Module Series

Bluetooth-Low-Energy applications

ITM-1762C-S

- Ultra low power consumption with intelligent PMU
- Supports the Bluetooth 5.0 core specification
- LE advertising Extensions and LE Long Range
- Supports multiple level Low Energy states
- Supports LE L2CAP Connection Oriented Channel Support
- Supports LE low duty directed advertising
- Supports LE data length extension feature
- Supports OTA (Over-the-Air) programming mechanism for firmware upgrade
- Supports GAP, ATT/GATT, SMP, L2CAP
- Generic Applications for GAP Central, Peripheral, Observer and Broadcaster Roles
- Support OTA (Over-the-Air) programming

ITM-1762C-S module features a fully integrated 2.4GHz radio transceiver and baseband processor for Bluetooth-Low-Energy applications. It can be used as a standalone application-specific communication processor or as a wireless data link in hosted MCU systems where ultra-low power is critical. It supports flexible memory architecture for storing profiles, stacks and custom application codes, and can be updated using Over-The-Air (OTA) technology.

ITM-1762C-S module uses Realtek RTL8762CJF SoC. that combines the excellent performance of a leading RF transceiver with a low-power ARM Cortex-M4F and rich powerful supporting features and peripherals. It also contains 160KB SRAM, and 2Mbit flash memory.

General Specification	
CPU	Embedded 32bit ARM Cortex-M4F
Flash	2Mbit, SPI Flash
Memory	Built-in 160KB SRAM + 4Kb eFUSE
Bluetooth Standard	BLE 5.0
I/O Interface	GPIO, PWM, UART, I2C, SPI, ADC,…
Function	GAP, ATT/GATT, SMP, L2CAP
Antenna Type	Printed Antenna External Antenna
Tx Power	Max. 8dBm
Rx Sensitivity	LE 1M: -97dBm (PER ≤30.8%) LE 2M: -94dBm (PER ≤30.8%) LR2: -100dBm (PER ≤30.8%) LR8: -105dBm (PER ≤30.8%)
Security	AES128/192/256
Dimension	16mm(L)*12mm(W)*2.2(H) mm (w/ antenna)
Power Consumption	2.3VDC~3.6VDC