

Synopsys and Elektrobit Announce Availability of EB tresos Classic AUTOSAR Software for ARC Functional Safety Processor IP

Elektrobit is the First Automotive Software Company to Collaborate with Synopsys on Providing Software for Synopsys ARC Functional Safety Processors Used in Automotive ECUs

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Highlights:

- To accelerate early software development, Elektrobit has ported its Classic AUTOSAR software to Synopsys' ARC EM and HS Functional Safety Processors
- ARC Processor-based hardware and software platforms enable automotive SoC developers to quickly develop safety-critical functions based on the AUTOSAR standard
- Combined solution supports an integrated safety manager for single-chip automotive solutions that lower system costs, reduces chip power consumption and area, and enhances real-time response rate

Synopsys, Inc. (Nasdaq: SNPS) and Elektrobit (EB), a visionary global supplier of embedded and connected software products for the automotive industry, today announced availability of EB tresos Classic AUTOSAR software for Synopsys' ASIL-D compliant DesignWare® ARC® EM and ARC HS Functional Safety (FS) Processor IP. This version of the EB tresos AUTOSAR software used with the ARC Functional Safety processors provides a hardware-software platform that makes it easier for automotive semiconductor companies, OEMs, and Tier 1 suppliers to develop software applications based on the AUTOSAR standard. The combined solution accelerates time-to-market for the complex automotive electronic control units (ECUs) required for applications such as ADAS, infotainment, gateways, and vehicle-to-everything (V2X) systems used in modern vehicles.

"Elektrobit has been active in the development of the AUTOSAR standard from its inception and continues to be a leader in AUTOSAR software and tools," said Artur Seidel, vice president for Americas at Elektrobit. "We are pleased to be the first automotive software company to collaborate with Synopsys on a software solution for its ARC Functional Safety processors, providing a turnkey approach that makes it quicker and easier for customers to develop automotive safety applications."

The ARC Functional Safety processors support ASIL B and ASIL D safety levels to simplify safety-critical automotive system on chip (SoC) development and accelerate ISO 26262 qualification. The complete portfolio includes the ARC EM22FS, HS4xFS, EV7xFS, and VPX5FS safety processors with integrated hardware safety features to detect system errors. The DesignWare ARC MetaWare Development Toolkit for Safety (EM22FS, HS4xFS) helps software developers accelerate the development of ISO 26262-compliant code. To accelerate early software development, Elektrobit supplies Classic AUTOSAR to the ARC EM Software Development Platform and the ARC HS4x/4xD Development Kit. A Microcontroller Abstraction Layer (MCAL), which abstracts the hardware devices, is available for each platform, allowing engineers to begin software development immediately. The ARC Functional Safety processor IP is developed based on the ISO 9001 certified Quality Management System (QMS) for Synopsys DesignWare IP supporting additional automotive quality requirements.

"Embedded processors used in advanced automotive applications must adhere to the highest safety standards and be developed with ISO 26262 compliance in mind," said John Koeter, senior vice president of marketing and strategy for IP at Synopsys. "Our collaboration with Elektrobit, a company known for its AUTOSAR expertise, to provide our ASIL ARC Functional Safety Processor IP with AUTOSAR OS support enables semiconductor vendors, Tier 1 suppliers, and car makers to accelerate software development and innovation for automotive applications."

Availability and Resources

- The [DesignWare ARC EM22FS Processor](#) is available now from Synopsys
- The [DesignWare ARC HS4xFS Processors](#) are scheduled to be available from Synopsys in Q3, 2020
- [EB tresos Classic AUTOSAR software](#) will be available for ARC HS4xFS Processors in Q3, 2020 and for ARC EM22FS Processors in Q4, 2020 from Elektrobit
- Learn more about Synopsys and Elektrobit collaborations at the [ARC Processor Virtual Summit](#) on September 9-10, 2020

About Elektrobit (EB)

Elektrobit (EB) is an award-winning and visionary global supplier of embedded and connected software

products and services for the automotive industry. A leader in automotive software with over 30 years serving the industry, EB's software powers over one billion devices in more than 100 million vehicles and offers flexible, innovative solutions for car infrastructure software, connectivity & security, automated driving and related tools, and user experience. EB is a wholly owned subsidiary of Continental.

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 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 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.

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