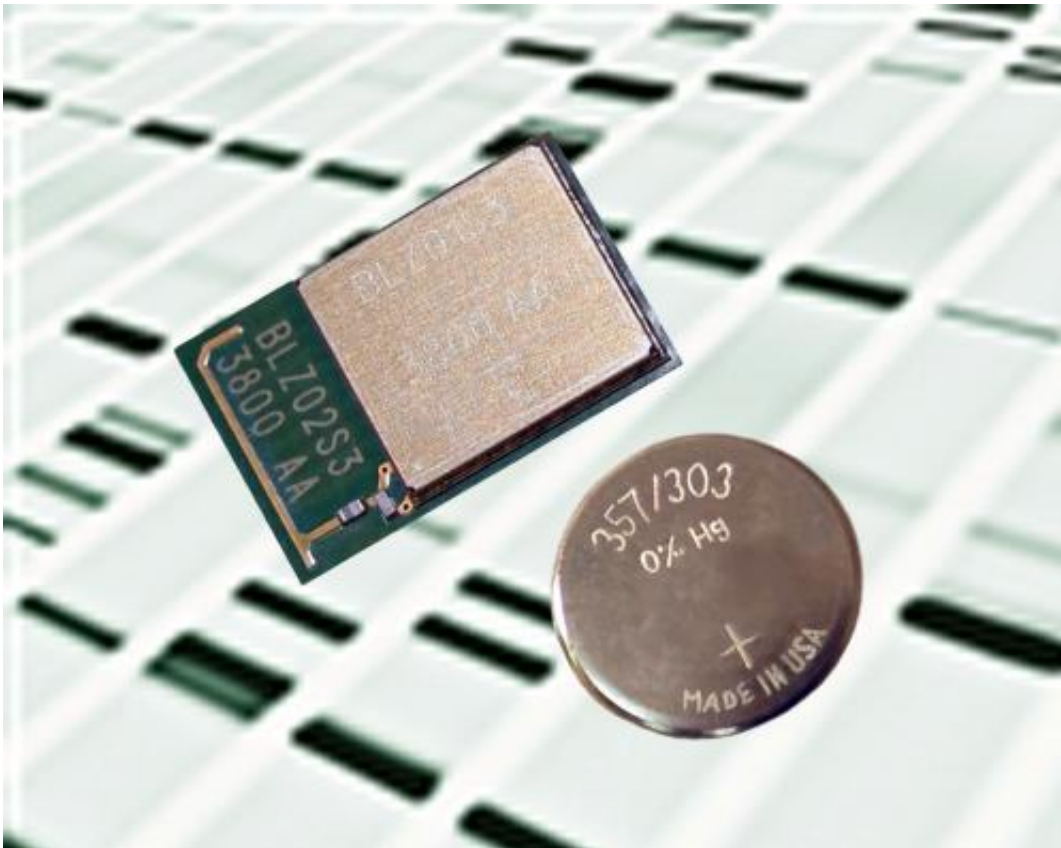


Fujitsu introduces ultra-compact Bluetooth low-energy modules

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With increasing OEM development of compact and low-cost Bluetooth low energy (BLE) devices and accessories, Fujitsu Components America has introduced a new family of ultra-compact, BLE modules based on the Nordic Semiconductor nRF51822 System-on-Chip (SoC). The

modules provide an economical means for developers to reduce their time-to-market.

Fujitsu's new MBH7BLZ01-109003 and MBH7BLZ02-109004 Bluetooth low energy modules are among the smallest on the market. Bluetooth V4.0 single-mode compliant, the modules allow OEMs to quickly develop tiny, power-conscious and cost-efficient Bluetooth Smart consumer devices, such as medical monitors, proximity sensors, smart watches and fitness monitors, as well as emerging applications, such as 3D motion sensors and environmental sensors.

Fujitsu offers two versions: A 10.5 x 9.2 x 1.6 mm surface-mount module without antenna, and a 15.7 x 9.8 x 2.0 mm surface-mount module with antenna. The modules feature a built-in MCU, which allows adding upper layer profiles including private profiles and application code. With development tools available from Nordic Semiconductor, it is possible to implement specific processing into the module and compose functions without using an additional MCU. These blank modules contain the complete verified and qualified Bluetooth® low energy protocol stack, offering flexibility and a high level of customization.

Nordic Technical Support Center has a range of development tools and reference designs to quickly implement specific processing into the modules. The Nordic Semiconductor nRF51822 SoC is built around a 32-bit ARM Cortex M0 CPU with 256kB flash + 16kB RAM. The separation of protocol stack and application code allows engineers to focus on developing the application code for Bluetooth Smart accessories with assurance that the protocol stack is fully tested and can't be corrupted by application software development. Currently available reference designs include keyboard, mouse and advanced navigation remotes.

According to Bob Thornton, Fujitsu Component America's President, combining Fujitsu's proven module packaging technology, distribution network, environmental responsibility and customer privacy with Nordic Semiconductor's ultra-low power SoC, application software development and technical support is a win-win. "Developers will have everything they need to create next-generation BLE products quickly and at a low cost," he said.

J. Darren O'Donnell, Director of Marketing & Sales - Americas at Nordic Semiconductor, agreed. "We are pleased to work with Fujitsu to offer the design community an ultra-compact, ultra-low power, single-chip solution that allows engineers to develop a range of Bluetooth low energy and 2.4GHz proprietary designs for cost, power, and size-constrained applications," he said.

Provided by Fujitsu

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