# Fujitsu Microelectronics and TSMC to Collaborate on 28nm Process Technology

**Tokyo and Hsin-chu, Taiwan, August 27, 2009** - Fujitsu Microelectronics Limited and Taiwan Semiconductor Manufacturing Company, Ltd. (TWSE: 2330, NYSE: TSM) today announced that they have agreed to collaborate on 28-nanometer (nm) process technology targeted for foundry production of Fujitsu Microelectronics' 28nm logic ICs and to jointly develop an enhanced 28nm high-performance process technology by utilizing TSMC's advanced technology platform. Previously, both companies announced that Fujitsu Microelectronics will collaborate with TSMC on 40nm production. This will extend Fujitsu Microelectronics' 40nm collaboration with TSMC and covers joint development of an optimized 28nm high-performance process technology. Initial 28nm samples are expected to ship toward the end of 2010.

This collaborative effort combines Fujitsu Microelectronics' expertise and strength in advanced high-speed process and low-power design technologies with TSMC's expertise and strength in power-efficient high-performance logic/SoC process and leading-edge technology platform that is part of the Open Innovation Platform<sup>™</sup> from TSMC. Extending the collaboration to 28nm will provide the opportunity for both companies to capitalize on a competitive and high-performance 28nm technology based on TSMC's 28nm technology portfolio that includes high-performance and low-power applications.

The two companies are also discussing possibilities for collaborating on advanced packaging that could include joint developments that combine Fujitsu Microelectronics' strengths in high-performance lead-free and ultra-high-pin count packaging technologies, with TSMC's strength in chip-package integration and advanced Cu/ELK interconnect.

"We are rapidly progressing in our previously-announced collaboration with TSMC on 40nm process technology, with several product designs in progress at present", said Haruyoshi Yagi, Corporate Senior Vice President of Fujitsu Microelectronics Limited. "With this further agreement with TSMC on 28nm high-performance process technology development and production, we combine both companies' strengths to create greater value for our customers, and will further drive the growth of businesses for TSMC and Fujitsu's ASIC and ASSP (\*1) core products."

"Fujitsu Microelectronics selected TSMC as a partner based in part on TSMC's unsurpassed record of developing and ramping advanced technologies. The agreement today is also a vote of confidence in TSMC's technology platforms that include design related considerations such as design kits, design flows, TSMC and 3<sup>rd</sup> party IP; robust device related documentation, processes technology excellence and backend assembly and test capabilities," said Jason Chen, Vice President, Worldwide Sales and Marketing, TSMC.

#### Notes:

#### \*1: ASIC and ASSP

ASIC: Application specific IC. Customized ICs for specific applications (customers). ASSP: Application specific standard product. IC products for specific applications, such as image processing and network-related processing.

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# About Fujitsu Microelectronics Limited (FML)

Fujitsu Microelectronics Limited designs and manufactures semiconductors, providing highly reliable, optimal solutions and support to meet the varying needs of its customers. Products and services include ASICs/COT, ASSPs, power management ICs, and flash microcontrollers, with wide-ranging expertise focusing on imaging, wireless, automotive and security applications. Fujitsu Microelectronics also drives power efficiency and environmental initiatives. Headquartered in Tokyo, Fujitsu Microelectronics Limited was established as a subsidiary of Fujitsu Limited on March 21, 2008. Through its global sales and development network, with sites in Japan and throughout Asia, Europe, and the Americas, Fujitsu Microelectronics offers semiconductor solutions to the global marketplace. For more information: http://jp.fujitsu.com/fml/en/

### **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 total managed capacity in 2008 exceeded 9 million (8-inch equivalent) wafers, including capacity from two advanced 12-inch GIGAFABs <sup>TM</sup>, 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 www.tsmc.com.

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