PHOTRONICS

Photronics Outlines Nano-Imprint Lithography Template Strategy

September 8, 2005
Photronics Outlines Nano-Imprint Lithography Template Strategy

BROOKFIELD, Connecticut September 8, 2005 -- Photronics, Inc. (Nasdaq:PLAB), a worldwide leader in supplying innovative imaging technology solutions for the global electronics industry, announced today that it will host a Technology Seminar on nano-imprint lithography during the Micro and Nano Engineering Conference (MNE) in Vienna, Austria on September 21, 2005. Leading researchers from ST Microelectronics, Laboratoire des Technologies de la Microélectronique - CNRS, Leica and Photronics will present their outlook on nano-imprint lithography applications, process development, metrology, electron beam lithography for template fabrication, template infrastructure development, and reticle enhancement technology (RET) options for process nodes at and beyond 45nm.

Dr. Christopher Progler, Chief Technology Officer for Photronics commented, "We have initiated a series of technology seminars within the lithography community to share accomplishments and concerns surrounding the future of mask technology and its applications. As a critical enabling technology in the successful adoption of nano-imprint lithography (NIL), Photronics is committed to taking a leadership role in cultivating the necessary template infrastructure required for NIL to realize its full potential."

Photronics began its development of nano-imprint templates in 2002 as an extension of its development efforts in Chromeless Phase Lithography (CPL) masks, Alternating Aperture Phase Shift Masks (AAPSMs) and phase masks for photonics applications. In May 2004, the Company was selected as the template technology development partner in a $36 million US government sponsored program under the National Institute of Standards and Technology - Advanced Technology Program (NIST ATP). Other participants in the program include Molecular Imprints, KLA-Tencor, Motorola Labs and the University of Texas at Austin. In addition to the NIST ATP program, Photronics also fabricated imprint templates for tool vendors and end users in the areas of photonics, light emitting diodes (LED), thin film head and a variety of emerging nano technology applications.

Dr. Progler added, "One concern with bringing nano-imprint lithography to volume production is having access to an adequate template supply. Partnerships are being established which improve Photronics' manufacturing capability. Our participation in several strategic initiatives are helping to build critical infrastructure such as process transfer, proof of concept demonstration, and template standardization."

Participants interested in attending Photronics' Technology seminar and luncheon in Vienna can request an invitation by logging onto Photronics' website at www.photronics.com, by using the contact information listed on this press release, or by directly contacting Julie Martin at jmartin@dallas.photronics.com.

Photronics is a leading worldwide manufacturer of photomasks. Photomasks are high precision quartz plates that contain microscopic images of electronic circuits. A key element in the manufacture of semiconductors and flat panel displays, photomasks are used to transfer circuit patterns onto semiconductor wafers and flat panel substrates during the fabrication of integrated circuits, a variety of flat panel displays and, to a lesser extent, other types of electrical and optical components. They are produced in accordance with product designs provided by customers at strategically located manufacturing facilities in Asia, Europe, and North America. Additional information on the Company can be accessed at www.photronics.com.

FOR FURTHER INFORMATION:
Michael W. McCarthy
VP- Corporate Communications
Photronics, Inc.
(203)775-9000
mmccarthy@brk.photronics.com