

Synopsys and ASMedia Announce Industry's First USB 3.1 Interoperability Demonstration

Multi-Vendor USB 3.1 Interoperability Lowers Design Risk and Speeds Development of 10 Gbps USB SoC Designs

MOUNTAIN VIEW, Calif. and TAIPEI, Taiwan, Aug. 3, 2015 /PRNewswire/ --

Highlights:

- Interoperability demonstration shows successful 10 Gbps USB 3.1 data transfers between the DesignWare USB 3.1 Device Controller IP and ASMedia USB 3.1 Host Controller IC
- Demonstration validates the readiness of the DesignWare USB 3.1 Device Controller for integration into SoCs
- ASMedia's USB 3.1 Host Controller IC, the first USB-IF certified USB 3.1 product, provides a silicon-proven IC solution for USB 3.1
- USB 3.1 specification delivers double the data throughput of SuperSpeed USB 3.0 for 10 Gbps cloud computing, digital home and digital office chipsets

Synopsys, Inc. (Nasdaq:SNPS) and ASMedia today announced the successful [interoperability demonstration](#) of Synopsys' [DesignWare® USB 3.1 Device Controller IP](#) with ASMedia's USB-IF certified USB 3.1 Host Controller IC. Proven interoperability between the two companies' products demonstrates that the DesignWare USB 3.1 IP works as defined by the USB 3.1 specification and reduces design risk of integrating the USB 3.1 IP into applications requiring 10 Gbps data transfers.

"The successful demonstration between ASMedia's USB 3.1 Host Controller IC, the first USB-IF certified USB 3.1 product, and the Synopsys DesignWare USB 3.1 IP is a significant milestone in accelerating the development of products that offer 10 Gbps USB data transfer speeds," said Weber Chuang, vice president of marketing at ASMedia. "Proven interoperability of USB 3.1 IP and ICs demonstrates the USB 3.1 ecosystem is ready to support new product development and help system architects and designers meet the growing demand for fast transfer of digital content."

Synopsys' DesignWare USB 3.1 Device Controller IP supports all USB data transfer rates and power-down capabilities. The IP's small gate count and support for low power options, such as hibernation, minimize power consumption for power-sensitive digital home applications. The IP is backward-compatible with existing DesignWare USB 3.0 software stacks and device protocols, enabling designers to reuse their existing software code to save months of software development time. Based on the DesignWare USB 3.0 Controller IP architecture, which has shipped in hundreds of millions of SoCs, the DesignWare USB 3.1 Controller IP enables designers to integrate USB 3.1 functionality with significantly less risk and faster time-to-market.

The ASM1142 Host Controller IC is the first USB-IF certified USB 3.1 Host Controller chip on the market and is shipping in volume on PC motherboards and add-in cards. The IC integrates two internal regulators to supply normal core power and suspend core power, supporting drivers for Windows® 7, Windows 8.0, Windows 8.1 and various Linux® Kernels. The ASM1142 Host Controller IC bridges a PCI Express® interface to two USB 3.1 ports, enabling USB transfers at 10 Gbps and supporting all USB specifications.

"Synopsys' successful interoperability demonstration with ASMedia's USB 3.1 Host Controller IC gives designers confidence that they can incorporate DesignWare USB 3.1 IP into their SoCs with less risk," said John Koeter, vice president of marketing for IP and prototyping at Synopsys. "With hundreds of millions of

chips deployed with DesignWare USB 3.0 IP, Synopsys continues to deliver high-quality USB IP that helps designers implement the latest functionality into their SoCs and deliver differentiated products to the market faster."

Availability

The DesignWare USB 3.1 Device Controller IP is available now. ASMedia's USB 3.1 ASM1351 Host Controller IC is available now and shipping in volume.

About DesignWare IP

Synopsys is a leading provider of high-quality, silicon-proven IP solutions for SoC designs. The broad DesignWare IP portfolio includes logic libraries, embedded memories, embedded test, analog IP, wired and wireless interface IP, security IP, embedded processors 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 IP subsystems. 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) 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 15th largest software company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP, and is also a leader in software quality and security testing with its Coverity® 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.

About ASMedia

ASMedia is a fabless design house founded in 2004. ASMedia provides high speed IO solutions that deliver highly-efficient connectivity, such as USB 3.1, USB 3.0, SATA 6G and PCIe Gen3. Learn more at <http://www.asmedia.com.tw>

Editorial Contacts:

Monica Marmie
Synopsys, Inc.
650-584-2890
monical@synopsys.com

Stephen Brennan
MCA, Inc.
650-968-8900, ext.114
sbrennan@mcapr.com

SOURCE Synopsys, Inc.
