

Applied Materials Advances Transistor Silicide Technology with Applied Endura ALPS Ni PVD

May 17, 2004

SANTA CLARA, Calif.--(BUSINESS WIRE)--May 17, 2004--Applied Materials, Inc. (Nasdaq:AMAT) today introduced its Applied Endura(R) ALPS(R) Ni PVD system, the industry's most advanced gate silicide technology. The ALPS Ni (nickel) process provides customers with a 20-50% reduction in resistivity at 40nm linewidths and a higher quality silicide than current materials -- meeting the critical requirements to enable 65nm and below transistor performance. Providing greater than 50% bottom coverage in 2.5:1 aspect ratio features with sub-100 angstrom films, the ALPS Ni process delivers a low leakage interface with up to 2x reduction in silicon consumption compared to conventional silicide processes.

"The Applied Endura ALPS Ni system takes PVD well into the 65nm generation and beyond for critical transistor applications with the reliability and flexibility customers require for high-volume production," said Dr. Fusen Chen, vice president and general manager of Applied Materials' Copper, PVD and Integrated Systems Group. "PVD is already the silicide process technology of choice for 130nm and 90nm devices, and it is becoming more important with each new generation as the simplest and most cost-effective solution."

Applied Materials is the industry leader in gate silicide technology and the only company with PVD systems that support such a wide range of process technologies, from front-end, to interconnect and packaging applications.

The ALPS Ni system is available for 200mm and 300mm wafer processing on both the Endura and recently introduced Endura2 platforms. The Endura2 features a new modular architecture that emphasizes reliability, serviceability and overall equipment efficiency for 300mm high-volume manufacturing.

Multiple Applied Endura ALPS Ni systems have been shipped to customers in the U.S., Taiwan and Japan; additional systems are scheduled for shipment to customers in the U.S., Japan, China, Taiwan and S.E. Asia by the end of 2004.

Applied Materials, Inc. (Nasdaq:AMAT) is the largest supplier of equipment and services to the global semiconductor industry. Applied Materials' web site is www.appliedmaterials.com.

*PVD: physical vapor deposition

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SOURCE: Applied Materials, Inc.