The user manual of WIFI、Bluetooth module

1. The product description

The user can achieve wireless connection to WIFI net and Bluetooth, through this module

2. Basic parameters

Feature Description	Feature Description
Model	MHCWBT1P-B
Product Name Major Chipset	2.4GHz WIFI+Bluetooth dual-mode module RTL8723DS
WLAN Standard	IEEE 802.11b/g/n
BT Standard	BT2.1/4.2；v4.2 BR/EDR，v4.0 BLE
WLAN Frequency Range	2.4GHz~2.4835GHz
BT Frequency Range	2402MHz~2480MHz
Spread Spectrum	IEEE 802.11b: DSSS (Direct Sequence Spread Spectrum) IEEE802.11g/n: OFDM (Orthogonal Frequency Division Multiplexing)
Modulation Method	DBPSK/DQPSK/CCK(DSSS)；BPSK/QPSK/16QAM/64QAM(OFDM)
Data Transfer Rate	11b:1,2,5.5, 11Mbps 11g: 6,9,12,18,24,36,48,54Mbps 11n:HT20MCS0~HT20MCS7 HT40MCS0~HT40MCS7
Antenna Reference	MHCWBT1P-B:WIFI/BT Internal Printed ANT
Interface	SDIO1.1/2.0,HS-UART
Supply Voltage	3.3V±0.3V
Dimension	18（mm）*20（mm）*2.5（mm）
Operating Temperature	0° C to 70° C
Storage Temperature	-40° C to 125° C

RF output power

	Band	Limited Power(dBm)
BT	**2402MHz-2480MHz**	**0-20**
WLAN	**2412MHz-2472MHz**	**<20**

3. The display method of Model approved code

In the factory， the model approve code is lasered on the shielding case.

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures：

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Low Temperature Operation

When the external temperature is lower than 0℃, the IC may be damaged to a certain extent, which will affect the operation of the module.

Please ensure that the operation temperature meets the requirements.

FCC ID: 2AFZZ-MHCWBT1P-B

5. Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of FCC RF Rules. This equipment should be installed and operated with minimum distance of 20 in (50cm)between the radiator and yourbody. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter

CAUTION:

To comply with the limits of the Class B digital device pursuant to Part 15 of the FCC Rules, this device is compliant with Class B limits. All peripherals must be shielded and grounded. Operation with non-certified peripherals or non-shielded cables may results in interference to radio or reception

MODIFICATION

To assure continued compliance, Any changes or modifications not expressly approved by the grantee of this device could void the users authority to operate the device.

5. Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 50 cm(8 in)between the radiator and your body NOTE To satisfy FCC exterior labeling requirements, the following text must be placed on the exterior of the end product Contains Transmitter module FCC ID: ******* To satisfy IESD exterior labeling requirements, the following text must be placed on the exterior of the end product " Contains Transmitter module IC:*******

Manufacturer: **Xiao Communications Co.,Ltd.**

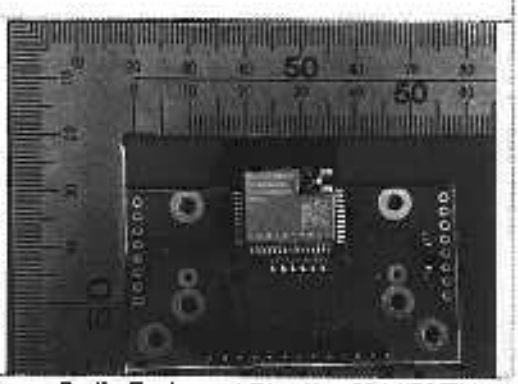
Address: #019,9th Floor, Building 6, 33 Xi’ erqi Middle Road, Haidian District,Beijing, 100085 China

A voltage stabilizing element or circuit is required on the power supplies to the module, and then the power supply is sent to the module

This equipment may be operated in all European countries.

EU DECLARATION OF CONFORMITY

It is hereby declared that following designated product:

Product Type:	2.4GHz WIFI+Bluetooth dual mode module	Product colour image
Model No:	MIICWDTPH3	
Product Description:	2.4GHz WIFI+Bluetooth dual-mode module	
Software version:	v1.0	
Hardware version:	v1.1	

Complies with the essential protection requirements of Directives on Radio Equipment Directive 2014/53/EU.
The assessments were based on the following regulations and standards:

Requirement	Standard	Report No	Assessment Body
Health and safety	IEC 62368-1: 2014 and/or EN 62368-1:2014 + A11:2017 EN 62311:2020, EN 50385:2010, EN 50385:2017 1999/519/EC	SRTC2021-9003(R)-0064 SRTC2021-9004(R)-2107201(I)	PHOENIX Test Lab (Notified body 0700) certificate:
EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.2.4(2020-09)	SRTC2021-9003(R)-0063	
Radio Spectrum	ETSI EN 300 328 V2.2.2 (2019-07)	SRTC2021-9004(R)-2107201(I); SRTC2021-9004(R)-2107201(E); SRTC2021-9004(R)-2107120(F)	

This declaration is the responsibility of the manufacturer:
Xiaomi Communications Co.,Ltd.
Address: #019,9th Floor, Building 6,33 Xi'erqi Middle Road, Haidian District,Beijing, China

Authorised person signing for the company:
Hao Sheng Certification Manager of Xiaomi Communications Co., Ltd.

Name in block letters & position in the company
#019,9th Floor, Building 6,33 Xi'erqi Middle Road, Haidian District, Beijing, 100085,China, Oct 18,2021

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Place & date *Legally valid signature*