Micronic introduces Sigma7100 pattern generator and the Mix & Match concept for 130 nm photomasks

Täby, Sweden, April 23, 2001 - Micronic Laser Systems AB (Stockholmsbörsen’s Attract 40-list: MICR), a leading manufacturer of laser pattern generation equipment to the semiconductor and display industries, today introduced Sigma7100 pattern generator and the new concept, the Micronic Mix and Match solution, which is based on the unique combination of the Sigma7100 and the Omega6600 pattern generators.

“We are very pleased to announce that development of our SLM technology has progressed to the point that we now launch the Sigma7100 for 100 nm design node,” said Sven Löfquist, Micronic’s president and CEO.

The Sigma7100 is similar in many respects to a modern wafer stepper but uses an SLM as a programmable mask. The SLM is an integrated circuit with a flat, mirror-like surface located within the tool. Deep ultraviolet (DUV) light is reflected off the surface of the SLM to expose photoresist on a photomask blank on the tool’s stage, forming the pattern of the mask. The Sigma7000 product line is expected to fulfill semiconductor photomask requirements for several generations and is capable of writing photomasks for semiconductors at the 100 nm technology node and beyond.

“The new tool Sigma7100 anchors our Mix & Match pattern generation solution. The combination of the Sigma7100 and our Omega6600 laser pattern generator form a strong tandem that allows photomask shops to optimize productivity and performance by using the best combination of pattern generators to create mask sets for advanced ICs.”

The Omega6600 is the first commercially available laser pattern generator capable of writing photomask for semiconductors with design rules down to 130 nm. The tool uses a flexible imaging raster engine (FIRE) architecture, including features such as flexible grid spacing, enhanced focus control, selectable double pass, advanced data path and real-time CD correction.

Multiple types of pattern generators are required to cost-effectively produce mask sets of approximately 25 layers at the 130 nm node. Coping with the critical layers and increasing use of resolution enhancement techniques requires production tools that provide the best possible resolution, CD control and placement. A flexible Mix & Match strategy based on Micronic’s Sigma and Omega series tools offers unsurpassed productivity and performance compared to traditional solutions.

About Micronic Laser Systems AB
Micronic Laser Systems is a Swedish high-tech company engaged in the development, manufacture and marketing of a series of extremely accurate laser pattern generators for the production of photomasks. The technology involved is known as microlithography. Micronic’s systems are used by the world’s leading electronics companies in the manufacture of television and computer displays, semiconductor circuits and semiconductor packaging components.

Micronic is located in Täby, north of Stockholm and at present has subsidiaries in the United States and Japan and a service office in Taiwan. Micronic’s net sales for 2000 amounted to MSEK 704 (MSEK 213 in 1999) and the company has 304 employees. Micronic maintains a web site at: http://www.micronic.se