



## Applied Materials Extends Leadership Position in Epitaxy

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SANTA CLARA, Calif.--(BUSINESS WIRE)--June 8, 2005--Applied Materials, Inc. gained significant market share for its epitaxial deposition systems in calendar 2004, increasing its leadership position by 4.5% to 53% of the overall epi market, according to Gartner Dataquest's April 2005 report.(1) The Applied Centura(R) Epi system continues to be the industry standard in epi with over 400 systems shipped to customers worldwide. These systems cover a broad spectrum of applications, from silicon wafer manufacturing to leading-edge selective epi-based strain engineering solutions for high-performance transistor designs.

"In addition to our leadership in epi wafer manufacturing, Applied Materials' advanced strain engineering development work with chip manufacturers has demonstrated the capability of our epi systems to significantly increase transistor speeds without the need to shrink the scale of the device," noted Dr. Randhir Thakur, group vice president and general manager of Applied Materials' Front End Products Group. "These device improvements have opened up new markets for our systems as customers implement additional transistor-level epi steps for the 65nm-generation and beyond, where innovative epi technology can offer a key performance advantage."

The Applied Centura RP Epi reduced pressure system delivers a robust, reliable, selective epitaxial process for recessed and elevated source/drain structures and other emerging applications. Beginning at 65nm, transistor power dissipation and electrical leakage make it extremely difficult to increase drive current -- a key indicator of chip speed. By selectively growing an epitaxial layer of SiGe to induce a compressive stress within the source/drain region, the Centura RP Epi system can enhance drive current because electrons flow through strained silicon with less resistance.

At the IEDM 2004(2) Conference, Applied Materials reported that the Applied Centura RP Epi system's selective epi SiGe technology enabled transistor drive current improvements of over 65% in 65nm transistor designs. Applied Materials' technologists are working closely with chipmakers and other development partners around the world to optimize and extend this performance-boosting technology to make it available for a wide range of advanced chip designs. Shipments of the Applied Centura RP Epi system for these advanced applications have been accelerating as chipmakers implement the benefits of selective epi to improve device performance and yield.

**Forward-Looking Statements.** This press release contains forward looking statements, including those related to Applied Materials' technological leadership, product capabilities, strategic position and opportunities. These statements are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements, including but not limited to: the sustainability of demand in the semiconductor and semiconductor equipment industries, which is subject to many factors, including global economic conditions, business spending, consumer confidence, demand for electronic products and semiconductors, and geopolitical uncertainties; the timing, rate, amount and sustainability of capital spending for new technology, such as 300mm and sub-100 nanometer applications; the company's ability to successfully develop, deliver and support a broad range of products and services and expand its markets; and other risks described in Applied Materials' Forms 10-K, 10-Q and 8-K. All forward-looking statements are based on management's estimates, projections and assumptions as of the date hereof and the company undertakes no obligation to update any forward-looking statement.

Applied Materials, Inc. (Nasdaq:AMAT), headquartered in Santa Clara, California, is the largest supplier of equipment and services to the global semiconductor industry. Applied Materials' web site is [www.appliedmaterials.com](http://www.appliedmaterials.com).

(1) "Wafer Fab Equipment Market Share Reshuffled in Boom of 2004," Dean Freeman, Mark Stromberg, Klaus Rinnen, Bob Johnson, Takashi Ogawa; Gartner Dataquest Report April 1, 2005

(2) 2004 IEEE International Electron Devices Meeting, San Francisco, CA

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