SMIC Deploys Synopsys HSPICE Simulator for 45-nm Physical IP and Standard Cell Development

HSPICE 2009.03 Delivers 2x Speed-up and Improved Silicon Correlation

MOUNTAIN VIEW, Calif., June 2/ PRNewswire-Firstcall/ -- Synopsys, Inc. (NASDAQ: SNPS), Synopsys, Inc. (NASDAQ:SNPS), a world leader in software and IP for semiconductor design, verification and manufacturing, today announced that Semiconductor Manufacturing International Corporation (SMIC; NYSE: SMI and SEHK: 0981.HK), one of the leading semiconductor foundries in the world, has adopted Synopsys' HSPICE® circuit simulator and WaveView Analyzer for design and verification of their 65-nanometer (nm) and 45-nm IP blocks, I/O circuitry and standard cell characterization flows. Taking advantage of the innovations in the 2009.03 release of the HSPICE circuit simulator, SMIC was able to cut simulation runtime in half with improved silicon correlation over their existing solution.

"With HSPICE, we were able to run our analog IP and standard cell circuits two times faster than our existing solution," said Paul Ouyang, vice president of Design Services at SMIC. "In addition, WaveView Analyzer significantly improved our verification productivity by delivering an easy-to-use, feature-rich and high-performance waveform analysis solution. We are now able to instantly render large waveforms and run automatic specification verification functions."

"The 2009.03 release of HSPICE delivers further simulation speed improvements on both single- and multicore computer hardware while maintaining the same trusted silicon-accurate results," said Graham Etchells, director of marketing for the Analog/Mixed-Signal Group at Synopsys. "Continuing innovations in HSPICE, WaveView Analyzer and other AMS circuit simulation solutions enable foundries worldwide to accelerate development of advanced process nodes."

The HSPICE simulator is widely recognized as the "gold standard" for accurate circuit simulation and offers foundry-certified MOS device models with state-of-the-art simulation and analysis algorithms. With more than 25 years of successful design tapeouts, the HSPICE simulator is one of the fastest and most trusted circuit simulators. HSPICE is an integral component of Synopsys' Discovery™ Verification Platform, which offers high-performance functional and mixed-signal verification to enable designers to achieve the highest throughput and accuracy for complex mixed-signal system-on-chip (SoC) designs.

About Synopsys
Synopsys, Inc. (NASDAQ:SNPS) is a world leader in electronic design automation (EDA), supplying the global electronics market with the software, intellectual property (IP) and services used in semiconductor design and manufacturing. Synopsys' comprehensive, integrated portfolio of implementation, verification, IP, manufacturing and field-programmable gate array (FPGA) solutions helps address the key challenges designers and manufacturers face today, such as power and yield management, software-to-silicon verification and time-to-results. These technology-leading solutions help give Synopsys customers a competitive edge in bringing the best products to market quickly while reducing costs and schedule risk. Synopsys is headquartered in Mountain View, California, and has more than 60 offices located throughout North America, Europe, Japan, Asia and India. Visit Synopsys online at https://www.synopsys.com/.

About SMIC
Semiconductor Manufacturing International Corporation ("SMIC"; NYSE: SMI; SEHK: 981) is one of the leading semiconductor foundries in the world and the largest and most advanced foundry in Mainland China, providing integrated circuit (IC) foundry and technology services at 0.35um to 45nm. Headquartered in Shanghai, China, SMIC has a 300mm wafer fabrication facility (fab) and three 200mm wafer fabs in its Shanghai mega-fab, two 300mm wafer fabs in its Beijing mega-fab, a 200mm wafer fab in Tianjin, a 200mm fab under construction in Shenzhen, and an in-house assembly and testing facility in Chengdu. SMIC also has customer service and marketing offices in the U.S., Europe, and Japan, and a representative office in Hong Kong. In addition, SMIC manages and operates a 200mm wafer fab in Chengdu owned by Cension Semiconductor Manufacturing Corporation and a 300mm wafer fab in Wuhan owned by Wuhan Xinxin Semiconductor Manufacturing Corporation. For more information, please visit http://www.smics.com.

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