Synopsys' ARC EV6x Vision Processor IP Named Best Processor of the Year by the Embedded Vision Alliance

ASIL D Ready Vision Processor with Safety Enhancement Delivers Highest Level of Functional Safety for Automotive SoCs

Disclaimer: GlobalFoundries acquired the Synopsys Processor Solutions business on June 1, 2026. Clickhere to learn more.

MOUNTAIN VIEW, Calif., May 21, 2019 /PRNewswire/ --

Synopsys, Inc. (Nasdaq: SNPS) today announced that its DesignWare® ARC® EV6x Vision Processor IP with Safety Enhancement Package (SEP) was named "Best Processor" by the Embedded Vision Alliance as part of its annual Vision Products of the Year Award program. The award selection was determined by an independent panel of industry experts and recognizes Synopsys' leadership and innovation in the processor IP market. Synopsys' EV6x Processors with SEP are the industry's first ASIL D Ready vision processor IP, combining a vision processor and deep learning engine with hardware safety features, safety monitors, and lockstep capabilities for safety-critical designs. These features enable designers to achieve the ISO 26262 standard's most stringent level of functional safety and fault coverage without significant impact on power, performance, or area.

"Automotive semiconductor and OEM companies are incorporating greater amounts of ADAS and self-driving functionality into designs, requiring significant embedded vision performance with the highest safety standards," said Jeff Bier, founder of the Embedded Vision Alliance. "Synopsys is enabling the next generation of applications for computer vision by providing the ARC EV6x Vision Processor with SEP, which integrates hardware safety features that enable SoC designers to meet these performance requirements and more easily achieve ASIL D certification."

The Synopsys DesignWare ARC EV6x Processors with SEP were selected for the Best Processor award due to their heterogeneous architecture that integrates scalar, vector DSP, and CNN execution units with safety-critical features to meet the ASIL D requirements of RADAR, LiDAR, and embedded vision automotive systems. These features enable designers to meet the demanding vision requirements of autonomous vehicles and the ISO 26262 standard functional safety and fault coverage requirements for ASIL B, ASIL C, or ASIL D certification. The EV6x Processors with SEP are supported by the ARC MetaWare EV Development Toolkit for Safety, which enables software developers to generate highly efficient, ISO 26262-compliant code for their automotive applications.

"Safety-critical ADAS functionality is one of the fastest growing requirements in automotive systems, driving the need for intelligent, deep learning vision processing," said John Koeter, vice president of marketing for IP at Synopsys. "Receiving the Best Processor award for our EV6x Vision Processor IP is a testament to Synopsys' continuous commitment to providing designers with the IP and software tools they need to accelerate ISO 26262 certification of their automotive SoCs."

Availability and Resources:

- The ASIL D Ready DesignWare ARC EV6x Vision Processor with Safety Enhancement Package is available today
- Register for Synopsys' Embedded Vision Seminar (May 23, 2019, Santa Clara, Calif.)
- Watch video: Accelerate Automotive Design with DesignWare ARC EV6x Embedded Vision Processor IP
- Learn more about EV6x Embedded Vision Processors with Safety Enhancement Package

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 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 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:
Norma Sengstock
Synopsys, Inc.
650-584-4084
norma@synopsys.com

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