SMIC and Synopsys Announce Reference Design Flow 2.0

Latest Flow for 0.13-micron Process Offers Advanced Floor Planning, Signal Integrity and Reliability Features

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Synopsys, Inc. (NASDAQ: SNPS), a world leader in semiconductor design software, today announced that it has jointly developed reference design flow 2.0 with Semiconductor Manufacturing International Corporation (NYSE: SMI) (SEHK: 0981.HK) , the largest foundry in China. SMIC and Synopsys Professional Services worked closely on the complete RTL-to-GDSII flow, which is based on Synopsys Galaxy™ Design Platform and SMIC's advanced 0.13-micron process. The flow not only addresses deep sub-micron design challenges in 0.13-micron designs, but can also shorten time-to-market, and reduces time-to-yield.

New features in version 2.0 of the SMIC-Synopsys reference flow include advanced floor planning capabilities from Synopsys' JupiterXT™ design planning solution. Specifically, the solution's power network synthesis (PNS) and power network analysis (PNA) capabilities are used to design the power plan at the floor planning stage. Reference flow version 2.0 also features advanced signal integrity (SI) and IC reliability (IR/EM) analysis capabilities using Synopsys PrimeTime® SI, Astro-Xtalk™ and Astro- Rail™ tools. These features target electro-migration (EM) challenges that commonly cause increased resistance in power grid paths and lead to increased IR drop or ground bounce. EM also impacts timing and reliability. Finally, version 2.0 introduces voltage-drop (IR-drop) analysis, which enables the user to analyze the impacts of timing, performance, functionality and noise immunity, and features IC reliability analysis to predict mean time between failures (MTBF).

"SMIC has been providing advanced 0.13-micron CMOS processes to customers worldwide for mass manufacturing since the first half of 2004. Version 2.0 reference flow provides customers a complete and proven design solution in advanced floor planning, SI closure, and IR/EM analysis, which are important to 0.13-micron designs," said Paul Ouyang, Vice President of Design Services at SMIC. "The development of version 2.0 reference flow builds on our success and collaboration in developing the first version. We look forward to a continuing relationship with Synopsys as we move towards more advanced processes."

"SMIC and Synopsys are key technology partners of Datang Micro. The new features of the reference design flow that have resulted from their collaboration can be used by our engineers to help shorten design time and time-to-yield," said Mr. Zhao Lun, general manager of Datang Microelectronics Technology Co., Ltd. "The comprehensive process portfolio offered by SMIC, and the proven design solutions from Synopsys are critical to meet our advanced design needs."

"Working closely with SMIC has enabled us to deliver reference flows that address the advanced deep sub micron process needs of the growing Chinese market," said Rich Goldman, vice president of Strategic Market Development at Synopsys. "Synopsys will continue to work with SMIC to help ensure their customers can access a validated flow that shortens time to results for their complex ICs and systems."

Availability

Reference Design Flow 2.0 is available now. For query, please contact your SMIC account manager or mail to following address: Design_Services@smics.com.

About Synopsys

Synopsys, Inc. is a world leader in EDA software for semiconductor design. The company delivers technology-leading semiconductor design and verification platforms and IC manufacturing software products to the global electronics market, enabling the development and production of complex systems-on-chips (SoCs). Synopsys also provides intellectual property and design services to simplify the design process and accelerate time-to-market for its customers. Synopsys is headquartered in Mountain View, California and has offices in more than 60 locations throughout North America, Europe, Japan and Asia. Visit Synopsys online at http://www.synopsys.com/.

About SMIC

SMIC is one of the leading semiconductor foundries in the world, providing integrated circuit (IC) manufacturing at 0.35-micron to 0.11-micron and finer line technologies to customers worldwide. Established in 2000, SMIC has four 8-inch wafer fabrication facilities in volume production in Shanghai and Tianjin. In the first quarter of 2005, SMIC commenced commercial production at its 12-inch wafer fabrication facility in Beijing. SMIC also maintains customer service and marketing offices in the U.S., Europe, and Japan, and a representative office in Hong Kong. As part of its dedication towards providing high-quality services, SMIC

strives to comply with or exceed international standards and has achieved ISO9001, ISO/TS16949, OHSAS18001, TL9000, and ISO14001 certifications. For additional information, please visit http://www.smics.com/ .

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