

RF-BM-S02A(BLE) Module

This module is designed to get the electronic products together with intelligent For the transplantation and use of Bluetooth Low Energy(BLE) applications in various industry products .SHENZHEN RFSTAR TECHNOLOGY CO.,LTD releases BLE transparent transmission module.

The module make the host application development easier as as a bridge of smart phone peripherals. User's'existing products or solutions with this module, can communicate with mobile devices (with Bluetooth 4.0) , realize intelligent control and management under the bridge (serial port) mode. Users can design their own solutions or products to use the module to extend simple peripherals under the direct driving mode,to release new peripherals in lowest cost and efficiency.

The RF - BM – S02A BLE module use TI CC2541 as the core processor with TI official standard protocol stack, which runs at 2.4 GHz ISM band, GFSK (Gaussian Frequency Shift Keying) modulation mode, with 40 channels in 2 MHz clearances, 3 fixed radio channels, 37 adaptive automatic jump frequency channels according to the passage, the Physical layer with classic Bluetooth are RF dual-mode device, The 2 MHz gap can prevent the adjacent channel interference better. The module - 93 dBm high-gain receiving sensitivity in 11.2 mm x 15.1 mm x 1.9 mm.

mobile devices, which can be widely applied to instruments and meters, logistics tracking, healthcare, intelligent household, sports measurement, automotive electronics, toys.

Features:

- 1.Convenient, do without any Bluetooth protocol stack application experience.
- 2.Using universal serial to design users' interface with bi-directional reading and simple operation
- 3.Dimensional channel design, minimize data packet processing, and maximize the communication efficiency .
- 4.Ultra low power consumption in standby mode.

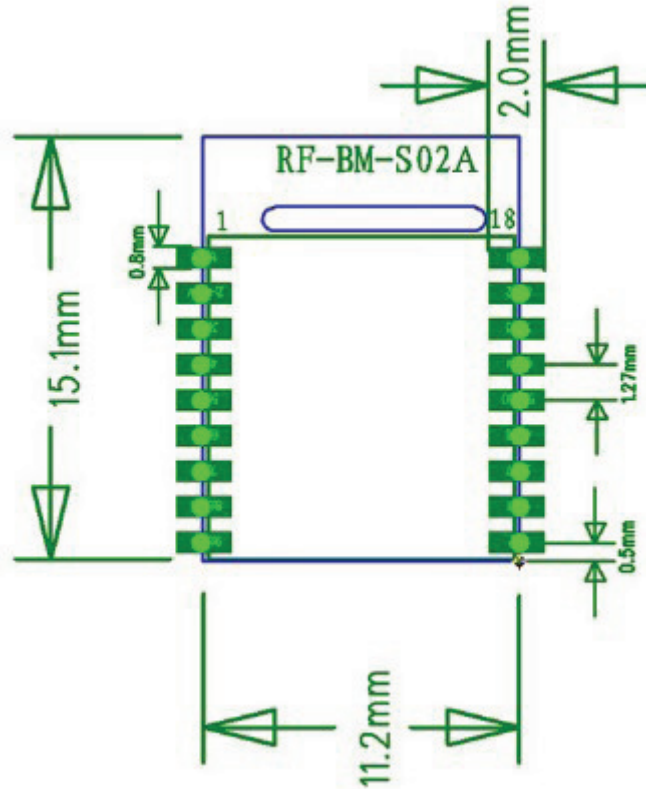
Applications:

- ◆ 2.4-GHz Bluetooth low energy Systems
- ◆ Mobile Phone Accessories
- ◆ Sports and Leisure Equipment
- ◆ Health Care and Medical
- ◆ Home and Building Automation
- ◆ Consumer Electronics

RF-BM-S02A

Mechanical Footprint (Unit:mm)

DIMENSIONS – 15.1 x 11.2 x 1.9 mm.



Pin Description

PIN	PIN name	Description	Remarks
Pin1	GND	The ground pad must be connected to a solid ground plane.	
Pin2	VCC	Power-supply connection	2V-3.6V
Pin3	P22	I/O	DEBUG_DC
Pin4	P21	I/O	DEBUG_DD
Pin5	RESET	Reset, Active Low	
Pin6	P20	I/O	
Pin7	P17	I/O	
Pin8	I2C_SCL	I2CClock line	CC2541 I2C_SCL;
Pin9	I2C_SDA	I2CData line	CC2541 I2C_SDA;
Pin10	P12	I/O	
Pin11	P11	I/O	
Pin12	P07	I/O	

Pin13	P06	I/O	
Pin14	P05	I/O	
Pin15	P04	I/O	
Pin16	P03	I/O	
Pin17	P02	I/O	
Pin18	P01	I/O	

FCC Warning:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2ABN2-RFBMS02A Or Contains FCC ID: 2ABN2-RFBMS02A"

When the module is installed inside another device, the user manual of the host must contain below warning statements;

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product

Any company of the host device which install this modular with limit modular approval should perform the test of radiated emission and spurious emission according to FCC part 15C : 15.247 and 15.209 requirement, Only if the test result comply with FCC part 15C : 15.247 and 15.209 requirement, then the host can be sold legally.