



Applied Materials' UVision 3 Sets Benchmark for Brightfield Inspection Sensitivity and Productivity

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SANTA CLARA, Calif.--(BUSINESS WIRE)--Nov. 26, 2007--Applied Materials, Inc. today unveiled its Applied UVision(R) 3 system, the industry's highest productivity DUV(1) Brightfield wafer inspection tool with the critical-defect detection sensitivity required for 45 nanometer (nm) FEOL(2) and immersion lithography. Delivering significant advancements to Applied's breakthrough UVision technology, this next-generation system triples the number of laser beams scanning the wafer to provide 40% faster throughput than any competitive system. Two new imaging modes extend sensitivity to 20nm, and a new flexible automatic defect classification engine enables quick access to defects of interest and faster yield learning.

"The UVision 3 system's multi-beam DUV laser architecture allows extendibility beyond the resolution limits of traditional optical inspection," said Dr. Gilad Almog, vice president and general manager of Applied Materials' Process Diagnostics and Control group. "With this enhanced system, leading-edge memory and immersion lithography manufacturers can run volume production at engineering tool sensitivity with a shorter cycle time to generate meaningful data. We have shipped multiple UVision 3 systems to leading customers where they have validated its exceptional sensitivity at groundbreaking DUV Brightfield throughputs."

By coupling unique laser DUV architecture with a sensitive photo-multiplier tube (PMT) and variable polarization, the UVision 3 system also meets the challenges of 32nm memory development. New Brightfield imaging modes, both in the illumination and collection path, address the contrast versatility required for immersion lithography. In addition, the system's innovative algorithms of high defect accuracy and stitch-to-stitch detection enable enhanced sensitivity on periphery areas, a key advantage not addressed by any other Brightfield system.

UVision 3 is an integral part of Applied Material's advanced lithography-enabling technologies for 45nm and below double patterning and advanced FEOL applications. For more information on the Applied UVision system, visit http://appliedmaterials.com/products/uvision_4.html.

Applied Materials, Inc. (Nasdaq:AMAT) is the global leader in Nanomanufacturing Technology(TM) solutions with a broad portfolio of innovative equipment, service and software products for the fabrication of semiconductor chips, flat panel displays, solar photovoltaic cells, flexible electronics and energy efficient glass. At Applied Materials, we apply Nanomanufacturing Technology to improve the way people live. Learn more at www.appliedmaterials.com.

(1) DUV=deep ultraviolet

(2) FEOL=front end of line

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