## NOVELLUS SHIPS VECTOR® LED SYSTEM TO CHINA SEMILEDS

San Jose, Calif. - June 30, 2011 - Novellus Systems (NASDAQ: NVLS) today announced that it has shipped a VECTOR<sup>®</sup> plasma-enhanced chemical vapor deposition (PECVD) system to Xurui Guangdian Co., Ltd. ("China SemiLEDs"), a joint venture company in the People's Republic of China in which SemiLEDs Corporation (NASDAQ: LEDS), a leading manufacturer of high-brightness light-emitting diodes (LEDs), is a partner. The new VECTOR will be installed at the China SemiLEDs' plant in Foshan, China, and will be used for the manufacturing of SemiLEDs' MvpLED<sup>™</sup> high-efficiency LED products.

Cost-per-die and cost-per-lumen are critical factors in driving the adoption of LED technology into the mainstream lighting market. Current LED manufacturing technology is predominantly based on sapphire substrates in 2", 3" and 4" diameters. The inherently low-productivity manufacturing process used in making LEDs consumes a considerable amount of energy - on average, more than 200 kWh of electricity is spent in making a 2" sapphire wafer.

The VECTOR system has industry-leading process performance, a wide process window, and high productivity, a combination of factors which provides a lower manufacturing cost-per-die in comparison to traditional LED manufacturing solutions. With a multi-wafer carrier configuration, the VECTOR LED system is capable of handling all wafer sizes - 2", 3", 4", 6", 8" and 12" - with exceptional throughput, film quality and uniformity at each size. In contrast to a traditional PECVD reactor used in LED manufacturing, the VECTOR LED also deposits films at lower temperatures, provides better manufacturing process control and is more energy-efficient.

"The new VECTOR LED system is the LED manufacturing industry's most productive PECVD solution," said Mr. Sesha Varadarajan, senior vice president and general manager of Novellus' Electrofill and PECVD business units. "We are pleased to add VECTOR LED to the company's existing suite of products for LED manufacturing, including our process solutions for photoresist strip, descum, PVD, electroplating, and wafer polishing and thinning."

"In our continual effort to increase productivity and energy efficiencies, we will be placing the VECTOR LED system at China SemiLEDs' Foshan plant," said Mr. Marco Mora, general manager of China SemiLEDs. "Novellus' infrastructure and service capabilities in China made the selection of this vendor a very logical choice for China SemiLEDs."

## About Novellus' PECVD Technology:

The multi-station sequential processing (MSSP) architecture of Novellus' VECTOR system provides industryleading productivity coupled with superior uniformity and repeatability. More than 1,000 VECTOR systems have been installed at customer facilities around the world.

## About Novellus:

Novellus Systems, Inc. (NASDAQ: NVLS) is a leading provider of advanced process equipment for the global semiconductor and LED manufacturing industries. An S&P 500 company, Novellus is headquartered in San Jose, Calif. with subsidiary offices across the globe. For more information, please visit <u>www.novellustechnews.com</u>.

## About SemiLEDs:

SemiLEDs develops and manufactures LED chips and LED components primarily for general lighting applications, including street lights and commercial, industrial and residential lighting. SemiLEDs sells blue, green and ultraviolet (UV) LED chips under the MvpLED brand.

Novellus and VECTOR are registered trademarks of Novellus Systems, Inc.

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