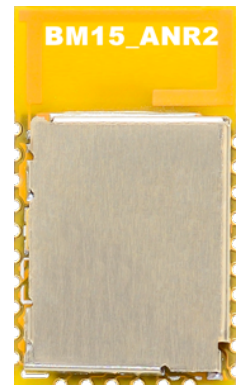


# BM15\_AN R2: Bluetooth Low Energy (Bluetooth Smart) Module

## Product Description:

BM15 R2 series built in the latest Bluetooth 5.0 Low Energy technology inside together with Texas Instrument® SimpleLink Wireless MCU CC2640R2 as the core. The CC2640R2 contains a powerful 32-bit ARM® Cortex M3 to handle the application, an ARM Cortex M0 to handle the radio protocols and a Sensor Controller to handle sensor readings and processing. InnoComm BM15\_AN R2, a BLE 5.0 **certified** module, supports longer range BLE application and higher data throughput. It is your next generation wireless solution to enrich IoT applications with a better seamless experience.



## Key Features:

- BT 5.0 **certified**
- Larger user memory size(275KB NV memory including 128KB flash, 28K RAM)
- ARM Cortex M3 with sensor engine
- Embedded antenna
- Compact size of module

## Specifications

- **Radio Frequency**
  - Bluetooth Low Energy compliance with 4.2 and 5.0 specification
  - RF frequency range 2360 – 2500MHz
  - Programmable output power up to +5dBm
  - Excellent receiver sensitivity (-97 dBm)
  - Suitable for system targeting compliance with worldwide radio frequency regulations:
    - ETSI EN 300 328(Europe)
    - EN 300 440 Class 2(Europe)
    - FCC CFR47 Part 15(US)
    - ARIB STD-T66 (Japan)
- **Low Power**
  - Active mode RX: 6.4mA
  - Active mode TX at 0dBm: 6.8mA
  - Active mode TX at 5dBm: 8.9mA
- **Memory**
  - 275KB NV Flash, ~80kB free flash for application
  - 20KB SRAM+8KB SRAM for Cache
- **Physical Specification**
  - Dimension: 18.0 x 10.5 x 2.0 mm
  - Pin count: 26
  - I/O: x15 GPIO (can be configured to Max. 1x UART, 2x SPI, 1x I2S, 1x I2C)
- **Operating Temperature**
  - -40°C to +85°C
- **Power Supply**
  - Voltage Range: 1.9V ~ 3.8V
- **Mounting Method**
  - SMD
- **Pre-certification**
  - CE, FCC
  - QDID

## Target Applications

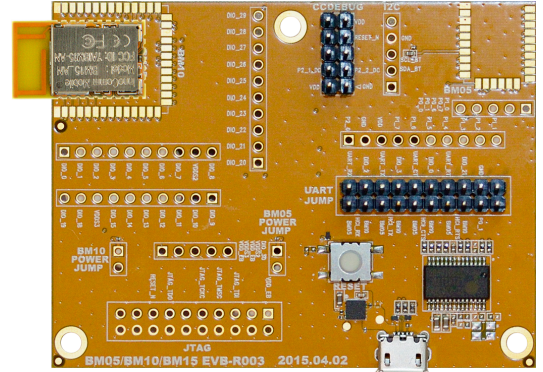
- Health & Fitness
- Home & Building Automation
- Wireless Sensor Network
- Remote Controls
- ...etc

## Software Features

- TI-RTOS
- Fully tested & certified BT stack & profiles
- BLE Protocol Stack in library format
- Sample applications

## Support & Service

- Multiple software development tool supported
  - IAR Embedded Workbench® for ARM
  - Code Composer Studio
- Evaluation board
- Guides included in the BLE installer ([www.ti.com/ble-stack](http://www.ti.com/ble-stack))
- Hardware design review and consult
- Upper layer protocol and application development tool to be available for download



### Ordering information

Please email to [innocomm@innocomm.com](mailto:innocomm@innocomm.com) or call +886-3-5781868 for more information.

InnoComm Mobile Technology, a 3<sup>rd</sup> party of Texas Instrument offering the wireless module to its customers, is based in Taiwan Hsinchu Science Park. InnoComm has been offering solutions and professional services to customers and helping them to stay competitive in the fast-changing wireless world.

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