Synopsys and Jungo Collaborate to Offer Complete USB Full Speed OTG Solution With IP and Software

DesignWare USB IP Validated With Jungo Software

Synopsys, Inc. (NASDAQ: SNPS), the world leader in semiconductor design software, and Jungo® Software Technologies, Inc., a leading provider of hardware access applications, announced today that they have partnered to offer a complete hardware and software USB full speed On-The-Go (FS-OTG) solution, including Synopsys DesignWare® intellectual property (IP) and Jungo software. The combination of Synopsys' DesignWare USB cores and Jungo's leading embedded USB software creates a complete, validated solution that helps to reduce risk and cost for designers adding USB FS-OTG connectivity to their SoCs.

Through this collaboration, Jungo and Synopsys validated that the OTG hardware and software work together to perform all FS-OTG functions. Using the FPGA-based DesignWare FS-OTG hardware development platform, Jungo created specific driver software to match Synopsys' USB FS-OTG core. Jungo's USB OTG stack will enable manufacturers of PDAs, digital cameras, MP3 players, set top boxes and other consumer devices to add USB OTG functionality to their devices more quickly and reliably. Jungo's USB OTG stack includes host side and device side functionality, together with OTG Host Negotiation Protocol (HNP) and Session Request Protocol (SRP) protocols, and variety of class drivers support including Human Interface Device (HID), Printer, Audio, Mass Storage and others. Jungo will also offer custom stack porting and driver development for customer applications using the DesignWare USB FS-OTG core.

"Our USB software and skills match up perfectly with Synopsys' DesignWare USB cores, the most widely used in the world," said Ophir Herbst, general manager of the software tools division at Jungo. "Our company focus on embedded software development gives our mutual customers a complete solution for development and deployment of full speed USB OTG products."

"Jungo's leadership in USB device drivers and stack software gives developers a high-quality source for software and customization," said Guri Stark, vice president of marketing, Synopsys' Solutions Group. "Through our collaboration with Jungo, DesignWare USB full speed OTG customers now have access to an integrated, validated solution."

Pricing and Availability

The USB OTG software is currently available from Jungo. For more information visit: http://www.jungo.com/components_otg.html .

In addition to the DesignWare USB FS-OTG core, which is available today, Synopsys also offers a complete family of USB core, PHY and verification IP solutions. For more information visit: www.designware.com.

To learn more about this solution, visit Synopsys and Jungo at the electronicaUSA show in San Francisco, March 30 - April 1, 2004, booths 1536 and 1539.

About USB On-The-Go

USB On-The-Go (OTG) is a supplement to the USB 2.0 specification that increases the capability of existing mobile devices and USB peripherals by adding host functionality for connections to USB peripherals. Many of the new peripherals connected to PC's and laptops are portable devices. As these portable devices increase in popularity, there is a growing need for them to communicate directly with each other when a PC is not available. The OTG Supplement addresses this need for mobile inter-connectivity; it defines a way for portable devices, through only one mini-connector, to connect to supported USB products in addition to the PC.

About DesignWare

DesignWare, the world's most widely used, silicon proven IP, provides designers with a comprehensive portfolio of synthesizable implementation IP, hardened PHYs and verification IP for ASIC, SoC and FPGA designs. The DesignWare IP family includes industry leading connectivity IP Cores and Verification IP (e.g., USB 1.1, USB 2.0, USB 2.0 PHY, USB 2.0 On-the-Go, PCI, PCI-X®, PCI Express™, Ethernet, 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 (e.g., IBM PowerPC® 440, Infineon C166™S and TriCore®1, MIPS32™ 4KE™, NEC V850E™). For a complete directory of Synopsys' available IP visit: www.synopsys.com/ipdirectory. For more information on DesignWare IP, visit: www.designware.com or call 1-877-4BEST-IP.

About Jungo Software Technologies

Jungo Software Technologies is a leading supplier of driver development tools, hardware access applications, residential gateway software and embedded USB solutions. Jungo offers integrated reference designs with several of the most influential global silicon vendors, enabling its customers to simplify device development cycles, improve performance and accelerate time to market. Jungo is a privately held company with corporate offices in San Jose, California, sales and support offices in Taipei, Texas and London and an R&D center in Israel. Founded in 1998, Jungo's investors include Infineon Ventures, Intel Communications Fund, Partech International and TeleSoft Partners. The company's Web site is located at www.jungo.com.

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 https://www.synopsys.com/ .

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SOURCE: Synopsys, Inc.

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Web site: http://www.designware.com/

Web site: https://www.synopsys.com/ipdirectory

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