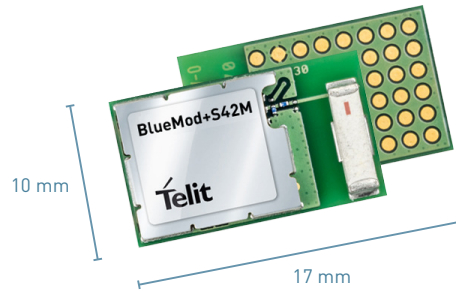


BlueMod+S42M

Bluetooth Low Energy Single Mode Sensor Module



Product Description

Simple to integrate, the BlueMod+S42M single mode Bluetooth sensor module is the fast-track, cost effective solution for space constrained IoT projects. It delivers long battery life, robust security and includes features that ease the development process such as multiple interfaces, software stack, and supports GATT-based profiles.

A true system on chip (SoC), the BlueMod+S42M is also equipped with an on-board micro controller, integrated chip antenna, passive components, T°/Humidity sensor, and an accelerometer.

Choose Telit when reliability and confidence matter. Connect with confidence for applications that demand security. React quickly to applications that require accurate, timely measurements of temperature and humidity such as cold chain monitoring in pharmaceutical and agriculture industries. For those critical and fragile packages, accurate vibration is detected with the 3-axis accelerometer.

Profiles

The BlueMod+S42M supports the Terminal I/O profile. Terminal I/O works similar to SPP and offers a simple point-to-point connection, including flow control over-the-air. This feature is ideal for use cases that require low data rates and transparent data exchange. Controlled by an AT command interface, the module also comes with a generic GATT interface. This interface allows the use of any Bluetooth Low Energy standard profile as well as customer specific proprietary profiles.

Key Features

- Bluetooth v4.2 Qualified Module
- RED, SRRC, NCC Certified
- Generic GATT Client and Server
- LE Secure Connections
- Configurable DIS (Device Information Service)
- Terminal I/O for Easy Transparent Data Transfer (BLE-SPP like)
- Embedded Sensor
- Over-the-Air Updated
- Sample Code for iOS and Android
- WeChat AirSync Protocol

Applications

- Cold chain monitoring
- Industrial
- Special package handling
- Medical/Pharmaceutical
- Remote controls
- Home automation
- Toys
- LE HID
- Beacon
- Access control

Family Concept

The BlueMod+S and BlueMod+SR as well as the BlueMod+S42 /S42M modules are mechanically and electrically compatible. The modules also have compatible software interfaces, and can easily be replaced by each other without additional changes to the hardware or software.

Combine your BLE module with

Cellular modules



GNSS modules



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Complete, Ready to Use Access to the Internet of Things



BlueMod+S42M

Features

- Over-the-Air updates
- Embedded T°/H sensor (option)
- Embedded 3 Axis accelerometer(option)

Environmental

- LGA 48 pads
- Integrated ceramic antenna
- Length x Width x Height: 17x10x2.6 mm
- Temperature range: -20°C to +70°C

Interfaces

- UART: 9600 bps – 921600 bps (asynchronous)
- Other interfaces: I²C, SPI, PWM
- GPIOs: Up to 14

Approvals

- Bluetooth Qualification 4.2
- RED, SRRC, NCC

Electrical & Sensitivity

- Power supply: 1.8V to 3.6V
- Transmit Power: 0 dBm
- Receiver Sensitivity: -94 dBm
- Max power consumption transmission: 5.2 mA
- Max power consumption reception: 6.9 mA
- Power consumption standby: 1.1µA
- Power consumption sleep: 0.2 µA

Tools

- BlueEva+S42M/AI: evaluation kit without sensors
- BlueEva+S42M/AI/3ATH: evaluation kit with sensors



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