Synopsys DesignWare SATA IP Enables First-Pass Silicon Success for Global Unichip Corporation

High-Quality DesignWare IP Helps Deliver New Low Power, High-Performance GP5080 Solid State Drive SoC for Storage Applications

MOUNTAIN VIEW, Calif., Aug. 25 /PRNewswire-FirstCall/ -- Synopsys, Inc. (Nasdaq: SNPS), a world leader in software and IP for semiconductor design, verification and manufacturing, today announced that Global Unichip Corporation (GUC) has achieved first-pass silicon success for its GP5080 Solid State Drive (SSD) system-on-chip (SoC) utilizing the complete Synopsys DesignWare® SATA IP solution, consisting of controller, PHY and verification IP. GUC, a leading full-service SoC design foundry, determined that Synopsys' DesignWare SATA IP was superior in quality, power consumption, performance and feature set. SATA interoperability was a key requirement for GUC, and Synopsys was the only provider to offer an integrated solution consisting of a controller and PHY IP that has passed the SATA International Organization (SATA-IO) Building Block interoperability testing, an independent demonstration of full SATA functionality. By integrating Synopsys' DesignWare SATA IP solution into GUC's SSD SoC Platform, GUC was able to focus their internal expertise on delivering their SSD SoC platform within an aggressive six-month development time-to-market window.

With the mobile mass storage market transitioning from the conventional Hard Disk Drive (HDD) to the SSD, GUC set out to develop an SSD SoC solution that would meet the high-performance and low-power requirements of mobile applications such as netbooks, mobile internet devices (MIDs) and high-speed pen drives. Its flagship, GP5080 SoC platform, provides designers with a solution that requires significantly less power than competitive products and provides high data system throughput of more than 120 MB/s in sequential read and over 80 MB/s in sequential write with 4-channel NAND Flash access.

"Low system power consumption is a key requirement for us. Synopsys' DesignWare SATA IP solution is 50 percent lower in power and 30 percent lower in area compared to competitive solutions," said Michael Chang, vice president of the R&D Division at Global Unichip Corporation. "With very aggressive time-to-market windows, GUC relies on Synopsys' high-quality, silicon-proven SATA IP solution which helps us achieve the first-pass success and meet our project schedule. Synopsys' DesignWare IP is definitely a brand we can trust."

"As leading companies such as GUC continue to create innovative products, it's crucial they have access to high-quality IP that enables them to reduce integration risk and focus internal resources on their core competencies," said John Koeter, vice president of marketing for the Solutions Group at Synopsys. "Synopsys provides our customers with high-quality interoperable IP solutions that will help semiconductor companies meet their design goals and deliver differentiated products to the market faster."

The DesignWare SATA IP offering consists of host and device digital cores, as well as PHYs for major foundries from 130nm to 40nm and verification IP that are compliant to SATA (including eSATA) 2.6/3.0 and AHCI specifications. The comprehensive SATA IP solution supports 1.5 Gb/sec, 3 Gb/sec and 6 Gb/sec transfer speeds. Synopsys helps reduce integration risk by providing SATA IP solutions that are silicon-proven and shipping in volume production in multiple designs.

About DesignWare IP

Synopsys is a leading provider of high-quality, silicon-proven interface and analog IP solutions for system-on-chip designs. Synopsys' broad IP portfolio delivers complete connectivity IP solutions consisting of controllers, PHY and verification IP for widely used protocols such as USB, PCI Express, DDR, SATA, Ethernet, HDMI and MIPI IP including 3G DigRF, 4G DigRF, CSI-2 and D-PHY. The analog IP family includes Analog-to-Digital Converters (ADCs), Digital-to-Analog Converters (DACs), Audio Codecs, Video Analog Front Ends (AFEs), Touch Screen Controllers and more. In addition, Synopsys offers SystemC transaction-level models to build virtual platforms for rapid, pre-silicon development of software. With a robust IP development methodology, extensive investment in quality and comprehensive technical support, Synopsys enables designers to accelerate time-to-market and reduce integration risk. For more information on DesignWare IP, visit: http://www.synopsys.com/designware. Follow us on Twitter at http://twitter.com/designware_ip.

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

About GUC

Global Unichip Corp. (GUC), a dedicated full-service Fabless ASIC provider based in Taiwan, was founded in 1998. GUC is now publicly traded on the Taiwan Stock Exchange under the symbol 3443 with annual sales close to US$ 300M in 2009. GUC provides total solutions from silicon-proven IPs to complex time-to-market SoC turnkey services. GUC is committed to providing the most advanced and the best price-performance silicon solutions through close partnership with TSMC, GUC's major shareholder, and other key packaging and testing power houses. With state of the art EDA tools, advanced methodologies, and experienced technical team, GUC ensures the highest quality and lowest risks to achieve first silicon success. GUC has established a global customer base throughout Greater China, Japan, Korea, North America, and Europe. Its track-record in complex SoC designs has brought benefits to customers in time to revenue at the lowest risk.

Synopsys and DesignWare are registered trademarks of Synopsys, Inc. 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

Stephen Brennan
MCA, Inc.
650-968-8900 x 114
sbrennan@mcapr.com

Eva Huang
Global Unichip Corp.
+886-3-5646600 x 6601
eva.huang@globalunichip.com

SOURCE Synopsys, Inc.