GLOBALFOUNDRIES and Synopsys Partner To Provide Comprehensive Design Environment for Foundry's 14 nm-XM FinFET Offering

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IP and design tool flows accelerate implementation of robust non-planar architecture for mobile products

Milpitas, Calif., February 5, 2013 —GLOBALFOUNDRIES and Synopsys, Inc. (Nasdaq: SNPS), a global leader providing software, IP and services used to accelerate innovation in chips and electronic systems, today announced the two companies have partnered to deliver a comprehensive design solution to accelerate the implementation of GF's 14 nm-XM FinFET offering. The solution includes Synopsys' DesignWare® Embedded Memory and Logic Library IP; design tools from the Galaxy™ Implementation Platform; and TCAD process and device simulation tools, all optimized to enable design teams to achieve desired performance, power and area requirements in the most efficient, low-risk manner. The collaborative development is built on the industry's first modular FinFET technology, which combines a 14 nanometer (nm) FinFET device with elements of GF's 20 nm-LPM process to reduce risk and accelerate time to volume.

"We have a long-standing relationship with Synopsys that has resulted in a wide range of proven design implementation solutions for our mutual customers. The compelling benefits available through our new 14 nanometer-XM FinFET technology, particularly in addressing the requirements of mobile device SoCs, will be much more accessible and efficient to realize thanks to this latest collaboration," said Mike Noonen, executive vice president of marketing, sales, design and quality at GF. "The combination of our advanced process and Synopsys' IP, design and manufacturing tools design environment will give customers the performance and power benefits of three-dimensional FinFET transistors with less risk and a faster time-to-market."

FinFET transistors are a significant change from planar devices. GF collaborated with Synopsys on TCAD to model and simulate the changes and to speed up the process development and performance optimization of its FinFET devices. In addition, these devices and the associated shrinking of process geometry at 14nm impact parasitic extraction, SPICE modeling of the devices, routing rules, and IP development. GF and Synopsys collaborated closely to minimize the impact of these changes and ensure smooth adoption of FinFET technology by design teams. Synopsys' extensive portfolio of DesignWare® Embedded Memory and Logic Library IP is architected to achieve the full benefits of GF's 14 nm-XM FinFET technology. The IP delivers superior results in the areas of performance, leakage and dynamic power, and low voltage operation.

"Synopsys has a history of strong collaboration with GF to bring advanced process technologies to the market," said John Chilton, senior vice president, marketing and strategic development, at Synopsys, Inc. "Our collaboration on FinFET is built on this foundation. It focuses on enabling design teams to take full advantage of GF's investment in 14 nanometer process technology and the significant benefits it brings to next-generation semiconductor designs."

About 14 nm-XM

The 14 nm-XM offering is based on a modular technology architecture that uses a 14nm FinFET device combined with elements of GF's 20 nm-LPM process, which is well on its way to production. Technology development is already underway, with test silicon running through GF's Fab 8 in Saratoga County, N.Y. The XM stands for "eXtreme Mobility," and it is the industry's leading non-planar architecture that is truly optimized for mobile system-on-chip (SoC) designs, providing a whole product solution from the transistor all the way up to the system level. The technology is expected to deliver a 40-60% improvement in battery life when compared to today's two-dimensional planar transistors at the 20 nm node.

About GF

GF is the world's first full-service semiconductor foundry with a truly global footprint. Launched in March 2009, the company has quickly achieved scale as the second largest foundry in the world, providing a unique combination of advanced technology and manufacturing to more than 160 customers. With operations in Singapore, Germany and the United States, GF is the only foundry that offers the flexibility and security of manufacturing centers spanning three continents. The company's three 300mm fabs and five 200mm fabs provide the full range of process technologies from mainstream to the leading edge. This global manufacturing footprint is supported by major facilities for research, development and design enablement located near hubs of semiconductor activity in the United States, Europe and Asia. GF is owned by the Advanced Technology Investment Company (ATIC). For more information, visit http://www.globalfoundries.com.

About Synopsys

Synopsys, Inc. (Nasdaq:SNPS) accelerates innovation in the global electronics market. As a leader in electronic design automation (EDA) and semiconductor IP, its software, IP and services help engineers address their design, verification, system and manufacturing challenges. Since 1986, engineers around the world have been using Synopsys technology to design and create billions of chips and systems. Learn more at www.synopsys.com.