



Toshiba Corporation Selects Applied Materials' Predictive Scheduling Solution to Boost Lithography Efficiency

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SANTA CLARA, Calif., September 27, 2011 - Applied Materials, Inc. today announced that semiconductor and storage products company [Toshiba Corporation](#) has purchased Applied's [SmartSched](#)® predictive scheduling software to improve the capacity and efficiency of its [photolithography](#) operations. Installation of the first phase of this breakthrough software solution began in August at Toshiba's Fab 4 facility in Yokkaichi, Japan - currently one of the world's largest 300mm "mega fab" chip production factories.¹

"Unlocking litho capacity was identified as a critical step in increasing output in our manufacturing operations," said Masanori Morikawa, senior manager of manufacturing engineering at the Toshiba Yokkaichi Operation. "We selected Applied's SmartSched solution because it offers the quickest, most cost-effective route to optimize throughput and reduce cycle time, focusing first on lithography steps. We plan on working with Applied to extend SmartSched capability to meet additional Toshiba production requirements so we can improve output and equipment utilization in multiple areas of our manufacturing operations."

"SmartSched software is like the ultimate efficiency expert - addressing one of the industry's biggest issues: managing lot movement to maximize the utilization of each tool," said Charlie Pappis, group vice president and general manager of [Applied Global Services](#). "We're extremely pleased to be able to help a technology leader such as Toshiba increase the return on their existing lithography assets. We believe that all 300mm fabs can benefit significantly from our SmartSched software solution, extending beyond litho to other bottleneck tool areas of a factory. SmartSched software aligns very well with a key objective in the [ITRS roadmap](#) to reduce wafer cycle time."

Applied's SmartSched software is the industry's first and only commercially available predictive scheduling solution for optimizing the movement of wafers through the litho cell - considered to be the most complex and capital intensive area of the fab and a frequent bottleneck in production. It is also an area where costs are expected to continue to rise with growing device complexity. SmartSched uses proprietary predictive algorithms to help customers optimize litho tool time, converting underutilization into expanded capacity. Greater litho tool utilization also means that customers can potentially delay or avoid the purchase of new equipment - providing a significant return on their SmartSched software investment.

The SmartSched system is built on Applied's proven Advanced Productivity software platform that includes capacity planning, scheduling, dispatching and simulation technologies that are used by virtually every leading 300mm fab worldwide. Together, they form a unique, integrated solution for optimum manufacturing operations based on highly accurate planning processes. For more information on Applied's comprehensive range of real-time decision-making products, visit www.appliedmaterials.com/software-semi.

Applied Materials, Inc. (Nasdaq:AMAT) is the global leader in providing innovative equipment, services and software to enable the manufacture of advanced semiconductor, flat panel display and solar photovoltaic products. Our technologies help make innovations like smartphones, flat screen TVs and solar panels more affordable and accessible to consumers and businesses around the world. At Applied Materials, we turn today's innovations into the industries of tomorrow. Learn more at www.appliedmaterials.com.

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¹ SEMI 2011 World Fab Forecast

[The Applied SmartSched predictive scheduling software](#)

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