NXP Takes Broad Leadership in Security and NFC to Deliver New Secure Element Chip to Protect Private Data across Mobile and IoT Devices

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NXP brings industy's first 40nm embedded secure element chip to mass production

BARCELONA, Spain, Feb. 27, 2017 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ:NXPI) today unveiled its new PN80T embedded Secure Element (SE) and NFC solution. It is the Industry's first 40nm SE and is designed to ease development and implementation of an extended range of secure applications for any platform including smartphones, wearables, and the Internet of Things (IoT). The innovative chip combines best-in-class RF performance, exceptional flexibility in NFC antenna design and state-of-the-art secure element performance, which results in fast transaction times and field updates – consequently leading to better end-user experiences.

"As the number of connected devices increase, so does the risk of IoT-driven cyberattacks. These privacy breaches may just be the beginning, if the security in consumer IoT devices remains unchanged," said Ruediger Stroh, Executive Vice President of Security and Connectivity at NXP. "NXP's 'secure-by-design' approach, exemplified in the PN80T chip, helps our customers and partners mitigate risk of security breaches, stay ahead of any rules and security requirements set forth by trusted authorities, and empowers the IoT ecosystem of devices to house trusted applications, associated credentials and cryptographic data in a secure environment."

Best-in-class user experience for well-established NFC use cases

With more than one billion NFC chipsets being deployed in the market today, NXP's engineering expertise further advances the technology. The new PN80T system includes a high performance NFC controller that enables a smaller NFC antenna to fit smaller and thinner form factors than before. The controller delivers best-in-class RF performance, allowing communications at further distances as well as a significantly improved RF interoperability of 99 percent. Furthermore, with the increased performance of the SE, transactions times at payment and transit terminals in China could be reduced by 40 percent compared to previous generations, which brings mobile transactions up to the speed and convenience experienced through contactless cards.

Enabling new security applications to protect devices and users alike

Building on the success of well-established NFC applications such as mobile payment and transit, the PN80T can fuel a range of new security applications that are not NFC-related. For mobile devices, the PN80T can be used as a high-level security protection enclave. Being ELA6+ certified, the highest CC level of any SE in the market, allows manufacturers and developers to enhance platform security by enabling devices to use biometric information for access. The PN80T is designed to secure this sensitive biometric information.

Easy deployment of secure transaction services

Stepping up in features and enablement, PN80T unleashes business opportunities in many domains of security by:

- offering OS updates independent from the TSM,
- the use of Loader Service, the enabler of simpler deployment of value added services, eliminating the burden of costly TSM for any business size,
- smooth and broad service deployment supporting MIFARE4Mobile®, a technology used to manage MIFARE-based services in NFC mobile devices, from over-the-air installation to end-user interaction,
- best performance and robustness against tearing events and durability through NXP combined design expertise in both hardware and software
- offering a dedicated reference design and test bed to support R&D activities and development of wearables and applications using embedded eSE technology

At Mobile World Congress, NXP will demonstrate secure fingerprint identification in which the eSE could be used independent from the NFC controller to store private data in any type of connected device.

Driving Security-by-Design in IoT Devices

From microcontrollers, processors and secure elements, to RFID products, advanced smart cards, NFC technology, software and services, NXP has a long history of providing solutions for ecosystems that require heightened security and privacy to protect systems, from the component level to the cloud. The company achieves this with deep engineering expertise, strong relationships across the solution ecosystem, a proven understanding of current applications, and insight into trends as more companies look to implement solutions based on the Internet of Things. IoT connectivity requires more computing and security to ensure reliability, safety and quality, which underscore the guiding principles of NXP's Security by Design. Learn more about NXP's Security by Design here.

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 31,000 employees in more than 33 countries and posted revenue of $9.5 billion in 2016. Find out more at www.nxp.com.

For more information, please contact:

Americas	**Europe**	**Greater China / Asia**
Tate Tran	Martijn van der Linden	Esther Chang
Tel: +1 408-802-0602	Tel: +31 6 10914896	Tel: +886 2 8170 9990
Email:tate.tran@nxp.com	Email: martijn.van.der.linden@nxp.com	Email: esther.chang@nxp.com

NXP Semiconductors Netherlands B.V.