



## UMCi Selects Applied Materials' Transistor Fabrication Systems for Volume Production

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SANTA CLARA, Calif.--(BUSINESS WIRE)--Jan. 12, 2004--

Integrated Gate Stack, RTP and LPCVD Nitride Systems to Enable  
90nm Volume Production at Singapore's Pioneer 300mm Foundry

Applied Materials, Inc. (Nasdaq:AMAT) has received an order from Singapore's UMCi foundry for a multi-system suite of advanced transistor fabrication technologies for 300mm volume production. Systems include the Applied Centura(R) DPN(TM) (decoupled plasma nitridation) system, the Applied Vantage(TM) Radiance(TM)Plus RTP (rapid thermal processing) system, and the Applied Centura SiNgen(TM) LPCVD system for 130nm and 90nm production. The systems were shipped in the fourth calendar quarter of 2003 and will be used to manufacture logic chips.

Mr. Chris Chi, President of UMCi said, "Applied Materials' ability to supply fully optimized and integration-ready technologies for our most advanced transistor applications is a key reason for our decision to purchase these systems. Our evaluation of each individual process technology demonstrated their process performance, productivity and multi-generational extendibility to below 90nm, helping us to select these systems for our critical current and future transistor fabrication processes. As we aggressively move our production toward the 90nm device node, having Applied Materials' enabling, extendible transistor fabrication capability is critical to maintaining the highest performance and yield."

"UMCi is aggressively implementing advanced and extendible technologies for its push to 90nm production, and we are working closely with them and their chipmaker customers on a variety of key manufacturing and transistor technology challenges," said Dr. Randhir Thakur, Vice President and General Manager of Applied Materials' Front End Products group. "We are delighted with their choice of our transistor systems for addressing their critical development and manufacturing requirements."

The 300mm Applied Centura DPN system integrates multiple process technologies on a single platform to provide chipmakers with the exceptional precision and process control needed for the complex transistor gate fabrication sequence. In addition to its industry leading DPN plasma nitridation chamber, the system features the Radiance RTP chamber for gate oxidation and post-nitridation anneal, as well as the Polygen LPCVD chamber for poly electrode deposition.

The Applied Vantage Radiance RTP system was introduced in 2002 with a streamlined architecture aimed at reducing cost of ownership for spike anneal, salicidation and other anneal applications. The RadiancePlus RTP chambers build on the company's proven Radiance RTP technology to provide enhanced within-wafer uniformity and repeatability for spike anneals while maintaining precise control of dopant activation and electrical performance in ever-smaller transistor structures.

The Applied Centura SiNgen LPCVD system is an advanced single-wafer system for silicon nitride deposition. Its low thermal budget, high throughput and reduced cycle time offer key benefits over batch furnaces when used with 130nm and below devices.

Applied Materials (Nasdaq:AMAT) is the largest supplier of products and services to the global semiconductor industry. Applied Materials' Web site is <http://www.appliedmaterials.com>.

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