# NOVELLUS SYSTEMS, IBM AND THE UALBANY NANOCOLLEGE ESTABLISH STRATEGIC PARTNERSHIP AT CNSE'S ALBANY NANOTECH COMPLEX

## First Program Targets Development of Photoresist Strip Processes for Advanced Computer Chip Technologies

San Jose, California, East Fishkill and Albany, New York - February 11, 2010 - Novellus Systems (NASDAQ: NVLS), IBM Corporation (NYSE: IBM) and the College of Nanoscale Science and Engineering (CNSE) today announced the establishment of a strategic partnership at CNSE's Albany NanoTech Complex targeting the development of semiconductor process solutions for 22nm and beyond nanoelectronics technologies.

The most advanced semiconductors in volume production today have 45 and 32nm circuitry, with devices at 28nm and below under development. The move to each technology generation can result in smaller, faster, more efficient chips that improve the performance of products ranging from servers to smartphones. Novellus joins the ecosystem of semiconductor companies at CNSE's Albany NanoTech Complex that are working with IBM, its technology alliance partners, and CNSE research teams to address the challenges of moving to each technology generation.

The first project under this agreement is designed to enable advanced, residue-free photoresist strip technologies for leading-edge processes for the 28nm and 22nm nodes. Photoresist stripping is a critical process step for defining the wiring in a semiconductor chip. The scope of the collaboration will encompass a range of photoresist removal processes, including high-dose implant strip (HDIS) processes that are compatible with high-k metal gate technology, and damage-free etch strip chemistry used for ultra-low-k dielectric structures.

IBM brings to the collaboration extensive semiconductor technology experience and a proven track record of technology development and manufacturing that can help accelerate development of 28nm and smaller technology dimensions. Novellus' GxT® advanced photoresist strip platform will be used at IBM's East Fishkill facility and CNSE's Albany NanoTech Complex for these new, sophisticated strip applications. Novellus has demonstrated industry-leading cleaning results on the GxT platform using specialized, non-oxidizing strip chemistries that can achieve a silicon and oxide loss of less than 0.1nm. CNSE provides world-class intellectual capital and unparalleled technological infrastructure at its Albany NanoTech Complex, the most advanced in the academic world.

"IBM is committed to working with Novellus Systems and the College of Nanoscale Science and Engineering in this newly-established technology collaboration, where our initial focus is on optimizing these advanced photoresist strip technologies for our industry-leading high-k metal gate transistor structures," said Paul Farrar, vice president of process development, IBM. "Close collaboration with equipment suppliers through the consortium of world-class companies at CNSE's Albany NanoTech is critical to bringing leading-edge technology to market for the benefit of IBM and its alliance partners."

"IBM has a long-standing reputation for developing state-of-the-art semiconductor manufacturing processes," said Tim Archer, Novellus' executive vice president of worldwide sales, marketing, and customer satisfaction. "Novellus is excited to be working with IBM and CNSE in this strategic partnership focused on advancing the science of photoresist strip and clean."

"The UAlbany NanoCollege looks forward to working in partnership with industry leaders Novellus Systems and IBM to accelerate the development and deployment of innovative technologies that will support nanoelectronics manufacturing," said Richard Brilla, vice president for strategy, alliances and consortia for CNSE. "This collaboration will enable the integration of leading-edge process and equipment technologies to help address the critical needs of industry, further demonstrating the technology leadership of IBM and its alliance partners."

About IBM:
For more information about IBM's semiconductor products and services, visit www.ibm.com/technology.

About Novellus:
Novellus' GxT photoresist strip system is designed for critical logic device manufacturing process steps that demand low silicon loss and ultra-low defectivity. 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

About CNSE:
The UAlbany CNSE is the first college in the world dedicated to education, research, development, and deployment in the emerging disciplines of nanoscience, nanoengineering, nanobioscience, and nanoeconomics. CNSE's Albany NanoTech Complex is the most advanced research enterprise of its kind at any university in the world. With over $5 billion in high-tech investments, the 800,000-square-foot complex attracts corporate partners from around the world and offers students a one-of-a-kind academic experience. The UAlbany NanoCollege houses the only fully-integrated, 300mm wafer, computer chip pilot prototyping and demonstration line within 80,000 square feet of Class 1 capable cleanrooms. More than 2,500 scientists, researchers, engineers, students, and faculty work on site at CNSE's Albany NanoTech. For more information, visit www.cnse.albany.edu.

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