

BS003B Bluetooth module Manual

1. Overview:

BSO03B is a dual-mode Bluetooth module that uses AB5322 as a chip processor and can integrate data transceiver and audio transmission.

Module size (37mm*21mm*2mm)

Bluetooth 5. 0BLE+EDR

2. Support functions:

Support music playback (MP3, WAV, WMA, FLAC, APE) Support online music playback

Support lighting brightness, color adjustment Support different lighting scenes Support multiple sound effects adjustment

3. Module PCB:

Size: 37*21*2mm Pin spacing: 2.54mm

PIN number	PIN	Function Description
1	5V	DC5V 3.7-5.0V
2	GND	
3	R	Red light control output, 0-3V PWM
4	G	Green light control output, 0-3V PWM
5	B	Blue light control output, 0-3V PWM
6	W	White light control output, 0-3V PWM

4. Module performance index

Standby current: < 100uA

Working current: < 1A (including audio playback)

Frequency Range: 2400 MHz ~ 2483.5 MHz

Sensitivity: -87dBm @ 0.1% BER

Bluetooth transmit power: Class 2, -6dBm ~ + 4dBm

Antenna type: Onboard antenna

Antenna gain: 0.68dB

Audio SNR: 85dB @ 500mVrms output

Audio Distortion: < 0.05% @ 500mVrms

Output Operating Temperature: -20-85 degrees Celsius

List of applicable FCC rules

FCC Part 15.247

RF exposure considerations

This module certified that complies with RF exposure requirement under 5mm RF distance.

Label and compliance information

FCC ID label on the final system must be labeled with “Contains FCC ID: 2A5RA-BS003B” or “Contains transmitter module FCC ID: 2A5RA-BS003B”.

Information on test modes and additional testing requirements

Contact ZHONGSHAN HONG ZHE ELECTRIC Co.,Ltd will provide stand-alone modular transmitter test mode. Additional testing and certification may be necessary when multiple modules are used in a host.

Additional testing, Part 15 Subpart B disclaimer

To ensure compliance with all non-transmitter functions the host manufacturer is responsible for ensuring compliance with the module(s) installed and fully operational. For example, if a host was previously authorized as an unintentional radiator under the Supplier’s Declaration of Conformity procedure without a transmitter certified module and a module is added, the host manufacturer is responsible for ensuring that the after the module is installed and operational the host continues to be compliant with the Part 15B unintentional radiator requirements. Since this may depend on the details of how the module is integrated with the host, ZHONGSHAN HONG ZHE ELECTRIC Co.,Ltd shall provide guidance to the host manufacturer for compliance with the Part 15B requirements.

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.

NOTE 1: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Note 1: This module certified that complies with RF exposure requirement under 5mm RF distance.

Note 2: Any modifications made to the module will void the Grant of Certification, this module is limited to OEM installation only and must not be sold to end-users, end-user has no manual instructions to remove or install the device, only software or operating procedure shall be placed in the end-user operating manual of final products.