



NXP Accelerates Automotive Software Design with the New S32K Microcontroller Platform Launch

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ARM® Cortex®-M based product line brings an unprecedented combination of security, safety and low power with full automotive-grade software

NUREMBERG, Germany, March 14, 2017 (GLOBE NEWSWIRE) -- **NXP Semiconductors N.V.** (NASDAQ:NXPI) today launched the S32K1 family combining a breakthrough suite of automotive grade tools and software in support of a scalable family of ARM Cortex-based MCUs with future-proof features. This combination drastically reduces development effort and time to market in a broad range of automotive applications. With 10 of the top 15 global car manufacturers already using S32K in next-generation vehicles, this platform sets the future direction of automotive ECU development.

A photo accompanying this release is available at <http://www.globenewswire.com/NewsRoom/AttachmentNg/d2b7a4f7-259f-48b9-b660-bd549ce61e36>

The traditional approach for software development has been to rely on AUTOSAR for automotive-grade drivers, however, not all applications require it. The alternative route is self-development, which is labor-intensive, adds qualification requirements and diverts critical resources. As ECU complexity increases, maintaining high-quality software and meeting time-to-market requirements can only be achieved through use of mature, validated sub-system components.

Minimized software complexity

NXP is utilizing its 15+ years of experience in delivering professionally maintained automotive-grade software to minimize development complexity for a broad range of customers regardless of their development approach.

In applications where the use of AUTOSAR is not mandated, NXP is providing an alternative, turn-key option for self-development with a free-of-charge, pre-qualified, automotive-grade software development kit (SDK) that enables rapid prototyping with simple drag and drop functionality. It includes:

- MISRA and SPICE Level 3 compliant low-level drivers (LLDs) for all peripherals
- Optional application-specific middleware for LIN, NFC and touch sensing
- FreeRTOS® operating system
- Drivers for complementary NXP ICs for faster application bring-up and production readiness e.g. system basis chip (SBC) drivers
- Documented source code and out-of-the-box examples eliminating the need for device documentation during application bring-up

The SDK is pre-installed in NXP's free S32 Design Studio (DS), an Eclipse-based integrated development environment (IDE) supporting multiple compiler and debugger options.

For AUTOSAR applications, NXP standard MCAL and OS support has been expanded with new Complex Device Drivers (CDD) and a new S32K starter kit from ARCCORE®, significantly lowering cost and complexity barriers to adoption. It is available free of charge for evaluation.

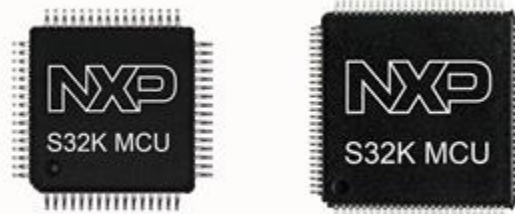
Future-proof hardware

Unlike existing solutions that require multiple MCU platforms to cover a similar range, the initial S32K1 family will span 128KB-2MB of flash memory based on high performance ARM Cortex-M cores. All family members include ISO CAN FD, CSEc hardware security, ASIL-B support and ultra-low-power performance. This scalable approach, combined with a common package strategy and production grade software, maximizes reuse allowing customers to react quickly to changing market requirements.

Quotes

"S32K marks an inflection point in NXP's automotive MCU strategy," said Manuel Alves, General Manager GPIS products in NXP's Automotive Microcontroller and Processors Business Line. "We are transitioning from multiple proprietary architectures to a continuous ARM Cortex MCU portfolio combining future-proof hardware with software differentiation."

"The S32K's software and tool support from NXP and multiple ARM ecosystem partners, enables fast time-to-market for developers of all experience levels," said Paul Lee, Global Distribution Marketing Manager for NXP's Automotive Microcontroller and Processors Business Line. "Furthermore, the significant investment in automotive-grade software sets a new standard for an MCU supplier."



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Availability

S32K144 samples and a \$49 development board are now available with production scheduled for the second quarter of 2017. S32K MCUs are included in NXP's Product Longevity Program which assures supply for a minimum of 15 years. For more information visit www.nxp.com/S32K.

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.

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