

Electronics

Insight SiP announces the launch of its ISP1507 module,

Published: 26 September 2016 - Sarah Mead



Insight SiP announces the launch of its ISP1507 module, extending the range of its class leading Bluetooth Smart Modules, based on the Nordic Semiconductor chipset. Following on from the success of its ISP1300 series of BLE modules, which is currently shipping in many OEM products worldwide, Insight SiP is releasing the ISP1507 module to offer customers access to the next generation technology in an integrated miniaturised package.

The new module is one of the smallest on the market at only 8 x 8 mm in x/y dimensions, with a thickness less than 1mm (typ. 0.95mm). This module uses the latest nRF52 series chipset from Nordic Semiconductor, with Insight SiP using its unique "System in Package" and "Antenna in Package" technology to provide a leading edge ready-to-use product that will fit into any application.

The module integrates the WLCSP nRF52832-CIAA chip from Nordic Semiconductor - offering a 32 bits ARM Cortex M4 CPU with floating point processor, 512 kB flash memory, analog and digital peripherals SPI, I2C and GPIO. Combined with its integrated 32 MHz / 32 KHz crystals, RF antenna and matching circuit and DC-DC convertor, this module forms a standalone Bluetooth Low Energy node. Module certification for global market is pending.

This module also incorporates NFC type-2 tag functionality (external antenna required), enabling easy "touch-to-pair" functionality. With the large memory capacity and powerful processor, this module can act as the hub for sophisticated applications, and in many cases replace additional microcontrollers required in previous generations of BLE products.

Despite the additional computing power on offer, power consumption is even lower than previous generations, with class leading performance at typically 5.5 mA for transmission, and reception, 1.5 μ A for standby mode and 0.7 μ A for deep sleep mode - and advanced power management enables battery lifetimes up to several years on a coin cell battery. Transmission output power reaches +4 dBm and reception sensitivity is also improved to -96 dBm.

The module runs the Nordic Bluetooth soft device which now supports a full Bluetooth V4.2 stack. This product represents therefore offers the very latest in Bluetooth Low Energy technology, with class leading performance in one single easy to use package.

To support product developers, Insight SiP offers a complete development kit together with sample software that provides everything required out of the box to start developing a solution on day one.

For more information, visit us at www.insightsip.com or email us at sales@insightsip.com.