# Synopsys' DesignWare IP for PCI Express Supports NXP Semiconductors' PXPIPE PHY Interface

Collaboration Delivers Proven Digital Controller IP and External PHY Solution

Synopsys, Inc. (NASDAQ: SNPS), a world leader in semiconductor design software, today announced that its DesignWare® intellectual property (IP) for PCI Express* supports the PXPIPE PHY interface standard from NXP, the independent semiconductor company founded by Philips. Designers using the DesignWare IP for PCI Express in their System-on-Chip (SoC) designs with an external PHY now have an option to choose a proven, version 1.1-compliant solution based on either the PIPE PHY interface or NXP PXPIPE PHY interface standard. Using an external PHY chip such as the NXP PX1011A provides designers an alternative PHY solution for ASIC prototyping and ASIC/FPGA-based products.

Synopsys' DesignWare IP for PCI Express is the world's most widely used PCI Express digital controller IP solution for SoC designs in the market today. Synopsys' complete portfolio of DesignWare IP for PCI Express, including Endpoint, Root Complex, Switch, Bridge and Dual Mode Cores support the NXP PXPIPE PHY interface standard. To help assure seamless interoperability, Synopsys and NXP have performed interoperability testing between the DesignWare IP for PCI Express and the NXP PX1011A PHY solution. The combined solution also passed the PCI-SIG* v1.1 compliance testing in December 2006 providing a proven, compliant and low-risk implementation for chip developers.

"Several customers have come to us jointly and requested the combined DesignWare IP for PCI Express and NXP PX1011A PHY solution. Our collaboration with Synopsys assures designers that they are using PCI Express products that have been proven to work together and are fully PCI Express version 1.1-compliant," said Dhwani Vyas, general manager, interface product line, NXP Semiconductors. "This allows our mutual customers to concentrate on the value-added portions of their design with the knowledge that their PCI Express controller and PHY will integrate smoothly while being completely compliant with the PCI Express standard."

"Having semiconductor and IP providers like Synopsys and NXP work together to deliver PCI Express solutions helps engineers to adopt the PCIe architecture and further deploy the technology into the industry," said Al Yanes, PCI-SIG chairman. "By participating in the PCIe compliance testing for version 1.1, both companies are demonstrating active roles in the PCIe ecosystem."

"As a leading IP provider, we take an active role in driving the adoption of standards like PCI Express and promoting interoperability efforts," said John Koeter, senior director of marketing, Synopsys Solutions Group. "Synopsys' DesignWare IP for PCI Express provides a complete solution for adding PCI Express IP to today's complex SoCs and has been listed on the PCI-SIG Integrator's list since August 2004. Our customers depend on our commitment to third-party interoperability and compliance testing to reduce risk and shorten time to market."

Availability
The DesignWare IP and NXP's PX1011A PHY are available now.

About DesignWare Cores

Synopsys DesignWare Cores provide system designers with silicon-proven, digital, and mixed-signal connectivity IP for some of the world's most recognized products, including communications processors, routers, switches, game consoles, digital cameras, computers and computer peripherals. Provided as synthesizable RTL source code or in GDS format, these cores enable designers to create innovative, cost-effective system-on-chips and embedded systems. Synopsys provides flexible licensing options for the DesignWare Cores. Each core can be licensed individually, on a fee-per-project basis, or users can opt for the Volume Purchase Agreement, which enables them to license all the cores as part of one simple agreement. For more information on DesignWare IP, visit: http://www.designware.com/ .

About Synopsys

Synopsys, Inc. is a world leader in EDA software for semiconductor design. The company delivers technology-leading semiconductor design and verification platforms and IC manufacturing software products to the global electronics market, enabling the development and production of complex systems-on-chips (SoCs). Synopsys also provides intellectual property and design services to simplify the design process and accelerate time-to-market for its customers. Synopsys is headquartered in Mountain View, California and has offices in more than 60 locations throughout North America, Europe, Japan and Asia. Visit Synopsys online at https://www.synopsys.com/ .

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