Synopsys Announces Availability of DesignWare SATA PHY IP in SMIC 130-nm Process Technology

Complete, Silicon-proven SATA IP Solution Consisting of Digital Controllers, PHY and Verification IP Lowers Risk and Speeds Time-to-market for SoC Designs

MOUNTAIN VIEW, Calif., Oct. 30 /PRNewswire-FirstCall/ -- Synopsys, Inc. (NASDAQ: SNPS), a world leader in software and IP for semiconductor design and manufacturing, today announced the immediate availability of the silicon-proven DesignWare® SATA PHY IP for SMIC's popular 130 nanometer (nm) process technology, for use in host and device applications such as mobile internet devices, set-top boxes, solid state drives and optical disk drives. As a leading provider of connectivity IP, Synopsys has expanded the SATA IP portfolio by introducing the SATA PHY IP for the SMIC 130-nm technology, therefore enabling a comprehensive SATA solution, which also includes the AHCI host and device digital controllers as well as verification IP. Accessing all the IP from one provider allows designers to lower the risk and cost of integrating SATA interfaces into their high-performance system-on-chip (SoC) designs.

The DesignWare SATA PHY IP substantially exceeds the SATA electrical specification in areas such as jitter, margin and receive sensitivity, thus delivering a robust design without sacrificing performance. The advanced built-in diagnostic capabilities provide customers with an on-chip sampling scope for quick debug of the PHY without the need for expensive test equipment. The PHY also comes with ATE test vectors which enable at-speed production testing of the PHY. Additionally, the DesignWare SATA PHY IP relies exclusively on standard digital CMOS process technology and does not require special process options, which results in significant manufacturing cost reduction and ease of integration into a SoC.

"As an established IP supplier, Synopsys provides chip designers with high-quality IP solutions that offer a wealth of advanced features, combined with excellent technical support," said Paul OuYang, vice president of SMIC marketing and sales. "Having Synopsys' silicon-proven IP available in the SMIC 130-nm manufacturing process technology enables designers to quickly achieve time-to-market goals for their high-performance storage applications and then ramp into volume production."

"With the release of the DesignWare SATA PHY IP designed for SMIC 130-nm technology, Synopsys continues to provide designers with the IP they need in the required foundry process," said John Koeter, vice president of marketing for the Solutions Group at Synopsys. "Synopsys is addressing key concerns that our customers are facing today by characterizing the PHY to help ensure it meets and exceeds the SATA specification and passes SATA-IO compliance, thereby providing customers confidence that our PHY is fully interoperable with other SATA products."

Availability

The DesignWare SATA PHY IP in SMIC's 130-nm process technology is available now. The comprehensive SATA IP solution including the AHCI host and device controllers, PHY and verification IP is also available now. For more information, visit: https://www.synopsys.com/designware-ip/interface-ip/sata.html

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: https://www.synopsys.com/designware

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 https://www.synopsys.com/.

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