## Synopsys Announces Complete SuperSpeed USB IP Solution Consisting of Device Controller, PHY and Verification IP

DesignWare SuperSpeed USB IP Solution Eases Integration Effort for High Performance SoC Designs

PRNewswire-FirstCall MOUNTAIN VIEW, Calif. (NASDAQ:SNPS)

MOUNTAIN VIEW, Calif., Nov. 12 /PRNewswire-FirstCall/ -- Synopsys, Inc. (NASDAQ: SNPS), a world leader in software and IP for semiconductor design and manufacturing, today announced a complete, single vendor SuperSpeed USB IP solution consisting of the DesignWare® device controller, PHY and verification IP. The solution also includes a SuperSpeed USB virtual platform and drivers to aid software development. Utilizing elements from a single vendor enables designers to quickly create SuperSpeed USB-based designs from concept through implementation and software development. As a leading provider of USB IP for nearly a decade, Synopsys is expanding its portfolio with a comprehensive, high quality DesignWare® SuperSpeed USB IP solution, helping designers lower the risk and cost of integrating the latest USB 3.0 specification into their system-on-chip (SoC) designs. Synopsys will be demonstrating the DesignWare SuperSpeed USB Device Controller at the upcoming SuperSpeed USB Developers Conference in San Jose, Calif. from November 17th - 18th, booth # 6.

Consumers are demanding higher bandwidth for faster data transfer of video, pictures and music for the next generation of camcorders, portable media players and smartphones. To address this demand, the SuperSpeed USB standard, based on the USB 3.0 specification from the USB Implementers Forum (USB-IF), delivers higher bandwidth for faster "sync-and-go" functionality between PCs and portable electronic devices. SuperSpeed USB delivers more than 10x the data transfer rate of Hi-Speed USB. For example, a 27 GB high- definition movie can be transferred from a PC to a portable device in approximately one minute utilizing a SuperSpeed USB interface, compared to 14 minutes using a Hi-Speed USB interface. SuperSpeed USB is backward compatible with previous USB technologies, offering the same ease-of-use and plug-and-play capabilities, while maintaining interoperability with existing USB products.

"Synopsys has a long and successful history in USB IP development, their contributions help drive USB standards into the marketplace," said Jeff Ravencraft, president and chairman, USB Implementers Forum. "The DesignWare SuperSpeed USB IP solution will help designers take advantage of the high bandwidth and low power benefits of SuperSpeed USB and quickly implement it into their target application."

The DesignWare SuperSpeed USB device controller and PHY IP are based on Synopsys' technology leading Hi-Speed USB products, which have been silicon- proven in hundreds of designs and are shipping in volume production. Optimized for low power, the DesignWare SuperSpeed USB device controller is designed to allow designers to maximize battery life by using dual power rails. The DesignWare SuperSpeed USB IP is delivered with lower power intent in Unified Power Format (UPF) allowing designers to use the Synopsys' Eclypse™ Low Power Solution to automatically implement aggressive power management schemes for dynamic and leakage power. The DesignWare SuperSpeed USB PHY consists of integrated high speed digital and analog blocks, PLL, and I/O pads, which are delivered as GDSII for advanced foundry processes. This saves designers considerable time, cost and the risk of acquiring and integrating the IP separately. The DesignWare SuperSpeed USB Verification IP supports all major simulators, with the added benefit of built-in support for the VMM methodology, enabling designers to quickly verify connectivity between the integrated IP and the SoC. The Linux drivers and SystemC™ transaction-level models in the DesignWare SuperSpeed USB virtual platform allow designers to begin software development in parallel with IP integration, months before hardware and FPGA prototypes are ready. This significantly reduces the product design cycle and accelerates time-to-market.

Additionally, Synopsys is collaborating with MCCI, a leading developer of USB software solutions, to provide designers with more options for software and drivers including support for device firmware, host class drivers and software customization services.

"We consider Synopsys to be the technology leader in USB IP and are continuing our successful collaboration to support the DesignWare SuperSpeed USB device controller with the MCCI USB DataPump® embedded device solution," said Terry Moore, CEO of MCCI. "Our broad range of software and services combined with the DesignWare SuperSpeed USB IP offering gives customers more time to focus on their product differentiation, and not on the development of the standardized USB software."

"As a leader in USB IP, Synopsys has the expertise to deliver and support a comprehensive and robust SuperSpeed USB IP solution," said John Koeter, vice president of the Solutions Group at Synopsys. "Designers can trust that Synopsys' high quality DesignWare SuperSpeed USB IP solution will allow them to successfully deliver innovative products incorporating SuperSpeed

USB and help meet their critical market windows."

## Availability

The DesignWare SuperSpeed USB device controller, PHY, verification IP, virtual platform, and driver IP is scheduled to be available in 2H 2009. For more information on DesignWare USB IP, please visit: http://www.synopsys.com/products/designware/usb\_solutions.html

Also, visit the USB IP blog at http://www.synopsysoc.org/usb-blog/

About DesignWare IP

Synopsys offers a broad portfolio of high quality, silicon-proven digital, mixed-signal and verification IP for system-on-chip designs. As a leading provider of connectivity IP, Synopsys delivers the industry's most comprehensive solutions for widely used protocols such as USB, PCI Express, SATA, Ethernet and DDR. In addition to connectivity IP, Synopsys offers SystemC transaction-level models to build virtual platforms for rapid, pre- silicon development of software. When combined with a robust IP development methodology, extensive investment in quality and comprehensive technical support, DesignWare IP enables designers to accelerate time-to-market and reduce integration risk. For more information on DesignWare IP, visit <a href="http://www.synopsys.com/designware">http://www.synopsys.com/designware</a>

## **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, system-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 http://www.synopsys.com/.

## Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements regarding the potential market demand, expected benefits, availability, and performance characteristics of the DesignWare SuperSpeed USB IP solution. These statements are based on current expectations and beliefs. Actual results could differ materially from those described by these statements due to risks and uncertainties including, but not limited to, unforeseen market forces, engineering difficulties, uncertainties attendant to any new product offering, discontinuation of the collaboration between Synopsys and MCCI and other risks as identified in the section of Synopsys' Annual Report on Form 10-K for the fiscal year ended October 31, 2007, and any subsequent forms 10-Q, entitled "Risk Factors."

Synopsys DesignWare and Eclypse are registered trademarks or trademarks of Synopsys, Inc. SystemC is a trademark of the Open SystemC Initiative and is used under license. Any other trademarks or registered trademarks mentioned in this release are the intellectual property of their respective owners.

**Editorial Contacts:** 

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

Lisa Gillette-Martin MCA, Inc. 650-968-8900 x115 Igmartin@mcapr.com

SOURCE: Synopsys, Inc.

CONTACT: Sheryl Gulizia of Synopsys, Inc., +1-650-584-8635, sgulizia@synopsys.com; or Lisa Gillette-Martin of MCA, Inc., +1-650-968-8900, ext. 115, Igmartin@mcapr.com, for Synopsys, Inc.

Web site: http://www.synopsys.com/