NOVELLUS EXTENDS COPPER BARRIER/SEED ROADMAP WITH ACQUISITION OF ALD TECHNOLOGY FROM ANGSTRON SYSTEMS

SAN JOSE, Calif., April 12, 2004--Novellus Systems, Inc. (Nasdaq NM: NVLS), the productivity and innovation leader in advanced deposition, surface preparation and chemical mechanical planarization processes for the global semiconductor industry, has extended its copper barrier/seed roadmap with the acquisition of Santa Clara, Calif.-based Angstron Systems, Inc., a supplier of atomic layer deposition (ALD) technology for advanced semiconductor manufacturing. Angstron's ion-induced ALD technology will be integrated on Novellus' INOVA xT platform, boosting the market momentum of this successful platform and strengthening Novellus' copper barrier/seed product portfolio for advanced technology applications.

As semiconductor device geometries shrink, copper barrier and seed deposition techniques must evolve to address the challenges associated with small features and the integration of low-k dielectrics. Novellus has consistently led this technology evolution by extending Hollow Cathode Magnetron (HCM®) physical vapor deposition (PVD) technology from 180 nm down to 65 nm. The HCM PVD technology on the company's INOVA xT copper barrier/seed system has been well received at leading device manufacturers and foundry customer sites worldwide and continues to show promise for extendibility to future process nodes.

Angstron's ALD TaN chamber employs a unique ion-induced ALD technique that results in a high density, ultra-thin conductive barrier film, enabling the industry to keep pace with the roadmap for copper line resistance as outlined in the International Technology Roadmap for Semiconductors (ITRS). In contrast, the less dense films resulting from the more traditional thermally induced ALD techniques require thicker films for good barrier integrity, which compromise line resistance, while their insulating film properties pose significant integration challenges. Additionally, Angstron's ion-induced ALD barrier is less sensitive to materials deposited in prior manufacturing process steps, thereby increasing the reliability of the device.

"As we share our customers' goal to extend HCM PVD performance, our acquisition of Angstron's ALD technology will help us provide an innovative solution to our customers' most challenging copper interconnect integration problems," said Joe Laia, vice president of Novellus' PVD Business Group. "Customer interest is high, with shipments anticipated by the fourth quarter of this year."

According to VLSI Research's President and CEO, Dan Hutcheson, "Novellus' acquisition of Angstron is well timed to coincide with the forecasted growth of the copper barrier/seed market, which today stands at $535 million. We expect to see this segment experience a compound annual growth rate of 21 percent, to reach more than $1.3 billion in 2008."

"Safe Harbor" Statement Under the Private Securities Litigation Reform Act of 1995: The statements regarding (i) Novellus' intention to integrate a TaN module built around Angstron's ALD technology on Novellus' INOVA xT platform; (ii) Novellus' belief that the integration of the TaN module on the INOVA xT platform will boost the market momentum of the INOVA xT and strengthen Novellus' copper barrier/seed product portfolio for advanced technology applications; (iii) the extendibility of HCM PVD technology on the INOVA xT copper barrier/seed system; (iv) ALD TaN's role in enabling the semiconductor equipment industry to keep pace with the ITRS roadmap for copper line resistance; (v) Novellus' belief that Angstron's ion-induced ALD barrier will increase device reliability; (vi) Novellus' expectations regarding timing of shipments; (vii) the 21 percent projected compound annual growth rate of the market for copper barrier/seed; and (viii) the amount and timing of Novellus' one-time, in-process R&D charge, as well as other matters discussed in this news release that do not concern purely historical data, are forward-looking statements. The forward-looking statements involve risks and uncertainties, including, but not limited to, unanticipated technical difficulties associated with the integration of the TaN module on the INOVA xT platform; lack of customer acceptance of the integrated Novellus/Angstron product; unanticipated problems with the extendibility of the HCM PVD technology on the INOVA xT copper barrier/seed system; ALD TaN's failure to deliver results in accordance with the ITRS roadmap for copper line resistance; greater-than-anticipated sensitivity of Angstron's ion-induced ALD barrier to materials deposited in prior manufacturing steps; slower-than-expected growth in the market for copper barrier/seed; unanticipated delays in demos and beta shipments of the integrated product; and other risks and uncertainties discussed in our filings with the Securities and Exchange Commission (SEC). Actual results could differ materially. We assume no obligation to update this information. For more details relating to risks and uncertainties that could cause actual results to differ from those anticipated in our forward-looking statements, and risks to our business in general, please refer to our SEC filings, including our Annual Report on Form 10-K for the year ended December 31, 2003.

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

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