

## 65nm Revolution: Applied Materials Leads the Semiconductor Equipment Industry

July 11 2004

Applied Materials, Inc. showcased the industry's largest portfolio of 65nm chip manufacturing systems at SEMICON West, with a full complement of transistor, interconnect and inspection solutions for fabricating next-generation devices. Using technology that creates circuits less than half the size of those used in today's chips, these systems are ready to revolutionize the digital world by enabling feature-packed, future-ready devices with up to twice the number of transistors to power the portable intelligence of tomorrow.

To extend Moore's Law to 65nm and beyond -- and deliver the vast new capabilities of the digital age -- chipmakers can no longer rely on just shrinking chip dimensions. The industry depends on major innovations in materials and manufacturing technologies to overcome this significant challenge.

"Customers are turning to Applied Materials for the breakthrough manufacturing solutions needed to build their challenging 65nm designs," noted Mike Splinter, president and CEO of Applied Materials. "Speed, performance and innovation are driving the digital age. Working together, our process equipment and defect reduction teams put us on the fast track of 65nm product evelopment to deliver systems that enable our customers' success. No other company in the industry can ombine this powerful multi-disciplinary approach to developing new technology."

Just a few of Applied Materials' breakthrough 65nm technologies being



highlighted at SEMICON West are the Applied Quantum(TM) X, a new single-wafer high current ion implanter, the Applied Reflexion LK Ecmp(TM), a revolutionary electro-chemical mechanical planarization system that removes copper from the wafer with electric charge, and the Applied Producer(R) HARP gap-fill system for enhanced transistor performance. The company also revealed its resolution strategy which harnesses the combined power of Applied's process systems with its metrology and inspection capabilities to resolve 65nm yield challenges.

From building the fastest transistors and copper/low k interconnect wires -- to inspecting the smallest chip dimensions -- to providing innovative fab services -- Applied Materials is leading the industry in the 65nm revolution.

For more information please visit <a href="www.appliedmaterials.com/">www.appliedmaterials.com/</a>

Citation: 65nm Revolution: Applied Materials Leads the Semiconductor Equipment Industry (2004, July 11) retrieved 10 April 2024 from <a href="https://phys.org/news/2004-07-65nm-revolution-materials-semiconductor-equipment.html">https://phys.org/news/2004-07-65nm-revolution-materials-semiconductor-equipment.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.