NXP Delivers Ultra-Low Power, Wireless Connectivity for Eco-Friendly Smart Home Devices

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News Highlights

- Wireless microcontrollers integrate multiprotocol mesh networking
- Integrated NFC NTAG for tap-to-pair installations
- New solutions provide IoT connectivity with ultra-low power performance for connected applications to maximize battery life
- Part of a complete Internet of Things wireless portfolio that includes Bluetooth LE, Thread, Zigbee and WI-FI communications

Eindhoven, Netherlands, May 7, 2020 – NXP Semiconductors N.V. (NASDAQ: NXPI) today introduced the K32W061/41, its new family of ultra-low power, multiprotocol wireless microcontrollers (MCUs). The new low power devices complement the company's recently introduced pin-compatible JN5189/88 (Thread™/Zigbee®) and QN9090/30 (Bluetooth® LE) MCUs and provide original equipment manufacturers (OEMs) with an easier migration path to support current and emerging smart home and building use cases.

Lowering the power consumption of today's smart home and IoT devices is crucial to maximizing the performance from a single coin cell battery. NXP's K32W061/41 MCU achieves this via multiple low power modes and low transmit/receive radio power capabilities.

"The demand for ultra-low power connectivity in the smart home continues to grow as does the number of wireless technologies to choose from," said Tom Pannell, senior marketing director for connectivity solutions at NXP. "With the launch our new multiprotocol wireless microcontrollers, NXP is providing ultra-low power performance for connected applications by leveraging the breadth and expertise of our technology portfolio to deliver solutions that make it easier for OEMs to design robust and feature-rich Internet of Things devices with Bluetooth LE, Zigbee and Thread."

The K32W061 and the K32W041 feature an IEEE 802.15.4 radio supporting Thread and Zigbee networking protocols, Bluetooth Low Energy 5.0 and an integrated NFC NTAG® (K32W061). The devices also support a wide operating temperature range (-40 °C to +125 °C). As a founding member of the Zigbee Alliance and Thread Group, co-founder of NFC Forum and member of Bluetooth SIG, NXP has leveraged its wireless expertise along with its broad MCU capabilities to integrate the latest connectivity standards with the proper intelligent peripherals These peripherals support a range of use cases that include:

- home and building automation
- security and access control
- smart thermostats and locks
- gateways and sense sensor networks applications

The K32W061/41 wireless microcontrollers are based on an Arm® Cortex® M4 microcontroller core running at 48MHz and include 640 KB of onboard flash and 152 KB SRAM, providing storage space and flexibility for complex applications and software over-the-air (OTA) updates. The optional NFC NTAG provides standardized out-of-band communications to dramatically simplify the pairing process. The multiprotocol radio includes an integrated power amplifier capable of up to + 11dBm output making long distance transmission possible. Additionally, it supports Bluetooth Low Energy 5.0, Zigbee, and OpenThread wireless network protocol stacks.

Product Enablement and Support

- NXP's MCUXpresso software development kit (SDK) for the K32W061/41 wireless MCUs is compatible with the latest toolchains from IAR and NXP's MCUXpresso IDE.
- The NXP IoT Toolbox smart device application and connectivity tool helps developers evaluate RF performance and test more efficiently.
- Hardware development support with the NXP IoT Development Kit, part number IOTZTB-DK006, that provides the ideal prototyping platform of a complete IoT design.
- Additional development hardware includes a USB dongle, part number OM15080-K32W for Bluetooth LE, Thread and Zigbee networks.

Product Availability

The K32W061/41 family of microcontrollers are available now from NXP and its authorized distribution partners.

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. 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 $8.88 billion in 2019. Find out more at www.nxp.com.

For more information, please contact:

Americas	**Europe**	**Greater China / Asia**
Jason Deal	Jason Deal	Ming Yue
Tel: +44 7715228414	Tel: +44 7715228414	Tel: +86 21 2205 2690
Email: jason.deal@nxp.com	Email: jason.deal@nxp.com	Email: ming.yue@nxp.com