Synopsys DesignWare USB 3.0 IP Shipped in More Than 100 Million Production SoCs

Use of Silicon-Proven DesignWare USB IP by More than 60 Companies Demonstrates High Quality and Low Integration Risk

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Highlights:

- With more than 100 million units shipped, Synopsys USB IP is the low-risk choice for designers implementing USB 3.0 functionality in their SoCs
- DesignWare USB 3.0 IP has been certified by the USB-IF standards body more than 80 times for both Synopsys and its customers
- Complete USB 3.0 IP solution, including controllers, PHYs, IP Prototyping Kits, IP Virtual Development Kits and verification IP, accelerates SoC integration effort
- DesignWare USB 3.0 PHYs available in more than 25 leading process technologies including 14/16-nm FinFET and spanning six foundries
- DesignWare USB 3.0 Controller supports Dual Role Device, Host, Device and On-The-Go configurations

Synopsys, Inc. (Nasdaq:SNPS), a global leader providing software, IP and services used to accelerate innovation in chips and electronic systems, today announced that its DesignWare® USB 3.0 Controller and PHY IP has shipped in more than 100 million production system-on-chips (SoCs) used in mobile computing, digital home and cloud computing applications such as smartphones, tablets, set-top boxes, digital TVs, gaming systems and servers. More than sixty companies have successfully integrated silicon-proven DesignWare USB 3.0 IP into their products' SoCs, including SoCs in the Microsoft XBOX One. This broad usage demonstrates the quality of the IP and how Synopsys enables rapid adoption of the standard. To help ensure interoperability and lower designers' integration risk, the DesignWare USB 3.0 solution has been certified by the USB-IF through USB compliance testing in plugfests and by third-party labs.

"Based on a long history of close collaboration with Synopsys, we have shipped hundreds of millions of products that incorporate Synopsys' DesignWare USB 2.0 and 3.0 IP. In the last year alone, tens of millions of units were shipped globally," said Sanghyun Lee, vice president of digital IP development team, System LSI Business at Samsung Electronics. "By using Synopsys' DesignWare USB 3.0 IP, Samsung can deliver leading SoC products to our customers."

"Our SoCs for digital home, networking and WiFi applications ship in very high volumes, so we need high-quality, highly reliable USB 3.0 IP to help ensure our success," said Yee-Wei Huang, vice president and spokesman at Realtek. "We chose DesignWare USB 3.0 IP because Synopsys has a track record of delivering certified IP that has undergone extensive third-party interoperability testing. Synopsys consistently delivers high-quality IP that supports advanced power-saving standards, enabling us to reduce power consumption in our wireless SoCs. Integrating DesignWare USB 3.0 IP reduced our design risk, accelerated our time-to-market and assured the high performance that our customers expect."

"Success in high-performance USB graphics solutions demands that we deliver SoCs with the most advanced technology on schedule," said John Cummins, senior vice president, worldwide sales and marketing at DisplayLink. "We selected Synopsys DesignWare USB 3.0 IP because we were extremely confident that the IP would deliver the performance, power and area we needed. DisplayLink SoCs that integrate Synopsys USB 3.0 IP are now found in the world's leading manufacturers of docking stations."

Synopsys' complete USB 3.0 IP solution, including controllers, PHYs, verification IP, IP Prototyping Kits and IP Virtual Development Kits, reduces design risk and accelerates IP prototyping, software development and integration. The DesignWare USB 3.0 IP has been certified by the USB-IF standards body more than 80 times for both Synopsys and its customers, ensuring interoperability with billions of USB-enabled devices worldwide. In addition to supporting SuperSpeed, High-Speed, Full-Speed and Low-Speed USB modes, the DesignWare USB 3.0 IP enables 5.0 Gbps SuperSpeed USB data transfer rates while lowering overall power consumption for mobile SoC designs. Synopsys DesignWare USB 3.0 PHY IP is available for more than 25 process technologies from 130-nm to 14/16-nm FinFET, supporting all leading foundries.

"As the leader in USB IP for more than 10 years and with almost 20 years of active participation in the USB-IF, Synopsys' deep knowledge of USB standards enables us to deliver high-quality IP that is proven to reduce integration risk and accelerate time-to-market," said John Koeter, vice president of marketing for IP and prototyping at Synopsys. "With more than 100 million chips deployed with DesignWare USB 3.0 IP, Synopsys continues to help designers incorporate the USB 3.0 functionality needed to deliver higher performance and more cost-effective SoCs."

Availability and Resources

The DesignWare USB 3.0 Controller and PHY IP are available now in leading process technologies from 65-nm to 14/16-nm FinFET.

Learn more about the USB 3.0 specification and DesignWare USB 3.0 IP in USB 3.0 University.

About DesignWare IP

Synopsys is a leading provider of high-quality, silicon-proven IP solutions for SoC designs. The broad DesignWare IP portfolio includes complete interface IP solutions consisting of controller, PHY and next-generation verification IP, analog IP, embedded memories, logic libraries, processor solutions and subsystems. To accelerate prototyping, software development and integration of IP into SoCs, Synopsys' IP Accelerated initiative offers IP prototyping kits, IP software development kits and customized IP subsystems for rapid integration of IP into SoCs. Synopsys' extensive investment in IP quality, comprehensive technical support and robust IP development methodology enables designers to reduce integration risk and accelerate time-to-market. For more information on DesignWare IP, visit http://www.synopsys.com/designware.

About Synopsys

Synopsys, Inc. (Nasdaq:SNPS) accelerates innovation in the global electronics market. As a leader in electronic design automation (EDA) and semiconductor IP, Synopsys delivers software, IP and services to help engineers address their design, verification, system and manufacturing challenges. Since 1986, engineers around the world have been using Synopsys technology to design and create billions of chips and systems. Learn more at http://www.synopsys.com.

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