

## Applied Materials' New High-Speed Process Monitoring Solution Boosts System Productivity and Fab Yield

June 22, 2006

SANTA CLARA, Calif.--(BUSINESS WIRE)--June 22, 2006--Applied Materials, Inc. today announced Applied NeXus(TM) SPC, a new diagnostic tool that performs split-second analysis of process conditions in Applied's semiconductor processing systems. Unlike any other system monitoring tools, NeXus SPC monitors critical process parameters up to 100 times per second (100Hz), combining data from multiple process and chamber sensors to create real-time patterns that immediately spotlight and track changing process conditions. For chipmakers, this critical information can increase system uptime and yield, protect wafers from process drift and enable more cost-effective maintenance schedules.

"NeXus SPC's Process-Aware(TM) diagnostic capability increases the availability of our customers' Applied Materials processing systems by providing a real-time window into their complete process environment, including factors upstream of the process chamber itself," said Manfred Kerschbaum, senior vice president and general manager of Applied Global Services. "This new productivity solution is a highly effective addition to our diagnostic software suite aimed at amplifying customers' return on their fab investment."

In addition to real-time and historical data visualization capabilities, a powerful feature of NeXus SPC is its use of Virtual Sensors(TM). These algorithms construct models from many different types of process and chamber sensors and create sophisticated alert capabilities based on users' pre-defined control limits. NeXus SPC hardware is installed in a system's factory interface and requires no additional footprint. Applied NeXus SPC is currently available on several Applied Materials processing systems, including the Applied Vantage(R) Radiance(R) Plus RTP(1), Applied Vantage RadOx(TM) RTP and Applied Centura Epi(2) systems. Additional systems will feature NeXus SPC in the future.

NeXus SPC broadens the capability of Applied Materials' existing NeXus diagnostic software family, including the Applied NeXus fab-level software platform which links hardware, process and service data from different processing systems throughout a fab. The NeXus platform leverages both existing and emerging equipment connectivity standards to enable tools and processes to utilize the high-resolution analysis required for nanomanufacturing; it can correlate data across time, across systems, and across fabrication facilities, helping customers quickly find and correct process or hardware excursions. Currently, customers employ the NeXus platform on more than 350 Applied process systems worldwide.

Applied Materials, Inc. (Nasdaq:AMAT) is the global leader in nanomanufacturing technology(TM) solutions for the electronics industry with a broad portfolio of innovative equipment, service and software products. At Applied Materials, we apply nanomanufacturing technology to improve the way people live. Learn more at www.appliedmaterials.com.

(1) RTP = rapid thermal processing; (2) Epi = epitaxial deposition

CONTACT: Applied Materials, Inc. Betty Newboe, 408-563-0647 (editorial/media) Randy Bane, 408-986-7916 (financial community)

SOURCE: Applied Materials, Inc.