Synopsys' ARC SEM Security Processors Win Linley Group's 2016 Analysts' Choice Award for Best Processor IP

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

MOUNTAIN VIEW, Calif., Jan. 25, 2017 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced that it received The Linley Group's 2016 Analysts' Choice Award for Best Processor IP. Synopsys' DesignWare® ARC® SEM security processors were selected based on their power and performance efficiency as well as unique security features that address the needs of low-power embedded applications such as smart metering, NFC payment and embedded SIMs.

The Linley Group, publisher of *Microprocessor Report*, is a leading industry source for independent technology analysis of processor IP and semiconductors. Their 2016 Analysts' Choice Awards recognized the top semiconductor products in seven categories: server processors, embedded processors, networking chips, mobile processors, mobile chips, processor IP and best technology. To select each winner among a diverse group of nominees in each category, The Linley Group's team of technology analysts focuses on the merits of the most innovative products released during 2016, evaluating the combined advantages in power, performance, features and cost of each device for their target end application and market.

"After evaluating the latest processor IP in the market, we chose Synopsys' ARC SEM family for Best Processor IP of 2016 due to its complete and unique security package, including tamper-resistant pipeline, countermeasures against side-channel attacks and optional CryptoPack hardware extensions to accelerate cryptographic algorithms," said Mike Demler, senior analyst at The Linley Group. "The selection of ARC SEM CPUs for our Analysts' Choice Award recognizes Synopsys' achievement in addressing critical security issues in IoT processors and other embedded designs."

The ARC SEM110 and SEM120D processors offer advanced security features such as uniform instruction timing and power randomization to obfuscate secure operations and resist side-channel attacks. The SEM pipeline also employs in-line instruction and data encryption, address scrambling and data integrity checks to provide further protection from system attacks and IP theft. Support for Synopsys SecureShield™ technology enables designers to implement a Trusted Execution Environment (TEE) with multiple privilege levels on a single, ultra-low power core, reducing silicon area and energy consumption. This combination of ARC SEM hardware and software features enables creation of more secure system-on-chips (SoCs) for IoT and mobile.

"With more than 1.9 billion ARC-based chips shipping annually, Synopsys continues to incorporate differentiated features into our processors to address the specific needs of a range of applications including automotive, IoT and storage," said John Koeter, vice president of marketing for IP at Synopsys. "Receiving The Linley Group's Best Processor IP Award is a testament to Synopsys' commitment to providing the design community with differentiated processor IP that enables them to meet the aggressive performance, power, area and security goals of their embedded designs."

Resources

- Learn more about ARC SEM security processors
- Learn more about ARC SecureShield technology
- Learn more about separately licensable ARC security options

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 https://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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