SAN JOSE, Calif., May 27, 2003—KLA-Tencor (NASDAQ: KLAC) today announced that Tower Semiconductor (NASDAQ: TSEM, TASE: TSEM) has installed its Klarity ACE fab-wide yield analysis software to help accelerate the ramp-up of Tower's 0.18-micron aluminum CMOS process technology and 0.13-micron copper CMOS process technology at its Fab 2 facility in Migdal Haemek, Israel.

By integrating Klarity ACE into its fab network, Tower will be able to monitor yields on its customers' products throughout the integrated circuit (IC) fabrication process, and more easily share performance and reliability data with its customers. This will enable process issues to be identified and resolved quickly. In addition to accelerating the production-ramp of advanced semiconductor processes, Klarity ACE will enable Tower and its customers to predict yields on future wafer runs with greater accuracy. This will help to ensure that the production goals of Tower's customers are met, as well as help to optimize their inventory management and materials flow planning.

"In making Fab 2 into a state-of-the-art facility, our goal is to have the leading-edge process technologies and services needed to accelerate our customers' advanced designs into production," stated Erez Taoz, Tower's vice president and Fab 2 general manager. "With the automated data exchange utility in KLA-Tencor's Klarity ACE software, critical IC performance data can be shared with our customers—providing them with better transparency to the fab to enable faster ramp-up, reliable and real-time data transfer, and effective communication."

Klarity ACE collects data from all sources throughout the fab and test floor—including process equipment, defect and parametric control systems, as well as the facility environment itself—and incorporates it into a centralized database that is available to every fab engineer. With these unique capabilities, Klarity ACE enables defect and yield engineers, as well as process and integration teams, to conduct advanced root-cause analysis and data mining, thereby improving yield prediction and achieving faster yield learning.

"Having the ability to monitor and accurately predict yields throughout the IC fabrication process is critical to meeting chipmakers' extremely narrow time-to-market windows," stated Dr. Ellis Chang, vice president of marketing for KLA-Tencor's Defect and Yield Solutions Division. "Even a yield loss of only a few percent in a modern, high-volume production fab can cost millions of dollars annually from a chip manufacturer's bottom-line profitability. With this integrated fab-wide solution, our customers can significantly improve the implementation of their excursion control methodologies and advanced systematic limited yield modeling—both of which are essential to accelerating their yield learning and improving production success on their advanced IC designs."

Klarity ACE is the industry's leading root-cause and yield-analysis software, with an installed base of more than 40 fabs—including more than 95 percent of all foundries and the majority of 300-mm fabs—as well as more than 30 fabless semiconductor companies.

About Tower Semiconductor: Tower Semiconductor Ltd. is a pure-play independent wafer foundry established in 1993. The company manufactures integrated circuits with geometries ranging from 1.0 to 0.18 microns; it also provides complementary manufacturing services and design support. In addition to digital CMOS process technology, Tower offers advanced non-volatile memory solutions, mixed-signal and CMOS image-sensor technologies. To provide world-class customer service, the company maintains two manufacturing facilities: Fab 1 has process technologies from 1.0 to 0.35 microns and can produce up to 20,000 150-mm wafers per month. Fab 2 features 0.18-micron and below process technologies, including foundry-standard technology, and will offer full production capacity of 33,000 200-mm wafers per month. The Tower Web site is located at http://www.towersemi.com

About KLA-Tencor: KLA-Tencor is the world leader in yield management and process control solutions for semiconductor manufacturing and related industries. Headquartered in San Jose, Calif., with operations around the world, KLA-Tencor ranked #6 on S&P's 2002 index of the top 500 companies in the U.S. KLA-Tencor is traded on the Nasdaq National Market under the symbol KLAC. Additional information about the company is available on the Internet at http://www.kla-tencor.com

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