NOVELLUS LAUNCHES INOVA® NExT™

SAN JOSE, Calif., July 11, 2005--Novellus Systems, Inc. (Nasdaq NM: NVLS), the productivity and technology leader in advanced deposition, surface preparation and chemical mechanical planarization processes for the global semiconductor industry, today announced the introduction of INOVA NExT, a 300-mm metallization system for copper barrier/seed applications at 45-nm and beyond. An extension of Novellus' successful INOVA platform, the INOVA NExT features advanced physical vapor deposition (PVD) technology, ion-induced atomic layer deposition (iALD), and a wide array of manufacturability innovations that further enhance the benchmark productivity already demonstrated at leading semiconductor companies around the world.

INOVA NExT improves defect performance, serviceability, user friendliness and reduces preventive maintenance (PM) time. The single target Hollow Cathode Magnetron (HCM) PVD technology has been extended to the 45-nm node. Barrier non-uniformity, sidewall asymmetry, and the etch-to-deposition ratio have all been improved, while the copper seed layer has lower overhang and increased sidewall coverage that enable fill of 45-nm structures. All these enhancements to INOVA NExT were made while maintaining the simplicity and production-worthiness of the HCM. This is in contrast to competing ionized PVD technologies where chambers are significantly more complex, leading to manufacturability issues.

In addition to PVD chambers, the INOVA NExT platform also enables integration of the iALD chamber. The iALD tantalum nitride (TaN) film replaces PVD TaN as the barrier layer for copper, providing a reduction in line resistance due to the highly conformal and ultra-thin nature of the film. Novellus' patented iALD TaN process deposits a conducting film with a resistivity of less than 300 micro-Ohm-cm, in contrast to competing thermal ALD processes that deposit an insulator. The conducting barrier layer is critical for ease of integration into the copper interconnect, while demonstrating compatibility with ultra low-k (ULK) dielectrics. The iALD process can also be used to deposit other metals, such as ruthenium and copper, enabling an all-iALD copper barrier/seed. Multiple iALD TaN modules have been shipped to leading-edge customers.

"We continue to build market momentum in the PVD business through the success of the INOVA platform. By the end of 2005, we expect to triple the number of 300-mm INOVA customers compared to early 2004," said Dr. Rao Mulpuri, vice president and general manager of Novellus' Integrated Metals business unit. "HCM technology is now entering its fifth generation of use at 45-nm. In addition to lowering the additional capital outlay at technology transitions, the extendibility of the HCM allows our customers to preserve key process learning. The iALD technology provides unique technical capabilities for narrow line width devices beyond 45-nm and we are excited about the potential for this technology."

The market for PVD systems is forecasted to reach around $1.2 billion per year in 2005 according to Gartner Dataquest. The copper version of INOVA NExT began shipping in Q1 2005. Aluminum and other applications will transition to the INOVA NExT in Q4 2005. The complete suite of INOVA NExT tools will enable Novellus to meet both the copper and aluminum needs of advanced logic, flash, ASIC and DRAM manufacturers as they shift to nodes of 45-nm and beyond.

To learn more about INOVA NExT, visit Novellus at SEMICON West 2005 (July 12-14) at the Yerba Buena Center for the Performing Arts in San Francisco.

"Safe Harbor" Statement Under the Private Securities Litigation Reform Act of 1995:

Statements included or incorporated by reference in this press release that are not purely historical are forward-looking statements within the meaning of federal securities laws, including statements regarding (i) the capabilities and performance of the INOVA NExT; (ii) continuing market momentum in the PVD business; (iii) the expectation of tripling the number of 300 mm INOVA customers; (iv) the potential for iALD technology beyond 45 nm; (v) PVD market forecasts for 2005; (vi) aluminum and other applications' transition to INOVA NExT; and (vii) Novellus' ability to meet manufacturers' copper and aluminum needs at and beyond 45 nm. Forward-looking statements involve risks and uncertainties, including, but not limited to technical or operational difficulties precluding the optimal performance of INOVA NExT; an unanticipated downturn in demand for PVD systems; the introduction of PVD systems competitive with or superior to INOVA; technical difficulties that preclude or make prohibitive the use of iALD technology beyond 45 nm; the inaccuracy of the bases for [copper/barrier seed systems or PVD] forecasts; difficulties with the design, production or operation of INOVA NExT that delay aluminum and other applications' transition; and the inadequacy of the INOVA NExT suite for anticipating or responding effectively to manufacturers' copper and aluminum needs beyond 45 nm, as well as other risks indicated in our filings with the Securities and Exchange Commission (SEC). Actual results could differ materially. We do not assume, and expressly disclaim, any obligation to update this information. For more details, please refer to our SEC filings, including our Annual Report on Form 10-K for the year ended December 31, 2004, our Quarterly Report on Form 10-Q for the quarter ended April 2, 2005, and our Current Reports on Form 8-K filed or furnished April 7, 2005, April 18, 2005, April 29, 2005, and May 5, 2005.

About Novellus:

Novellus Systems, Inc., an S&P 500 company, manufactures, markets and services advanced deposition, surface preparation

and chemical mechanical planarization equipment for today's advanced integrated circuits. Our products are designed for high-volume production of advanced, leading-edge semiconductor devices at the lowest possible cost. Headquartered in San Jose, Calif., with subsidiaries throughout the United States, as well as in the United Kingdom, France, Germany, the Netherlands, Ireland, Italy, Israel, India, China, Japan, Korea, Malaysia, Singapore and Taiwan, we are a publicly traded company on the Nasdaq stock exchange (Nasdaq: NVLS) and a component of the Nasdaq-100 Index®. Additional information about Novellus is available on our home page at www.novellus.com.

INOVA is a registered trademark and NExT is trademarked by Novellus Systems, Inc.

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