

# Synopsys Acquires Cascade, Completing PCI Express IP Portfolio

Leading Combined Solution Includes Endpoint, Root, Dual Mode and Switch Port Cores

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Synopsys, Inc. (NASDAQ: SNPS), the world leader in semiconductor design software, today announced the acquisition of Cascade Semiconductor Solutions, Inc., d.b.a "Cascade IP," a leading provider of PCI Express™ digital IP solutions. The acquisition extends Synopsys' leadership in PCI family IP by augmenting its successful DesignWare® Endpoint solution for PCI Express with Root, Dual Mode (Endpoint/Root) and Switch Ports. This enables Synopsys to immediately offer designers a complete high-performance, low-latency PCI Express IP solution to deploy in their Systems-on-Chips (SoCs). Cascade's digital IP complements Synopsys' PCI Express Verification IP and PHY (Physical Layer of the PCI Express protocol) to create a complete PCI Express IP solution. Together, Synopsys and Cascade have achieved PCI Express design wins at more than 25 companies, double the nearest competitor, with several customers taped-out and shipping products.

"We are seeing significantly increased demand from designers for PCI Express Root, Dual Mode and Switch Port IP in addition to our successful Endpoint, PHY and Verification IP. Designers want a complete solution available from one supplier to help reduce design risk and lower the total costs of implementing PCI Express on an SoC," said John Chilton, senior vice president and general manager, Synopsys Solutions Group. "This acquisition enables us to extend our comprehensive DesignWare IP portfolio with a complete PCI Express solution that is unrivaled in the industry."

"This is a significant event in the PCI Express community," said Jing-Fan Zhang, president and chief executive officer, Cascade IP. "The resulting portfolio of PCI Express IP, combined with Synopsys' global presence, sales and application resources, immediately expands the reach of our IP giving designers worldwide the PCI Express IP they need for their next-generation integrated circuits."

PCI Express, developed and managed by the PCI Special Interest Group (PCI-SIG), is an industry standard high-performance, general-purpose serial I/O interconnect designed for use in enterprise, desktop, mobile, communications and embedded platforms. DesignWare PCI Express IP powers the protocol test card used by designers to verify compliance at the PCI-SIG compliance workshops. The Synopsys DesignWare IP solution for PCI Express includes: an optimized x1 Endpoint digital core which can be used in ExpressCard™ development, and x1, x2, x4, x8 and x16 cores for applications that require Endpoint, Root, Dual Mode or Switch Ports; a PCI Express PHY; Verification IP; and schematics for the interoperability board and PHY daughter card used for successful PCI-SIG compliance testing.

## About DesignWare IP

Synopsys' DesignWare IP enables designers to cost effectively create and verify complex SoCs, ASICs and FPGAs. The broad IP portfolio includes industry leading connectivity IP cores and Verification IP (e.g., a complete set of USB 1.1, 2.0, OTG and PHYs, PCI, PCI-X, PCI Express, PCI Express PHY, Ethernet, 1394, I2C), AMBA™ on-chip bus (logic, peripherals, verification IP) complete memory solution (e.g., memory controllers, BIST and models), high-speed datapath components, microcontrollers (8051, 6811) and Star IP processors and DSP core (e.g., IBM PowerPC® 440, Infineon C166™ S and TriCore®1, MIPS32™ 4KE™, NEC V850E™, Philips CoolFlux™ DSP). When combined with our robust IP development methodology, extensive investment in quality and comprehensive worldwide technical support, DesignWare IP gives designers a faster, more predictable and lower-risk path to chip success.

For a complete directory of Synopsys IP visit: [www.synopsys.com/ipdirectory](http://www.synopsys.com/ipdirectory)

For more information on DesignWare IP, visit: [www.designware.com](http://www.designware.com) or call 1-877-4BEST-IP

## Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, including statements regarding the expected benefits of the acquisition. These statements are based on Synopsys' current expectations and beliefs. Actual results could differ materially from the results implied by these statements as a result of unforeseen difficulties in integrating Cascade's PCI Express IP solutions with Synopsys' IP offerings as well as the factors described in the section of Synopsys' Quarterly Report on Form 10-Q for the fiscal quarter ended July 31, 2004 filed with the Securities and Exchange Commission entitled "Factors That May Affect Future Results."

## About Synopsys

Synopsys, Inc. is the world leader in electronic design automation (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 more than 60 offices located throughout North America, Europe, Japan and Asia. Visit Synopsys online at <http://www.synopsys.com/>.

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SOURCE: Synopsys, Inc.

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