Novellus Systems Introduces Ashable Hard Mask Process Technology On Vector Express Platform

San Jose, California - June 25, 2007 - Novellus Systems, Inc. (Nasdaq: NVLS) announced today that it has started production shipments of its new patent-pending ashable hard mask (AHM&#8482) process technology on the VECTOR Express&#8482 plasma-enhanced chemical vapor deposition (PECVD) platform. Designed to address the challenges in advanced technology nodes that utilize 193nm lithography for high aspect patterning etch, where thinning photo-resist material makes it difficult to extend conventional patterning, AHM on VECTOR Express represents a major technical breakthrough compared to conventional amorphous carbon film processing. Novellus has already delivered tools with this new capability to major memory manufacturers and has commitments for shipments to additional customers within the next quarter.

Developed with a unique chemistry and enhanced plasma capability, the AHM film uniquely satisfies the demanding etch selectivity requirements of advanced device nodes while maintaining transparency to the light source used for wafer alignment during photo-resist exposure. In key customer evaluations, AHM on VECTOR Express has demonstrated superior film performance, excellent CD control, low defectivity and improved device yield. This technical performance has been achieved while reducing cost-of-ownership more than 30 percent from prevailing industry benchmarks.

In addition, a new post-deposition edge bevel film removal capability has been integrated on the VECTOR Express platform to provide process flexibility and to resolve reliability, throughput and defect performance issues associated with conventional in-chamber edge exclusion techniques. It also improves the precision and repeatability of film removal at the wafer edge, which is becoming even more important with 193nm immersion lithography.

"The introduction of AHM on the VECTOR Express platform represents another key milestone in our effort to provide customers with advanced technology and industry-leading productivity," said Tim Archer, senior vice president and general manager of Novellus' Dielectric Business Group. "The superior film properties, outstanding throughput and integrated post-deposition edge bevel removal capability of our AHM solution put VECTOR Express out in front in this fast-growing market segment, which is estimated to exceed $400 million by 2011."

The VECTOR Express PECVD platform, introduced earlier this year, is used to deposit a variety of films for memory and logic devices. VECTOR Express delivers industry-leading productivity and fundamental thin film process improvement with its SmartSoak&#8482 processing feature. SmartSoak takes advantage of the VECTOR platform's multi-station sequential processing (MSSP) architecture to control wafer heat-up independently from film deposition. This enables a more stable and consistent wafer temperature at the start of film deposition while simultaneously reducing thin film processing time. Novellus has received orders for more than 50 VECTOR Express systems.

About VECTOR

Introduced in 2000, VECTOR revolutionized the 300 mm PECVD market. The industry-leading system is capable of depositing all dielectric films required for advanced dual damascene structures, and is the production tool of choice with the largest installed base of 300mm systems. The tool's simple design ensures high system reliability and uptime. With two-thirds the footprint of the nearest competing tool, it offers significant lab floor space savings.

About Novellus

Novellus Systems, Inc. (Nasdaq: NVLS) is a leading provider of advanced process equipment for the global semiconductor industry. The company's products deliver value to customers by providing innovative technology backed by trusted productivity. An S&P 500 company, Novellus is headquartered in San Jose, Calif. with subsidiary offices across the globe. For more information please visit www.novellus.com.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements that (i) the Company has started production shipments of its new ashable hard mask process technology on the VECTOR Express&#8482 platform that is pending patent approval, (ii) the Company has commitments for shipments of AHM on VECTOR Express to additional customers within the next year and (iii) the Company's belief that with the introduction of the AHM solution on the VECTOR Express platform that the Company's growth in the market segment is estimated to exceed $400 million by 2011. Forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those contemplated by the forward-looking statements. Such risks and uncertainties include, but are not limited to, engineering and design flaws or operational difficulties that limit productivity, unforeseen disruptions in our manufacturing and production, the lack of adequate components and materials necessary for the production of ashable hard mask process technology on the VECTOR Express platform, unforeseen problems with the AHM patent application, and inaccuracies and uncertainties related to the Company's growth in the market segment, as

well as other risks indicated in our filings with the Securities and Exchange Commission (SEC). For more details, please refer to our SEC filings and the amendments thereto, including our Annual Report on Form 10-K for the year ended December 31, 2006, our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2007 and our Current Reports on Form 8-K. Forward-looking statements are made and based on information available to us on the date of this press release, and we assume no obligation to update them.

VECTOR Express, AHM and SmartSoak are trademarks of Novellus Systems, Inc.

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