SMIC and Synopsys Deliver 28-nm HKMG Low-Power Reference Flow

Collaboration Delivers Best-In-Class Power, Performance and Area with IC Compiler II

MOUNTAIN VIEW, Calif. and SHANGHAI, June 8, 2016 /PRNewswire/ --

Highlights:

- Technology advancements in the latest release of IC Compiler II deliver exceptional quality-of-results across all key metrics: Better performance, smaller area and lower power
- Speeds design setup and closure with pre-validated Synopsys Lynx Design System technology plug-in for SMIC 28-nm HKMG process

Semiconductor Manufacturing International Corporation ("SMIC"; NYSE: SMI; SEHK: 981), China's largest and most advanced semiconductor foundry and one of the world's largest foundries, and Synopsys, Inc. (NASDAQ: SNPS) today announced immediate availability of their joint 28-nanometer (nm) RTL-to-GDSII reference design flow. Developed through deep engineering collaboration between Synopsys and SMIC on the 28-nm High-K Metal Gate (HKMG) process technology, the flow is based on Synopsys' Galaxy™ Design Platform using key features from the IC Compiler™ II place and route solution, Design Compiler® Graphical synthesis, StarRC™ extraction solution, PrimeTime® signoff solution and IC Validator physical verification solution.

Already deployed on hundreds of designs, IC Compiler II addresses today's hypersensitive time-to-market needs by delivering superior quality of results and significant productivity gains with 10X faster design planning, 5X faster implementation and 2X more capacity. The reference flow features support for low-power techniques such as power-aware clock tree synthesis, power gating and physical optimization, enabled by industry standard IEEE-1801 UPF (Unified Power Format) power intent. Use of the reference flow allows designers to gain performance, power efficiency and chip density advantages while achieving predictable design closure.

The Lynx technology plug-in for the SMIC 28-nm HKMG process extends the reference flow to accelerate design setup and closure with Synopsys' Lynx Design System, a full-chip design environment providing innovative automation and visualization capabilities. This plug-in includes additional process technology information and representative flow and tool settings that help reduce the time it takes to get to optimized design results.

"Designers require a reference flow that addresses both high-performance and low-power requirements," said Tianshen Tang, senior vice president of Design Service at SMIC. "With the release of the SMIC-Synopsys 28-nanometer reference flow, we are enabling IC designers to accelerate release of their designs into manufacturing through the combination of SMIC's 28-nanometer High-K Metal Gate process technology and Synopsys' technology-leading design and IP solutions."

"Our mutual customers have always been at the forefront of innovation," said Bijan Kiani, vice president of marketing for the Design Group at Synopsys, Inc. "Through our collaboration with SMIC, we are delivering a proven high-performance, low-power reference flow and Lynx technology plug-in that utilize our industry-leading tools, including IC Complier II to accelerate design closure and tapeout readiness for SMIC's 28-nanometer manufacturing process."

Availability

The SMIC-Synopsys 28-nm Reference Flow is available now from SMIC. For more information, please visit http://www.smics.com/eng/design/reference_flows.php.

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. SMIC provides integrated circuit (IC) foundry and technology services at 0.35-micron to 28-nanometer. Headquartered in Shanghai, China, SMIC has a 300mm wafer fabrication facility (fab) and a 200mm mega-fab in Shanghai; a 300mm mega-fab and a majority owned 300mm fab under development for advance nodes in Beijing; and 200mm fabs in Tianjin and Shenzhen. SMIC also has marketing and customer service offices in the U.S., Europe, Japan, and Taiwan, and a representative office in Hong Kong. For more information, please visit www.smics.com.

Safe Harbor Statements

(Under the Private Securities Litigation Reform Act of 1995)
This press release contains, in addition to historical information, "forward-looking statements" within the meaning of the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements, including statements under "Second Quarter 2016 Guidance", "CapEx Summary" and the statements contained in the quotes of our CEO regarding our target for sustained profit, our revenue growth, continued demand strength and high utilization and our strategy to capture growth opportunities brought by specific markets and products are based on SMIC's current assumptions, expectations and projections about future events. SMIC uses words like "believe," "anticipate," "intend," "estimate," "expect," "project," "target" and similar expressions to identify forward-looking statements, although not all forward-looking statements contain these words. These forward-looking statements involve significant risks, both known and unknown, uncertainties and other factors that may cause SMIC's actual performance, financial condition or results of operations to be materially different from those suggested by the forward-looking statements including, among others, risks associated with the cyclical nature of the semiconductor industry, changes in demand for our products, competition in our markets, our reliance on a small number of customers, orders or judgments from pending litigation, intensive intellectual property lawsuits in semiconductor industry, financial stability in end markets, general economic conditions and fluctuations in currency exchange rates.

Investors should consider the information contained in SMIC's filings with the U.S. Securities and Exchange Commission ("SEC"), including its annual report on 20-F filed with the SEC on April 25, 2016, especially the consolidated financial statements, and such other documents that SMIC may file with the SEC or The Hong Kong Stock Exchange Limited ("SEHK") from time to time, including current reports on Form 6-K. Other unknown or unpredictable factors also could have material adverse effects on SMIC's future results, performance or achievements. In light of these risks, uncertainties, assumptions and factors, the forward-looking events discussed in this press release may not occur. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date stated, or if no date is stated, as of the date of this press release. Except as may be required by law, SMIC undertakes no obligation and does not intend to update any forward-looking statement, whether as a result of new information, future events or otherwise.

About Synopsys

Synopsys, Inc. (Nasdaq:SNPS) is the Silicon to Software™ partner for innovative companies developing the electronic products and software applications we rely on every day. As the world's 15th largest software company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP and is also growing its leadership in software quality and security solutions. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing applications that require the highest quality and security, Synopsys has the solutions needed to deliver innovative, high-quality, secure products. Learn more at www.synopsys.com.

Editorial Contacts:

Monica Marmie
Synopsys, Inc.
650-584-2890
monical@synopsys.com

Terry Ding
SMIC
+86-21-3861-0000 x16812
Terry_Ding@smics.com

SOURCE Synopsys, Inc.