(TM) Key Technical Highlights

- Alpine's advanced etch chamber offers excellent profile control. The Alpine features Mattson's proprietary inductively coupled plasma (ICP) source and a bias capability that enables independent control of ion energy and ion density at low pressures to minimize damage to low-k materials for sub-65 nanometer processing. Mattson's ICP technology has been successfully adopted by 17 of the 20 top semiconductor manufacturers in volume production and advanced product development.
- Unique photoresist recess processing for low-k/Cu dual damascene structures for advanced logic devices provides chipmakers up to 35 percent lower COO than dielectric etch tools.
- Provides improved profile control, low-k material preservation and a wider process window; and is able to run processes under low pressure regimes whereas conventional Etchers cannot.
- Features reliable, high-speed vacuum and atmospheric robotics that deliver increased throughput and over 40 percent improvement compared to competitive systems for advanced strip applications.
- Enables remarkable particle performance due to its unique platform design which meets the stringent particle requirements of the 65 nanometer technology node and beyond.

Sr. Vice President and General Manager of Mattson Technology's Surface Cleaning Group, Neal Holmlund, added, "Mattson's enabling technologies offer compelling process control advantages in addressing customers' challenges in the manufacture of smaller device structures. The new Alpine platform and robot design gives our global customers enhanced throughput, uptime, serviceability and lower Cost of Consumables."

Holmlund continued, "Mattson is proud to have shipped the initial Alpine system to a long-time customer. Their selection of our Alpine photoresist strip system is further testament to Mattson's ability to support advanced strip production. Our customer looked to Mattson to provide further improvements in the areas of productivity, reliability and serviceability for their BEOL production. Alpine's innovative system features reliable, high-speed vacuum and atmospheric robotics that deliver increased throughput, with an over 40 percent improvement as compared to competitive systems for advanced strip applications." Holmlund concluded, "As a manufacturing partner, Mattson is dedicated to providing our customers with state-of-the-art process technologies on cost-effective platforms coupled with a service and support capability to deliver the highest level of customer satisfaction."

About Alpine(TM)

The latest addition to Mattson's complete family of dry strip products, the Alpine(TM) enables chipmakers to handle copper/low-k dielectric integration, low-k/ ultra low-k ashing, resist recess, barrier layer removal and other BEOL dry strip challenges with a single tool, in addition to all critical FEOL dry strip process requirements. The Alpine features Mattson's proprietary inductively coupled plasma (ICP) source and a bias capability providing improved profile control, low-k material preservation and a wider process window. The system builds on Mattson's latest production proven platform and is designed for reliable, high-productivity, low-cost-of-ownership manufacturing for 65 nanometer nodes and below.

About Mattson Technology, Inc.

Mattson Technology, Inc. is a leading supplier of dry strip equipment and the second largest supplier of rapid thermal processing equipment in the global semiconductor industry. The company's strip and RTP equipment utilize innovative technology to deliver advanced processing performance and productivity gains to semiconductor manufacturers worldwide for the fabrication of current- and next-generation devices. For more information, please contact Mattson Technology, Inc., 47131 Bayside Parkway, Fremont, Calif. 94538. Telephone: (800) MATTSON/(510) 657-5900. Fax: (510) 492-5911. Internet: <http://www.mattson.com>.

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This news release contains forward-looking statements regarding the Company's future prospects. Forward-looking statements address matters that are subject to a number of risks and uncertainties that can cause actual results to differ materially. Such risks and uncertainties include, but are not limited to: end-user demand for semiconductors; customer demand for semiconductor manufacturing equipment; the timing of significant customer orders for the Company's products; customer acceptance of delivered products and the Company's ability to collect amounts due upon shipment and upon acceptance; the Company's ability to timely manufacture, deliver and support ordered products; the Company's ability to bring new products to market and to gain market share with such products; customer rate of adoption of new technologies; risks inherent in the development of complex technology; the timing and competitiveness of new product releases by the Company's competitors; the Company's ability to align its cost structure with market conditions; and other risks and uncertainties described in the Company's Forms 10-K, 10-Q and other filings with the Securities and Exchange Commission. The Company assumes no obligation to update the information provided in this news release.

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