

Multiple NXP Edge Processors Now PSA Certified

February 25, 2019

News Highlights

- NXP announces certification from Arm Platform Security Architecture (PSA) certification scheme, PSA Certified and Security Evaluation Scheme for IoT Platforms (SESIP) across the industry's broadest range of edge processing solutions: from microcontrollers (MCUs), crossover processors to applications processors.
- PSA and SESIP certifications reinforce NXP's long-standing leadership in driving scalable, secure processing for industrial and Internet-of-Things (IoT) applications.
- PSA Certified is an Arm-led industry-wide initiative, including NXP, to provide a simple and comprehensive approach to security testing.

NUREMBERG, Germany, Feb. 25, 2019 (GLOBE NEWSWIRE) -- (Embedded World 2019) – Building upon the commitment made by NXP to drive security for the IoT with <u>The Charter of Trust</u> at the Munich Security Conference, NXP Semiconductors N.V. (NASDAQ: NXPI) today announced various processor families were awarded Level 1 certification in the Arm® Platform Security Architecture (PSA) certification scheme, PSA CertifiedTM.

NXP utilized its decades-long security expertise and leadership in working together with industry partners to harmonize PSA and SESIP security schemes for reduced fragmentation of IoT certifications. From power-efficient MCUs (LPC55S00) to crossover processors (i.MX RT1050, i.MX RT1060, i.MX RT600) and up to high-performance i.MX applications processors (i.MX 7ULP, i.MX 8M Nano, i.MX 8M Mini, i.MX 8QuadXPlus, i.MX 8QuadMax), are now PSA Certified Level 1. LPC55S00, i.MX RT1050, i.MX RT1060, and i.MX 7ULP are also SESIP certified Level 1 with other families completing soon. Independent verification of the security requirements to gain PSA and SESIP certifications were carried out by Brightsight, the world's largest independent security evaluation lab.

"The market has been waiting for security standards that enhance consumer confidence," said Geoff Lees, senior vice president and general manager of microcontrollers. "PSA and SESIP provide that assurance and will open the door for much faster deployment of secure industrial and IoT solutions. We are working with ecosystem partners to create uniform certification standards while adding our unique value to raise the bar on security and privacy."

"Brightsight is excited to work with NXP on these PSA Certified and SESIP projects. Both schemes will improve the security of IoT devices and build a higher level of trust in the value chain," said Dirk-Jan Out, CEO of Brightsight. "This trust is critical for the IoT to succeed. As one of the leading partners of PSA Certified as well as SESIP, we are proud to be the security lab and advisory partner supporting NXP in their commitment to secure their products."

All PSA and SESIP certified products implement isolated, secure execution environment thus protecting sensitive assets by separating them from the user application. A cornerstone to establishing the IoT trustworthiness, NXP's ROM-based secure boot process leverages securely stored device keys creating an immutable, hardware-based 'Root-of-Trust' (RoT). The entire software stack, from the bootloader, operating system and up to the application software, is authenticated, starting from the hardware RoT to establish a chain of trust. Several recently introduced crossover processors and MCUs also integrate an SRAM-based Physically Unclonable Function (PUF) that uses natural variations intrinsic to the SRAM to generate on-demand keys. The security for Public Key Infrastructure (PKI) or asymmetric encryption is enhanced through the Device Identity Composition Engine (DICE) security standard as defined by the Trusted Computing Group (TCG).

With NXP's comprehensive 'secure-by-design' principles and capabilities, its embedded processors meet or exceed the Level 1 standards specified by PSA and SESIP with many of these families capable of Level 2 standards.

"As we drive towards a world of a trillion connected devices, it's our industry's responsibility to enable trust in connected devices, the data they collect and the deployment of these devices at scale," said Paul Williamson, VP and GM, Emerging Business Group at Arm. "PSA Certified enables IoT solution developers and device makers to verify their solutions have been designed with a secure foundation in line with PSA principles, and NXP is among the first of our partners to deliver a Level 1 PSA Certified product family."

Driving Holistic Security for the IoT

In addition to PSA Certified and SESIP, NXP is also connected to national and international governmental institutions around the world. With them, NXP helps coordinate the security expectations, certifications, requirements and legislation. For example, NXP has joined forces with fellow IoT key players in the Charter of Trust, is a member of the European Cyber Security Organization (ECSO) and has connections with the European Union Agency for Network and Information Security (ENISA). NXP also actively participates in standardization bodies such as ISO, FIDO, GlobalPlatform, and NFC Forum, to promote future security interoperability. Additionally, NXP solutions for key applications are certified according to global security standards, including Common Criteria (ISO/IEC 15408-1...3) up to the level EAL 6+ certifications.

For more information about NXP's security solutions for the IoT, visit our website.

About NXP Semiconductors

NXP Semiconductors N.V. (NASDAQ:NXPI) enables secure connections and infrastructure for a smarter world, advancing solutions that make lives

easier, better and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the secure connected vehicle, end-to-end security & privacy and smart connected solutions markets. Built on more than 60 years of combined experience and expertise, the company has over 30,000 employees in more than 30 countries and posted revenue of \$9.41 billion in 2018. Find out more at <u>www.nxp.com</u>.

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