ARM, IBM, Samsung, GLOBALFOUNDRIES and Synopsys Announce Delivery of 32/28nm HKMG Vertically Optimized Design Platform

Companies demonstrate strength of collaboration at 47th DAC

SAN JOSE, California

San Jose, CA - June 14, 2010 – ARM, IBM (NYSE: IBM), Samsung Electronics, Co., Ltd., GLOBALFOUNDRIES and Synopsys, Inc (NASDAQ: SNPS) today announced the delivery of the industry's first complete vertically optimized 32/28 nanometer (nm) design platform. Demonstrating the strength of the collaboration established and announced at DAC a year ago, the companies are collectively providing a technology enablement solution for the design and manufacturing of advanced mobile and embedded devices.

The solution consists of optimized high performance, low-power processor and physical IP from ARM; tool enablement, connectivity IP and integrated design flow from Synopsys; and 32/28nm low-power process technology from the Common Platform alliance of IBM, Samsung and GLOBALFOUNDRIES. The Common Platform 32/28nm process uses an innovative high-k metal gate approach to address the limitations of polysilicon technology. It leverages the research and development efforts of the IBM joint technology development alliance to offer a high-performance, low-power manufacturing platform.
The 32nm technology is scalable to 28nm for area optimization. Customers can seamlessly transition to 28nm technology without the need for a major redesign and with lower risk, reduced cost and faster time-to-market. This complete solution demonstrates the important role industry collaboration has in addressing the increasing complexity of SoC design as technology migrates to smaller geometries. The platform leverages:

• ARM® Cortex™ high-performance, low-power processor architecture and optimized suite of physical IP including standard cells, power management kit, memory compilers and interface IP, for the 32/28nm HKMG process. The ARM IP contribution delivers valuable low-power and system cost benefits. All physical IP are readily accessible on DesignStart - http://designstart.arm.com
• Synopsys Lynx Design System, enabled by the Galaxy™ Implementation Platform with IC Validator In-Design physical verification , and the Synopsys DesignWare® portfolio of interface IP. This RTL-to-GDSII implementation solution reduces risk and total design costs for optimized 32/28nm HKMG ARM Cortex processor-based SoC designs.
• 10 test chips produced through the three-way collaboration in 32 and 28nm HKMG process technology. Producing these chips has helped validated the design platform, including Common Platform PDKs, ARM Physical IP and Cortex processors, Synopsys Interface IP, core tool enablement and design methodology for accelerating first customer silicon success.
• 32nm low-power HKMG process technology is currently factory-qualified by Samsung. 28nm low-power HKMG process technology to be factory-qualified at GLOBALFOUNDRIES and Samsung in Q1 2011. The 32/28nm process technologies, featuring the innovative Gate First approach to HKMG, offer significant improvements in performance and power consumption when compared to the 45/40nm technology generations.
• A standardized platform to manufacture 28nm low-power HKMG semiconductors for a new generation of mobile devices, providing the flexibility of multi-sourcing based on the planned synchronization of fabs by members of the Common Platform alliance.
• Demonstrations and technical sessions of this comprehensive 32/28nm enablement platform will be shown at the 2010 DAC in the ARM-Common Platform-Synopsys booth (#586) "32/28nm Delivered" exhibit. On Tuesday, June 15, the companies will host an access innovation luncheon - where executives from the five allied companies will detail the benefits of 32/28nm HKMG and the accessibility of the enablement platform. Online registration is required at:
http://www.synopsys.com/Community/Partners/CommonPlatform/Pages/DAC10CPlunch.aspx

Related announcements and additional details can be found at the following links:
• Samsung Electronics Qualifies Foundry Industry's First 32nm Low Power High-K Metal Gates Logic Process and Design Ecosystem:- http://www.samsung.com/us/business/semiconductor/newsView.do?news_id=1162
• Samsung Electronics Achieves First-Pass 32nm Silicon Success Using Synopsys Galaxy Implementation Platform:- http://synopsys.mediaroom.com/index.php?s=43&item=812
• Synopsys Delivers Optimized Lynx Design System for Common Platform 32/28-nm Technology:- http://synopsys.mediaroom.com/index.php?s=43&item=816

ABOUT ARM
ARM designs the technology that lies at the heart of advanced digital products, from wireless, networking and

consumer entertainment solutions to imaging, automotive, security and storage devices. ARM's comprehensive product offering includes 32-bit RISC microprocessors, graphics processors, video engines, enabling software, cell libraries, embedded memories, high-speed connectivity products, peripherals and development tools. Combined with comprehensive design services, training, support and maintenance, and the company's broad Partner community, they provide a total system solution that offers a fast, reliable path to market for leading electronics companies.

ABOUT THE COMMON PLATFORM
IBM, Samsung Electronics, GLOBALFOUNDRIES have forged a unique manufacturing collaboration, featuring 28nm, 32nm, 45nm, 65nm and 90nm process technologies. By combining the expertise and research resources of all three companies and leveraging advances such as high-k metal gate technology, 193nm immersion lithography and ultralow-k dielectrics, the Common Platform™ technology collaboration is able to accelerate the availability of leading-edge technology to foundry customers. The Common Platform model is supported by a comprehensive design-enablement ecosystem, enabling foundry customers to easily source their chip designs to multiple 300mm foundries with minimal design work and with unprecedented flexibility and choice.

ABOUT GLOBALFOUNDRIES
GLOBALFOUNDRIES is the world's first full-service semiconductor foundry with a truly global manufacturing and technology footprint. Launched in March 2009 through a partnership between AMD [NYSE: AMD] and the Advanced Technology Investment Company (ATIC), GLOBALFOUNDRIES provides a unique combination of advanced technology, manufacturing excellence and global operations. With the integration of Chartered in January 2010, GLOBALFOUNDRIES significantly expanded its capacity and ability to provide best-in-class foundry services from mainstream to the leading edge. GLOBALFOUNDRIES is headquartered in Silicon Valley with manufacturing operations in Singapore, Germany, and a new leading-edge fab under construction in Saratoga County, New York. These sites are supported by a global network of R&D, design enablement, and customer support in Singapore, China, Taiwan, Japan, the United States, Germany, and the United Kingdom. For more information on GLOBALFOUNDRIES, visit http://www.globalfoundries.com.

ABOUT IBM
About IBM: For more information about IBM's semiconductor products and services, visit www.ibm.com/technology.

ABOUT SAMSUNG ELECTRONICS
Samsung Electronics Co., Ltd. is a global leader in semiconductor, telecommunication, digital media and digital convergence technologies with 2009 consolidated sales of US$116.8 billion. Employing approximately 188,000 people in 185 offices across 65 countries, the company consists of eight independently operated business units: Visual Display, Mobile Communications, Telecommunication Systems, Digital Appliances, IT Solutions, Digital Imaging, Semiconductor and LCD. Recognized as one of the fastest growing global brands, Samsung Electronics is a leading producer of digital TVs, memory chips, mobile phones and TFT-LCDs. For more information, please visit www.samsung.com.

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, verification 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 65 offices located throughout North America, Europe, Japan, Asia and India. Visit Synopsys online at http://www.synopsys.com/.

Media Contacts:

Erik Ploof
ARM
+1 425-880-6033
Erik.Ploof@arm.com

Jason Gorss
GLOBALFOUNDRIES
+1 518-305-9022
jason.gorss@globalfoundries.com

Michael Corrado
IBM
1-914-766-4635
mcorrado@us.ibm.com

Lisa Warren-Plungy
Samsung Semiconductor
+1-408-544-5377
lwarrenplungy@ssi.samsung.com

Sheryl Gulizia
Synopsys, Inc.
650-584-8635
sgulizia@synopsys.com