



## **Applied Materials Delivers Critical 45nm Photomask Etch Technology with New Tetra III System**

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SANTA CLARA, Calif., Apr 17, 2007 (BUSINESS WIRE) -- Applied Materials, Inc. today launched its new Applied Centura(R) Tetra(TM) III Advanced Reticle Etch, the only system that delivers the vital nanomanufacturing technology required for etching 45nm photomasks. The Tetra III controls trench depths across quartz masks to less than 10Å and reduces critical dimension (CD) loss to less than 10nm--enabling the use of alternating phase shift mask (PSM) and aggressive optical proximity correction techniques in customers' most critical device layers. The system offers virtually-zero defect, high productivity etch processes for chrome, quartz, molybdenum silicon oxynitride (MoSiON) and various new materials for next generation lithography applications.

"The Tetra III system's outstanding performance in advanced binary mask and PSM applications will be key to enabling customers' 45nm-generation and beyond mask production," said Tom St. Dennis, senior vice president and general manager of Applied Materials' Etch, Cleans, Front End and Implant Products Groups. "More than ever before, applications are proliferating as the industry explores several potential solutions for next generation lithography. With its capability to etch the entire spectrum of photomask materials, the Tetra III system is well-positioned for all applications."

The Applied Centura Tetra III system's ultra-clean and extendible platform enables customers to etch the most advanced masks with the highest yields to date. To learn more about this system, visit [www.appliedmaterials.com/products/photomask\\_etch\\_4.html](http://www.appliedmaterials.com/products/photomask_etch_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 panels, 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](http://www.appliedmaterials.com).

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