



## Applied Materials Transcends the Boundaries of Traditional Wafer Inspection with New ComPlus-EV

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Single-System Solution Covers all Darkfield and Key Brightfield Applications with Unmatched Sensitivity and Throughput

Applied Materials, Inc. (Nasdaq: AMAT) breaks through the barriers of traditional wafer inspection technology with its innovative ComPlus(TM)-EV, the industry's only system that performs high-speed wafer inspection for all darkfield and key brightfield applications for 90nm production. Using proprietary Enlarged GrayField(TM) technology, this single-system solution captures up to 50 percent more defects than the previous system at speeds of up to 60 wafers per hour, enabling faster ramps and higher production yields.

"Applied Materials' innovations in imaging technology have revolutionized defect detection and clearly established our leadership in optical wafer inspection technology," said Gilad Almogy, vice president and general manager of Applied Materials' Process Diagnostics and Control Business Group. "Based on the highly successful Compass platform, the ComPlus-EV system further accelerates this momentum, transcending the boundaries of traditional darkfield and brightfield imaging to cover the widest optical inspection spectrum with one system for 90nm and beyond."

Since the introduction of Compass technology in 2000, Applied Materials has continuously increased its share of the critical wafer inspection market, with significant growth over the past two years. Market research firm Dataquest estimates the market for patterned wafer inspection systems in 2002 at \$705 million and projects it to grow to \$1.9 billion by 2005. Customers in the U.S., Taiwan and Europe have installed or ordered multiple ComPlus-EV systems.

The ComPlus-EV system solution delivers exceptional advantages in system sensitivity and throughput, as well as significant savings to customers who typically purchase multiple highly-specialized inspection tools to cover the same range of applications. Using proprietary Enlarged GrayField technology, the ComPlus-EV detects a broad range of defect types at production speeds, including the most challenging ultra-small and flat pattern defects, as well as CMP (chemical mechanical polishing) copper interconnect and photolithography process defects. The new EZSet automatic recipe creator greatly reduces recipe creation and optimization time, for higher system availability. With its embedded connectivity to the SEMVision(TM) defect review system, ComPlus-EV delivers fast time-to-data for rapid fault detection.

The ComPlus-EV can be further enhanced with the MP (Multi-Perspective) option, which extends the system's exceptional capabilities to perform additional brightfield applications, including the detection of defects in the transistor area such as STI, gate, and tungsten plug layers. The MP option expands the number of detectors and magnifications, enabling higher sensitivity to flat defects at an increased capture rate, providing significantly higher throughput and reduced cost of ownership.

Applied Materials (Nasdaq: AMAT), the largest supplier of products and services to the global semiconductor industry, is one of the world's leading information infrastructure providers. Applied Materials enables Information for Everyone(TM) by helping semiconductor manufacturers produce more powerful, portable and affordable chips. Applied Materials' web site is [www.appliedmaterials.com](http://www.appliedmaterials.com).

A photo is available at URL:

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