

# Novellus Systems Extends Ashable Hard Mask Process Technology to the VECTOR Extreme Platform

**SAN JOSE, Calif. — July 14, 2008 —** Novellus Systems, Inc. (NASDAQ: NVLS) today announced the availability of an ashable hard mask (AHM) process configuration for the company's high-productivity VECTOR Extreme PECVD platform. The new VECTOR Extreme AHM system allows Novellus to participate in the rapidly growing AHM market while meeting the productivity demands of the emerging memory megafabs. Introduced in July 2007, the VECTOR Extreme platform has enjoyed rapid market acceptance, with more than 30 systems to be installed worldwide by the end of 2008.

As configured on the VECTOR Extreme, Novellus' innovative AHM technology employs a unique RF power configuration, optimized process gas chemistry and integrated post-deposition edge bevel film removal (EBR) to produce the highest-quality films with the easiest integration for 45nm manufacturing and below. The VECTOR Extreme AHM system is capable of providing memory manufacturers throughputs in excess of 150 wafers per hour. Due to its high etch selectivity and film transparency, Novellus' AHM on the VECTOR Express platform is already the film of choice at a number of leading-edge memory device manufacturers.

"The VECTOR Extreme AHM system represents an exciting marriage of the industry's most advanced AHM process technology with the highest-throughput PECVD platform on the market," said Tim Archer, senior vice president and general manager of Novellus' PECVD business unit. "With its high throughput, low cost of ownership and process tunability, the VECTOR Extreme AHM system is well positioned to meet the production requirements of memory megafabs."

The AHM market segment is expected to grow to \$300 million by 2012, driven by the challenges of advanced lithography. AHM films, deposited in a PECVD reactor, aid in pattern transfer and provide superior critical dimension control during etch compared to standard 193nm photoresists.

The VECTOR Extreme platform will be on display during SEMICON West at the Novellus exhibit in the Yerba Buena Center for the Arts, July 15-17.

## **About the VECTOR platform:**

Introduced in 2000, VECTOR revolutionized the 300mm 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.

VECTOR Extreme was launched in July of 2007 for the deposition of comparatively thick SiH<sub>4</sub> and TEOS-based dielectric films used in memory chips. Capable of throughputs of up to 250 wafers per hour, the VECTOR Extreme platform has seen rapid adoption in some of the world's largest memory manufacturing fabs, where low cost of ownership and productivity are paramount.

The VECTOR suite of products now includes VECTOR Express, VECTOR Express AHM, VECTOR Extreme and VECTOR Extreme AHM.

## **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](http://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 regarding (i) the company's belief that the new Vector Extreme AHM system allows Novellus to address the rapidly-growing AHM market while meeting the productivity demands of the emerging memory fabs, (ii) the company's expectation that more than 30 Vector Extreme systems will be installed worldwide by the end of 2008, (iii) the company's belief that the new Vector Extreme AHM system is well positioned to meet the production requirements of the memory mega fabs, and (iv) the company's belief that the AHM market

segment is expected to grow to \$300M by 2012- driven by challenges of advanced lithography. 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, inability to meet the productivity demands of the emerging memory fabs, unforeseen disruptions in the manufacturing and production of the new VECTOR Extreme AHM system impacting volume production and introduction into the market, inefficiencies in the allocation of funds to our strategic product research and development efforts to meet the production demands of the memory mega fabs, failure to accurately predict growth in the AHM market segment due to changes in product design and requirements and fluctuations in the semiconductor market, 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, 2007, our Quarterly Reports on Form 10-Q for the quarter ended March 29, 2008 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.

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VECTOR Extreme is a trademark of Novellus Systems, Inc.

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