



P1: Bridge mode and Direct mode Diagrams of BLE Module (V2.20)

## Bluetooth 4.0(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-S02\_v1.1 BLE module use TI CC2540 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. - 93 dBm high-gain receiving sensitivity in 13.7 mm x 17.4 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:

- ◆ 2.402-2.48GHz Bluetooth low energy Systems
- ◆ Mobile Phone Accessories
- ◆ Sports and Leisure Equipment
- ◆ Health Care and Medical
- ◆ Home and Building Automation
- ◆ Consumer Electronics

#### FCC Warning:

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-RFBMS02

when the module is installed inside another device, the user manual of this device 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.

#### FCC statement:

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.

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