New S32J Family of Safe and Secure Ethernet Switches Enables Scalable Vehicle Networks, Extending NXP CoreRide Platform

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- New S32J family of high-performance switches (80Gbps) share a common switch core with NXP S32 processing devices to maximize software re-use and simplify network configuration and integration
- Production-grade networking functions with pre-integrated software from NXP and market-leading software partners helps reduce development efforts and optimize system performance
- NXP CoreRide networking solution, built on the S32J family, will help OEMs and Tier 1s navigate complex network challenges associated with software-defined vehicles (SDVs)

EINDHOVEN, The Netherlands, Oct. 15, 2024 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ: NXPI), the worldwide leader in automotive processing and networking, has introduced the new S32J family of high-performance Ethernet switches and network controllers.

The S32J family shares a common switch core, NXP NETC, with NXP's latest S32 microcontrollers and processors, allowing them to operate together as one expanded virtual switch. The common networking switch core simplifies integration and software re-use with other solutions within the recently announced NXP CoreRide platform and offers OEMs more efficient and re-configurable networking choices.

The S32J provides 80Gbps bandwidth with ports ranging from 10Mb to 10Gb, and powerful dual Arm® Cortex®-R52 cores to address diverse requirements of new vehicle architectures. The S32J devices meet time-sensitive networking (TSN) automotive standards and provide robust ASIL-D safety, hardware security engine (HSE) and MACsec ports for mixed-critical data traffic.

The combination of the S32J family with the NXP CoreRide platform provides production-grade networking solutions with pre-integrated software and tooling. The solutions include a complete software enablement kit for HSE and MACsec security, TSN stacks and remote configuration and monitoring capabilities. A virtual development kit for the S32J family will be available by the end of 2024. The solution will be available to OEMs and Tier-1 suppliers in 2025.

The building blocks for SDV networks
"The transition to software-defined vehicles requires OEMs to simplify their network architectures and reduce the software and hardware integration complexity," said Meindert van den Beld, senior vice president and general manager of in-vehicle networking at NXP. "The S32J and NXP CoreRide networking solutions provide production-ready building blocks for these new software-defined network architectures."

NXP CoreRide Networking ecosystem voices
Dr. John Heinlein, Chief Marketing Officer at Sonatus
"Sonatus is a longstanding partner of NXP, with our combined technologies already in millions of production vehicles. This new NXP CoreRide networking solution deepens our support for vehicle networking and the NETC networking foundation across NXP products, enabling OEMs to accelerate development of more adaptable, upgradable architectures for software-defined vehicles."

Dr. Stefan Poledna, Chief Technology Officer and Co-founder of TTTech Auto
"At TTTech Auto, we are excited about the advancements in vehicle networking solutions through NXP's CoreRide networking platform. The integration of scalable and dynamically re-configurable network management capabilities for TSN-based, advanced Ethernet networks is crucial for the development of software-defined vehicles. TTTech's MotionWise platform complements the NXP CoreRide networking solution, delivering safe and flexible communication solutions that help OEMs and Tier-1s accelerate development cycles, enhance system reliability, and enable seamless end-to-end communication across vehicle networks."

NXP CoreRide platform
The NXP CoreRide platform marks a major step forward in helping automakers overcome software and hardware integration barriers, while scaling development efforts for new architectures in software-defined vehicles. The platform integrates NXP's S32 compute, networking and system power management with middleware, OSes and other software from the world's leading automotive software providers, including Accenture ESR Labs, ArcherMind, BlackBerry QNX, Elektrobit, ETAS, Green Hills Software, Sonatus, Synopsys, TTTech Auto, Vector Informatik GmbH, and Wind River, Tier-1 suppliers like Valeo, as well as integration service providers like Foxconn.

About NXP Semiconductors
NXP Semiconductors N.V. (NASDAQ: NXPI) is the trusted partner for innovative solutions in the automotive, industrial & IoT, mobile, and communications infrastructure markets. NXP's "Brighter Together" approach combines leading-edge technology with pioneering people to develop system solutions that make the connected world better, safer, and more secure. The company has operations in more than 30 countries and posted revenue of $13.28 billion in 2023. Find out more at www.nxp.com.

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A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/f3e09b2d-d109-44df-afbd-eb4df8197b0e

NXP-Corp
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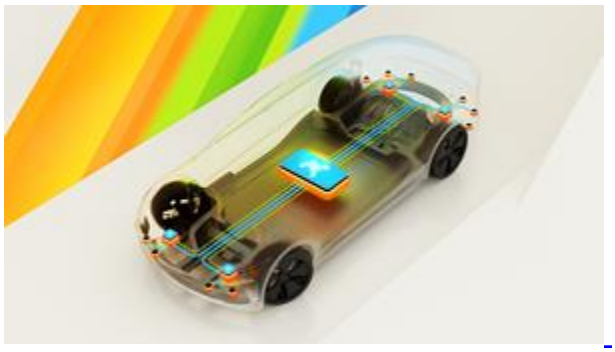

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Source: NXP USA, Inc.