

Applied Materials Delivers Advanced Solutions for Flash Memory Chip Manufacturing

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SANTA CLARA, Calif., Dec 06, 2005 (BUSINESS WIRE) -- Applied Materials, Inc. has expanded its portfolio of advanced manufacturing systems to help customers meet the burgeoning demand for Flash and DRAM memory chips. Two products introduced today, the Applied CVD Al(1) and Applied Centura(R) AdvantEdge(TM) Metal Etch systems, are at the forefront of the company's advanced memory technologies. These systems are helping chip makers extend the cost-efficiency and yield benefits of aluminum interconnect technology, while raising chip density and performance to new levels and propelling the exciting digital consumer products of the future.

Small, high-capacity consumer electronics and embedded software devices have created a surging demand for memory chips, making it the most dynamic sector in the semiconductor industry. According to market researcher Gartner Dataquest, sales of Flash memories grew at a combined annual growth rate of 23% between the year 2001 and 2004, and are forecast to grow to approximately \$20 billion by 2006. On a megabyte-equivalent basis, 2006 production is expected to more than double over 2005.

"The Flash chip market provides a significant opportunity for Applied Materials to deliver advanced, cost-efficient processing technology to support its customers worldwide," said Dr. Farhad Moghadam, senior vice president and general manager of Applied Materials' Thin Films Group. "Flash chipmakers require technology that can support rapid device scaling, provide maximum productivity and enable low-cost manufacturing. Applied Materials is the only company that offers a wide range of world-class solutions encompassing transistor and capacitor fabrication as well as both aluminum and copper interconnects to meet these demanding requirements."

In addition to the products announced today, Applied Materials' portfolio of advanced Flash and DRAM technologies includes the Applied Producer(R) HARP(TM) CVD system that meets the stringent gap-fill requirements for 70nm and below STI(2) and PMD(3) applications. Another key technology is the Applied Vantage(R) Radox(TM) system that reduces device leakage and improves oxide reliability by an order of magnitude over traditional batch systems -- enabling the critical oxidation steps needed for Flash processing.

Applied Materials, Inc. (Nasdag: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

- (1) CVD = chemical vapor deposition Al = aluminum
- (2) STI = shallow trench isolation
- (3) PMD = pre-metal dielectric

SOURCE: Applied Materials, Inc.

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