



NXP Expands Industry's Broadest Matter Portfolio with New, Secure Wireless MCUs

December 14, 2022

- *The world's first secure tri-radio wireless MCU, the RW612 is integrated with an i.MX RT crossover MCU and simplifies design for smart home devices by supporting the Matter™ standard, including Matter over Wi-Fi®, Matter over Thread® and Matter over Ethernet*
- *New K32W148 wireless MCU features advanced processing capabilities with multi-protocol enablement across Thread, Matter, Bluetooth® and Zigbee® to create scalable smart home solutions*
- *Both devices are part of NXP's EdgeLock® Assurance program and will be enabled with EdgeLock 2GO services offering support for keys and certificate management.*

EINDHOVEN, The Netherlands, Dec. 14, 2022 (GLOBE NEWSWIRE) -- NXP Semiconductors (NASDAQ: NXPI) today announced new devices designed to simplify the development of IoT and industrial IoT solutions. Adding to NXP's expanding portfolio of end-to-end Matter solutions, the RW612 and the K32W148 devices combine advanced edge processing capabilities with integrated security to streamline development, simplify designs and reduce costs for Matter-enabled smart home devices.

The recently launched Matter standard, developed within the Connectivity Standards Alliance by a consortium of industry leaders, including NXP, to ease device interoperability in the smart home. Matter aims to enable devices from different brands and ecosystems to seamlessly, reliably and securely communicate and thereby free consumers from ecosystem restraints. This innovative approach allows consumers to select devices based on desired features rather than complex or confusing connectivity requirements. With native support for Matter, the multi-protocol enablement provided by the NXP K32W148 and the tri-radio capabilities of the RW612 make it easier for developers to integrate Matter functionality into smart home devices.

The **RW612** is the industry's first tri-radio wireless MCU with concurrent, multi-protocol support for Wi-Fi® 6, Bluetooth® Low Energy 5.3 and 802.15.4, capable of supporting Thread or Zigbee. It is targeted for smart home devices such as thermostats, garage door openers, door locks, IP cameras, robotic vacuums, as well as smart appliances.

The **K32W148** wireless MCU offers multi-protocol enablement across Thread, Bluetooth Low Energy 5.3, and Zigbee for devices such as smart plugs, smart lighting, and low-power smart devices and sensors. It also easily adds Thread and Zigbee support to home routers, hubs and bridges. The multi-protocol enablement reduces costs and simplifies antenna design with a single antenna.

"The next generation of consumer and industrial devices needs the right combination of an advanced MCU and secure connectivity across the most important protocols, including Thread, Wi-Fi, Bluetooth and Matter," said Larry Olivas, Vice President and General Manager for Wireless Connectivity Solutions, NXP Semiconductors. "Combining NXP's advanced edge processing capabilities with our industry-leading tri-radio portfolio and advanced security simplifies designs and reduces the complexity of supporting Matter and enables smart device manufacturers to bring innovative, next-generation products to market faster."

Tri-Radios Streamline Smart Home Device Development

The RW612 leverages an integrated tri-radio and advanced edge processing capabilities from the EdgeVerse™ i.MX RT crossover MCU family. It features an Arm® Cortex®-M33 MCU subsystem with TrustZone®-M and fully integrated Wi-Fi 6, Bluetooth LE 5.3 and 802.15.4, capable of supporting Thread or Zigbee. Offering a high degree of integration to reduce design complexity, BOM costs and solution size, it includes on-chip SRAM and high performance configurable peripherals, including Ethernet, LCD controller and five FlexComm modules to support a variety of serial protocols. The RW612 is supported by the unified MCUXpresso® development environment to reduce time to market.

NXP also offers [the RW610](#), part of the same family of devices, which are ready to support new features such as Bluetooth LE Audio and Auracast™ broadcast audio for audio-focused applications, including portable audio devices and speakers, home theater systems, and gaming controllers.

Wireless MCUs for the Matter-enabled Smart Home

The multi-protocol K32W148 wireless MCU is architected with separated radio and security execution environments to free the main Arm® Cortex®-M33 core and memory for the customer's application. The multiprotocol radio supports Matter, Thread, Bluetooth LE 5.3 and Zigbee. It also includes dual-PAN capability to simplify the co-existence of multiple IEEE 802.15.4 networks, such as Thread and Zigbee. The K32W148 is also supported by the unified MCUXpresso development environment to reduce time to market.

Security at the Heart of Matter Enablement

Both the K32W148 and the RW61x wireless MCUs are part of NXP's EdgeLock Assurance program, which follows a secure-by-design approach, including protection against remote and local software attacks, as well as support for secure boot, secure debug and secure over-the-air firmware updates, with an immutable root-of-trust, hardware accelerated cryptography, and lifecycle management. They are also optimized to seamlessly work with the EdgeLock SE05x secure element and EdgeLock A5000 secure authenticator. These discrete security components with optionally pre-injected keys and certificates provide a Common Criteria EAL6+ certified, turnkey plug-in solution, bringing additional tamper resistance and support for additional security use cases (such as device integrity protection or secure UWB ranging). Both devices will also support the NXP EdgeLock 2GO

service for simplifying the provisioning and management of device credentials from manufacturing and through the device lifecycle.

The RW612 and RW610 are currently sampling. For more information, please visit [NXP.com/RW612](https://www.nxp.com/RW612) or contact NXP Sales worldwide.

The K32W148 is currently sampling. For more information, please visit [NXP.com/K32W148](https://www.nxp.com/K32W148) or contact NXP Sales worldwide.

For more information about NXP's end-to-end Matter solutions, please visit [nxp.com/Matter](https://www.nxp.com/Matter)

About NXP Semiconductors

NXP Semiconductors N.V. (NASDAQ: NXPI) enables a smarter, safer and more sustainable world through innovation. As a world leader in secure connectivity solutions for embedded applications, NXP is pushing boundaries in the automotive, industrial & IoT, mobile, and communication infrastructure markets. Built on more than 60 years of combined experience and expertise, the company has approximately 31,000 employees in more than 30 countries and posted revenue of \$11.06 billion in 2021. 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/88d5fe5d-9b3a-4d5d-aa3e-0935070ee851>

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Source: NXP USA, Inc.