TSMC to Take Delivery of an ASML EUV Lithography System for Research and Development on Future Technology Generations

Agreement underscores TSMC’s continuing investment in the European semiconductor community

Veldhoven, the Netherlands and Hsinchu Taiwan, R.O.C. — February 22, 2010 — ASML Holding NV (ASML) today announced that Taiwan Semiconductor Manufacturing Company (TWSE: 2330, NYSE: TSM) will take delivery of a TWINSCAN NXE:3100 extreme ultra-violet (EUV) lithography system. This tool represents one of six NXE:3100 EUV systems for ASML’s worldwide partners and customers.

TSMC is expected to be the first dedicated foundry conducting on-site EUV development and will install the new system on its Fab 12 GigaFab™ for development of future technology nodes.

EUV technology employs a much shorter wavelength and has the potential to reduce costs associated with current techniques used to stretch 193-nm immersion lithography, making it a promising lithography technology for manufacturing IC’s for future advanced technology nodes. TSMC is evaluating EUV and other lithography technologies for their potential to optimize cost-effective manufacturing at future technology nodes.

“TSMC will use a TWINSCAN NXE:3100 for research and development of future advanced technology nodes,” said Dr. Shang-yi Chiang, TSMC Senior Vice President of Research & Development. “EUV is one of next-generation lithography technologies we are investigating. Working with this system is in line with our objective of maintaining advanced technology leadership. At the same time, this agreement reinforces our historic commitment to investing in the innovative European semiconductor community which,
through ASML and others, will play a pivotal role in our process technology development in the future.”

“With an NXE:3100 for TSMC, ASML is now providing EUV systems to all major segments of the chip making industry: Logic, DRAM and NAND flash memory, and Foundry,” said Martin van den Brink, ASML’s executive vice president and chief product & technology officer. “We look forward to continuing our long relationship with TSMC by providing them the best possible technology for making the chips of tomorrow.”

About TSMC
TSMC is the world’s largest dedicated semiconductor foundry, providing the industry’s leading process technology and the foundry’s largest portfolio of process-proven libraries, IPs, design tools and reference flows. The Company’s managed capacity in 2009 totaled 9.96 million (8-inch equivalent) wafers, including capacity from two advanced 12-inch GIGAFABs™, four eight-inch fabs, one six-inch fab, as well as TSMC’s wholly owned subsidiaries, WaferTech and TSMC China, and its joint venture fab, SSMC. TSMC is the first foundry to provide 40nm production capabilities. Its corporate headquarters are in Hsinchu, Taiwan. For more information about TSMC please visit http://www.tsmc.com.

About ASML
ASML is the world's leading provider of lithography systems for the semiconductor industry, manufacturing complex machines that are critical to the production of integrated circuits or chips. Headquartered in Veldhoven, the Netherlands, ASML is traded on Euronext Amsterdam and NASDAQ under the symbol ASML. ASML has more than 6,500 employees (expressed in full time equivalents), serving chip manufacturers in more than 60 locations in 15 countries. More information about our company, our products and technology, and career opportunities is available on our website: www.asml.com