



Photronics Expands Flat Panel Display Mask Fabrication and Service Infrastructure Into Taiwan

March 21, 2005

BROOKFIELD, Connecticut March 21, 2005 -- Photronics, Inc. (Nasdaq:PLAB), a worldwide leader in supplying innovative imaging technology solutions for the global electronics industry, announced today plans to expand its flat panel display (FPD) mask capacity through the construction of a state-of-the-art FPD mask fabrication facility in Taichung, Taiwan. This new 10,100 square meter facility will service the strong growth in demand for large area mask solutions to support Taiwan's rapidly expanding flat panel display fabrication industry. Initially, the Taichung site will concentrate on Generation 6 and Generation 7 technologies, where Photronics has established itself as a strategic technology supplier through its existing FPD mask fab in Korea. Over the next three years, Photronics expects to investment approximately \$50 million in the Taichung site, depending upon market conditions. These investments will include the construction of the new FPD mask fabrication facility and all the requisite tooling to support its customers in the region.

FPD masks are fabricated much the same way as masks used in the fabrication of semiconductors. The process technologies and methodologies are nearly identical, although the mask substrate varies in size relative to the flat panel application. Currently, Generation 7 FPD masks are nearly a square meter in size, while advanced masks used to fabricate 90 nanometer semiconductors measure six by six inch squares. A set of FPD masks used to build a Generation 7 flat panel display can range between 10 to 12 individual mask levels. Whereas minimum critical dimension control is the primary concern for semiconductor mask applications, FPD masks focus on registration and overlay of each mask level within the set. Minimum critical dimensions for advanced FPD applications are approximately 800 nanometer, a feature size that is very mature by semiconductor industry standards.

Constantine "Deno" Macricostas, Chairman and Chief Executive Officer commented as to why Photronics is increasing its commitment to servicing flat panel display manufacturers. "The demand for FPD masks is growing at a compound annual growth rate that is more that three times the demand for semiconductor masks based on our own estimates. This robust growth is being driven by the move to advanced Gen 6 and Gen 7 process technologies. Based on our strong position in Korea and enhanced ability to support customers in Taiwan, I believe that we can see significant growth in our FPD revenues as the Taichung facility comes online." He added, "By entering the FPD mask market with such a total commitment, Photronics is adding diversity to its revenue base, as well as positioning the Company to grow with this new market. Furthermore, these investments enhance our ability to achieve our goal of being a \$1 billion company, at which time I would expect that FPD masks account for anywhere between 20% to perhaps as much as 30% of Photronics' revenues."

Soo Hong Jeong, PhD, President of Asia for Photronics noted, "Providing FPD mask technology and services is a natural extension of Photronics' core competency as a leading semiconductor photomask supplier in Asia. In addition to our extensive engineering expertise in providing innovative lithography solutions, we will leverage other strategic assets within our Asian infrastructure to maximize our competitive advantage. Customers will reap the rewards of such efficiency when they partner with Photronics to be their FPD mask supplier." He added, "Combined, Korea and Taiwan account for approximately 70% of the global market, which is expected to be some \$450 million based on our estimates in 2005. Over the past several years, we have established a strong FPD mask presence with the leading flat panel display providers in Korea. We believe that the superior technology and service we are supplying to our customers has enabled us to grow with them and continues to be critical in their efforts to maximize performance and reduce the overall cost of flat panel fabrication."

Integrating the Taichung facility with FPD operations in Korea is an important goal for Photronics. Mr. Jeong commented, "We have extensive experiences from which we will draw to make certain that Taichung fully supports meeting customer and shareholder expectations. Once completed, we will bring in the FPD mask engineering teams from Korea to work with the engineers and manufacturing technicians in Taichung. This will facilitate a smooth ramp and accelerate our ability to further penetrate the Taiwanese market."

Construction is expected to be completed and the Taichung site qualified for production by mid-2006. Until that time, Photronics will continue supporting the demand for FPD masks in Taiwan from its existing operations in Korea.

Photronics will be hosting its 7th Annual Analyst Meeting in San Francisco on Tuesday, March 22nd at 2:00pm local time at The Palace Hotel. Management will be discussing its FPD mask activities in detail during presentations provided by management,

which will be accessible via a webcast available by logging onto Photronics' web site at www.photronics.com/. Both the presentation from this Analyst Meeting and the slides will be archived for instant replay access until the Company reports its fiscal third quarter results in August, 2005.

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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, photomasks are used to transfer circuit patterns onto semiconductor wafers during the fabrication of integrated circuits. They are produced in accordance with circuit 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.

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