Synopsys Delivers Industry's First Verification IP for USB Power Delivery 3.0

Native SystemVerilog VIP Features Built-in Coverage, Verification Planning, Protocol-Aware Debug and Source Code Test Suites

MOUNTAIN VIEW, Calif., April 13, 2016 /PRNewswire/ -- Synopsys, Inc. (NASDAQ: SNPS) today announced the availability of the industry's first verification IP (VIP) and UVM source code test suite to support the USB Power Delivery 3.0 standard. With the increase in demand for optimized power management solutions, Synopsys VC VIP for USB Power Delivery 3.0 enables system-on-chip (SoC) teams to design next-generation products in the consumer, automotive and industrial markets with ease of use and integration, resulting in accelerated verification closure.

"The new USB Power Delivery 3.0 standard improves power transfer over a USB cable, reducing power consumption for larger devices such as laptops and desktops, and battery charge time for handheld electronics," said Jeff Ravencraft, USB-IF President and COO. "Being first in the industry, Synopsys VIP for USB Power Delivery 3.0 strengthens the ecosystem and facilitates early adoption and fast development of next-generation designs."

Synopsys VC VIP for USB Power Delivery 3.0 provides messages to support USB Type-C™ authentication, enhanced power management across multiple devices and bi-directional power and data flow. Synopsys VIP uses a native SystemVerilog/Universal Verification Methodology (UVM) architecture and features built-in comprehensive coverage, verification planning, extensive protocol checks and protocol-aware debug. It features an extensive and customizable frame generation, error injection capabilities, with a comprehensive exception list to generate negative scenarios, enabling ease of use and productivity gains. UVM source code test suites are available to further verify key features with minimal effort and fast-track custom testing of USB designs.

"We continue to provide our customers with comprehensive next-generation VIP by steadily introducing support for the latest protocols and specifications," said Vikas Gautam, group director of VIP R&D and corporate applications for the Synopsys Verification Group. "Synopsys is committed to delivering a complete USB solution with support for USB 3.1, 3.0, 2.0, UVM source code test suites and the newest USB Power Delivery 3.0, enabling our customers to efficiently design the latest leading-edge products."

Availability and Resources

Synopsys VIP for USB Power Delivery 3.0 and source code test suites are both available today as standalone products, and is included in the Synopsys VIP Library. For more information, please visit: www.synopsys.com/vip

Synopsys' DesignWare® USB Type-C controllers and PHY IP solution is also available today for integration with third-party or in-house USB Power Delivery blocks. For more information, on DesignWare USB IP, please visit: www.synopsys.com/usb

About Synopsys

Synopsys, Inc. (Nasdaq:SNPS) is the Silicon to Software™ partner for innovative companies developing the electronic products and software applications we rely on every day. As the world's 16th largest software company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP and is also growing its leadership in software quality and security solutions. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing applications that require the highest quality and security, Synopsys has the solutions needed to deliver innovative, high-quality, secure products. Learn more at www.synopsys.com.

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