NXP Advances IoT Connectivity with Industry's First Secure Tri-Radio Device

January 4, 2022

- Industry's first monolithic tri-radio family to support Wi-Fi 6, Bluetooth ® 5.2 and 802.15.4, enables simultaneous transmit and receive for higher performance in smart solutions
- Supports Matter, the interoperable, secure connectivity standard for the future of the smart home, providing unprecedented coexistence, performance, and radio integration
- Seamlessly connects smart devices across protocols and ecosystems, simplifying development and reducing cost and board space for smart home, automotive, and industrial devices

LAS VEGAS, Jan. 04, 2022 (GLOBE NEWSWIRE) -- NXP® Semiconductors (NASDAQ: NXPI) today announced the IW612, the industry's first secure tri-radio device to support the Wi-Fi 6, Bluetooth 5.2 and 802.15.4 protocols. Part of NXP's new family of tri-radio products, the new device enables seamless, secure connectivity for smart home, automotive and industrial use cases, and supports the new groundbreaking Matter connectivity protocol. The IW612 frees consumers from the restrictions of single protocol ecosystems, allowing them to enjoy seamless interoperability across different ecosystems and wireless network technologies. Additionally, developers benefit from NXP's state-of-the-art coexistence capability, which enables simultaneous support of three radios on a single device, reducing costs and development time.

One of the primary challenges facing the IoT is limited interoperability, which can restrict the consumer's ability to mix smart home products from different companies. Matter, a new standardized IoT connectivity protocol, designed by a consortium of industry leaders including NXP, addresses these limitations by unifying how devices communicate, independent of the manufacturer or wireless technology. The protocol creates more connections between more objects, thereby simplifying development for manufacturers and compatibility for consumers.

To support a new era of interoperability, the IW612 integrates three of the industry's leading connectivity radios onto a single device for the first time, delivering robust radio performance and integrating a high-performance RF front end. This technology combination enables true interoperability in the smart home, significantly reducing development time, simplifying design and reducing costs. The highly integrated solution overcomes hardware co-existence challenges that developers face today, while also enabling advanced security protocols to help thwart the ever-increasing number of security threats faced by the IoT.

The IW612 leverages NXP's long history of leadership in providing secure solutions to help combat the ongoing security threats smart devices face. The IW612 offers secure boot, debug and over-the-air firmware updates for ongoing protection, as well as WPA3 security and hardware encryption engines.

"With the IW612, developers can leverage different wireless connectivity protocols on a single device to create an easy-to-use, secure product for smart home, industrial and automotive use cases," said Larry Olivas, Vice President and General Manager for Wireless Connectivity Solutions, NXP Semiconductors. "From door locks and smart speakers to in-vehicle entertainment and telematics, products can now benefit from our tri-radio solutions that address multiple technologies and ecosystems, including Matter. This provides developers with a more cost-effective solution while streamlining deployment for the consumer."

"Interoperability has been a key challenge that has fragmented the smart home market for years, but Matter-enabled devices can change that," said Jonathan Collins, Research Director at ABI Research. "With its new monolithic devices, NXP enables developers to leverage Matter-supported connectivity protocols for their smart home applications and help accelerate Matter adoption. This, in turn, will provide consumers with improved useability by making smart devices easier to connect and greater choice among the interoperable devices they can use.

Additional Details:

The IW612 is an ideal solution for border routers, bridges and gateways in the smart home that require connecting Thread or Bluetooth devices to the cloud using the integrated Wi-Fi 6 radio. Additionally, the IW612 enables communication between Matter devices regardless of whether the devices use Wi-Fi or Thread. This allows Matter-over-Wi-Fi products to control and monitor Matter-over-Thread devices, and vice versa, for seamless interoperability.

Key features of IW612 include:

- Tri-Radio Integration
  - Wi-Fi 6 reduces network congestion, extends range, improves robustness and lowers power
  - Bluetooth 5.2 for audio (A2DP, LE Audio), voice and network commissioning
  - 802.15.4 for Matter with Thread mesh networking
- Advanced coexistence for internal and external multi-radio operation
- Robust security for protection against IoT attacks
- Pre-validated connection to NXP's broad microprocessor and microcontroller portfolio
- Integrated RF front-end including LNAs, high-power PAs and switches for system cost savings, reduced bill-of-materials

and footprint

Product Availability
The IW612 is sampling now and will be demonstrated live at CES 2022. For more information, please visit NXP.com/Matter or contact NXP Sales worldwide.

About NXP's Connectivity Portfolio
With one of the industry's broadest portfolios of wireless technologies, NXP is committed to accelerating our vision of a connected world that anticipates and automates. When combined with the processing power of the EdgeVerse platform, NXP is uniquely positioned to enable smart connected devices – making lives easier, safer, and more convenient. Whether it's connecting people to the Internet, joining IoT devices to the cloud, or communicating with cars in new and unexpected ways, NXP's portfolio allows customers to advance their most innovative ideas with confidence and a sense of trust. By collaborating with our partners, we are connecting our world and delivering solutions that advance society together.

About NXP Semiconductors
NXP Semiconductors N.V. (NASDAQ: NXPI) enables secure connections 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 automotive, industrial & IoT, mobile, and communication infrastructure markets. Built on more than 60 years of combined experience and expertise, the company has approximately 29,000 employees in more than 30 countries and posted revenue of $8.61 billion in 2020. Find out more at www.nxp.com.

For more information, please contact:

Americas & Europe
Phoebe Francis
Tel: +1 737-274-8177
Email: phoebe.francis@nxp.com

Greater China / Asia
Ming Yue
Tel: +86 21 2205 2690
Email: ming.yue@nxp.com

NXP-Corp

NXP-IoT

A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/2e8667f5-92c3-490f-a133-e90fa555a289

NXP Advances IoT Connectivity with Industry's First Secure Tri-Radio Device

•Industry's first monolithic tri-radio family to support Wi-Fi 6, Bluetooth® 5.2 and 802.15.4, enables simultaneous transmit and receive for higher performance in smart solutions •Supports Matter, the interoperable, secure connectivity standard for the future of the smart home, providing unprecedented coexistence, performance, and radio integration •Seamlessly connects smart devices across protocols and ecosystems, simplifying development and reducing cost and board space for smart home, automotive, and industrial devices

Source: NXP USA, Inc.