

## KLA-Tencor Enhances New PROLITH 10 Lithography Optimization Product With Advanced OPC Exploration Capability for 32nm Designs

SAN JOSE, Calif .-- (BUSINESS WIRE)--

KLA-Tencor (NASDAQ:KLAC) today introduced the latest version of its industry-leading PROLITH lithography optimization product, PROLITH 10, enabling users to accurately predict lithography process windows for integrated circuit (IC) designs down to 32nm. With the predictive accuracy of PROLITH 10, customers have already cut costly experimental lithography wafer runs by up to half, as well as dramatically reducing cycle time to production and speeding time to market.

"Our customers find that it is virtually impossible to develop a lithography recipe for 32nm designs without an accurate understanding of the impact of OPC (optical proximity correction) on the design," noted Edward Charrier, vice president and general manager of KLA-Tencor's Process Analysis Division. "PROLITH 10 combines the industry's most comprehensive lithography simulation with a powerful OPC engine so users can incorporate production-quality OPC effects into lithography process development. For the first time, development groups can utilize on-the-fly exploration modeling to confidently design for the most aggressive - or most cost effective - OPC, knowing that they can quickly and accurately predict production results before a mature process is available."

PROLITH's predictive capabilities have continuously advanced as the industry has embraced OPC to solve its sub-wavelength challenges. As a result, PROLITH is the most trusted tool on the market and is used in the lithography development of leading edge processes by virtually every chipmaker around the world, including early development of the 32nm node. The latest version of PROLITH enables detailed, predictive model-based OPC, with next-generation shape definition, for immersion lithography-based designs; this provides design for manufacturing (DFM) insight early in the development cycle. Making on-the-fly tradeoffs between process and OPC application, or "co-optimization" of OPC and process, is now possible using PROLITH 10.

Used as a virtual lithography cell, PROLITH 10 offers designers and process engineers powerful, predictive accuracy to quickly experiment with a wide variety of lithography process and OPC conditions and corrections, even before resists or scanners or other tools are available for a new node. The resulting well-defined lithography process windows can dramatically accelerate time to market by eliminating months of laborious experimentation to achieve optimum lithography conditions.

In addition to IC fabs, PROLITH is used by scanner suppliers, mask makers, resist suppliers

and other lithography tool manufacturers to cost-effectively characterize and develop their products. KLA-Tencor is the only vendor to offer a large library of expertly calibrated photoresist files that customers can use to quickly focus OPC results on specific process conditions; this library is updated continuously for newly available resists.

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, California, the Company has sales and service offices around the world. An S&P 500 company, KLA-Tencor is traded on the NASDAQ Global Select Market under the symbol KLAC. Additional information about the Company is available at <a href="http://www.kla-tencor.com">http://www.kla-tencor.com</a>.

Source: KLA-Tencor, Inc.