

Synopsys Interface IP Portfolio on 16-nm FinFET Process Meets Stringent Automotive AEC-Q100 Grade 1 Temperature Requirements

DesignWare PHY IP for LPDDR4, MIPI, PCI Express and Ethernet Delivers High Reliability for ADAS and Autonomous Vehicle SoCs

MOUNTAIN VIEW, Calif., Aug. 1, 2017 /PRNewswire/ --

Highlights:

- AEC-Q100 designed and tested DesignWare IP includes LPDDR4, MIPI D-PHY, PCI Express 3.1 and Ethernet on 16-nm FinFET process technologies
- IP with available test reports meets Grade 1 temperature (-40C to 125C ambient) and mission profile requirements, delivering high reliability for automotive SoCs
- ASIL Ready ISO 26262 certified IP with safety packages, FMEDA reports and safety manuals accelerates SoC-level functional safety assessments

Synopsys, Inc. (Nasdaq: SNPS) today announced that its 16-nm FinFET DesignWare® Interface IP for [LPDDR4](#) multiPHY, [MIPI D-PHY](#) and [Multi-Protocol 10G PHY](#) supporting [PCI Express 3.1](#) and [Ethernet](#) have met the AEC-Q100 Grade 1 temperature requirements. This is the latest achievement in Synopsys' long-term investment in providing designers with a [broad portfolio of automotive IP](#) that is designed and tested for AEC-Q100 reliability, offers ASIL Ready ISO 26262 certification and supports automotive quality management. The IP is designed to meet a range of automotive temperature profiles to support operations in a variety of automotive applications. In addition, the IP includes automotive safety packages with Failure Modes, Effects, and Diagnostic Analysis (FMEDA) reports, which saves months of development effort and accelerates the qualification process for automotive system-on-chips (SoCs).

"The new class of SoCs supporting safety-critical ADAS functions are predicted to grow in volumes with a CAGR of 48% in the next 3 years," said Luca De Ambroggi, principal analyst for automotive electronics at IHS Markit. "Meeting the automotive industry's strict reliability standards and operating temperature requirements are key for ADAS SoCs. By providing AEC-Q100 Grade 1 IP, Synopsys is helping designers to quickly meet their design and qualification goals."

"Today's connected cars performing numerous safety-critical functions such as lane departure warning and predictive pedestrian protection require SoC designers to integrate IP that adheres to stringent automotive standards," said John Koeter, vice president of marketing for IP at Synopsys. "Synopsys has made significant investments in providing IP that helps designers accelerate the development and qualification of their automotive SoCs as defined by ISO 26262 functional safety, AEC-Q100 reliability and automotive quality standards."

Availability and More Resources

The Grade 1 temperature, ASIL Ready ISO 26262 certified DesignWare PHY IP for LPDDR4, MIPI, PCI Express and Ethernet are available now.

For more information on Synopsys' DesignWare Automotive IP solutions, [visit the web page](#).

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 enable designers to reduce integration risk and accelerate time-to-market. For more information on DesignWare IP, visit www.synopsys.com/designware.

Synopsys Automotive: Enabling Safe, Secure, Smarter Cars – from Silicon to Software

Customers across the automotive supply chain use Synopsys' Silicon to Software™ solutions to develop ICs and software for infotainment, ADAS, V2X and autonomous driving applications. Synopsys' portfolio of automotive-specific IC design and verification tools, automotive-grade IP and automotive software cybersecurity and quality solutions accelerate time to market

and enable the next generation of safe, secure and smarter connected cars. Learn more at www.synopsys.com/automotive.

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 growing its leadership in software security and quality solutions. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing applications that require the highest security and quality, Synopsys has the solutions needed to deliver innovative, high-quality, secure products. Learn more at www.synopsys.com.

Editorial Contact:

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

SOURCE Synopsys, Inc.
