

# Synopsys Expands DesignWare MIPI IP Portfolio With DSI Host Controller

## MIPI IP Solution Speeds Development of Advanced Display Subsystems in Mobile Devices

MOUNTAIN VIEW, Calif., Dec. 7, 2010 [PRNewswire/](#) -- Synopsys, Inc. (Nasdaq: SNPS), a world leader in software and IP for semiconductor design, verification and manufacturing, today announced the immediate availability of [DesignWare® IP for the Mobile Industry Processor Interface \(MIPI®\) Display Serial Interface \(DSI\) Host Controller](#). With this latest addition, Synopsys broadens its [DesignWare MIPI IP portfolio](#) consisting of the [DigRFSM v3 \(2.5G/3.0G\)](#) and [DigRFSM v4 \(4G\)](#), [CSI-2](#), [M-PHY](#) and [D-PHY](#) protocols. The DesignWare MIPI DSI Host Controller is fully compliant to the latest MIPI Alliance specifications for DSI, Display Pixel Interface (DPI-2), Display Bus Interface (DBI-2) and Display Command Set (DCS). Using a single-vendor solution for DSI display subsystems lowers integration risk and cost while speeding time-to-market of mobile systems-on-chip (SoCs).

Synopsys' configurable DesignWare MIPI DSI Host Controller IP offers a rich feature set that enables designers to easily incorporate display subsystems into mobile devices through a standard interface. The DesignWare MIPI DSI Host Controller can support up to four data lanes at speeds of up to 1 Gbps of data per lane, providing a high-speed serial interface between an application processor and MIPI DSI-compliant display. Interface to the MIPI D-PHY can be done through the PHY Protocol Interface (PPI), as defined in the MIPI Alliance specification for the D-PHY (v.1.00.00). By supporting a range of resolutions from 160x120 (QQVGA) to 1024x768 (XVGA) with configurable virtual channels, the DesignWare MIPI DSI Host Controller IP addresses the diverse display demands of mobile devices. The low-power and area-efficient DesignWare MIPI DSI Host Controller enables designers to reduce overall system cost and extend the battery life of their mobile devices.

"We believe the mobile market has reached an inflection point in adopting MIPI protocols such as DSI as the de-facto standard in mobile SoCs," said Randy Lawson, Principal Analyst of iSuppli Corporation. "We project the continued rapid adoption of the MIPI DSI protocol by the smartphone market to reach over 63 percent penetration by 2013."

"The specifications from the MIPI Alliance enable faster deployment of new features and services across the mobile ecosystem," said Joel Huloux, Chairman of MIPI Alliance. "As an active contributor to the MIPI working groups, Synopsys' efforts to support the MIPI DSI specification helps speed the adoption of the display protocol."

"By providing a comprehensive portfolio of proven and compliant IP for the MIPI standards such as DSI, CSI-2, D-PHY, DigRF v3/v4 and M-PHY, Synopsys helps designers incorporate display, camera and mobile broadband connectivity into their devices with less risk and improved time-to-market," said John Koeter, Vice President of Marketing for the Solutions Group at Synopsys. "The new DesignWare DSI Host Controller delivers a strong combination of low power, small silicon area and high performance, which are key requirements for advanced displays used in mobile devices."

### Availability

The DesignWare MIPI DSI Host Controller IP is available now. For more information, please visit: <http://www.synopsys.com/mipi>.

### 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 controllers, PHY and Verification IP for widely used protocols, [analog IP](#), [embedded memories](#), [logic libraries](#), embedded test & repair IP and [configurable processor cores](#). In addition, Synopsys offers [SystemC transaction-level models](#) to build virtual prototypes for rapid, pre-silicon development of software. With a robust IP development methodology, [reuse tools](#), extensive investment in quality and comprehensive technical support, Synopsys enables designers to accelerate time-to-market and reduce integration risk. For more information on DesignWare IP, visit: <http://www.synopsys.com/designware>. Follow us on Twitter at [http://twitter.com/designware\\_ip](http://twitter.com/designware_ip).

### About Synopsys

Synopsys, Inc. (Nasdaq: SNPS) is a world leader in electronic design automation (EDA), supplying the global electronics market with the software, intellectual property (IP) and services used in semiconductor design, verification and manufacturing. Synopsys' comprehensive, integrated portfolio of implementation, verification, IP, manufacturing and field-programmable gate array (FPGA) solutions helps address the key challenges designers and manufacturers face today, such as power and yield management, system-to-silicon verification and time-to-results. These technology-leading solutions help give Synopsys customers a competitive edge in bringing the best products to market quickly while reducing costs and schedule risk. Synopsys is headquartered in Mountain View, California, and has approximately 70 offices located throughout North America, Europe,

Japan, Asia and India. Visit Synopsys online at <http://www.synopsys.com/>.

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