User Manual

FCC ID :2ACQ5MBZ001

DESCRIPTION： MBZ001

MODEL： MBZ001

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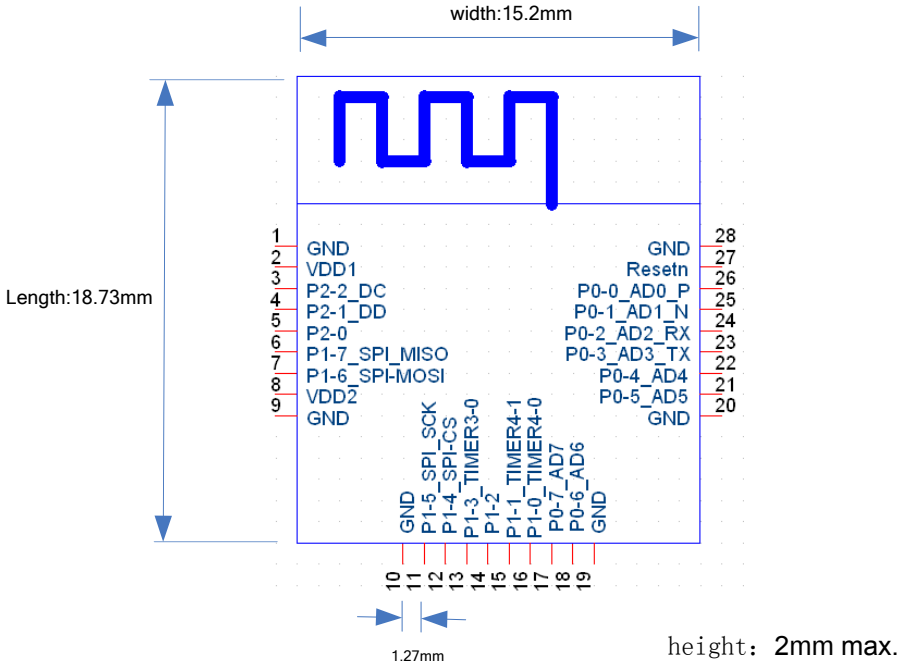
CUSTOMER APPROVED

1 Function features

MBZ001 is a wireless Zigbee module designed for low cost, low power consumption, wide voltage and working in 2.4GHz. It is based on IEEE 802.15.4 protocol and supports Zigbee 2007 Pro protocol stack. It is mainly used in the field of LED lamp control and wireless data transmission.

It can be used in single channel dimming, double color dimming, RGB dimming and effect RGBW dimming and effect internal power supply. Use with gateways(mobile phone, tablet, etc), remote controls, dimmer knobs, or optional stickers.

2 Product size and Pin assignment



3 Pin Description

Pin Num	Pin Name	Pin Type	Description
1	GND	Ground	-
2	VDD	Power Input	2.0V–3.6V digital power-supply
3	DC	Digital I/O	Port 2.2 / debug clock
4	DD	Digital I/O	Port 2.1 / debug data
5	P2_0	Digital I/O	Digital I/O
6	P1_7	Digital I/O	Digital I/O
7	P1_6	Digital I/O	Digital I/O
8	VDD	Power Input	2.0V–3.6V digital power-supply
9	GND	Ground	-
10	GND	Ground	-
11	P1_5	Digital I/O	Digital I/O
12	P1_4	Digital I/O	Digital I/O
13	P1_3	Digital I/O	Digital I/O
14	P1_2	Digital I/O	Digital I/O
15	P1_1	Digital I/O	Digital I/O
16	P1_0	Digital I/O	Digital I/O
17	P0_7	Digital I/O	Digital I/O
18	P0_6	Digital I/O	Digital I/O
19	GND	Ground	-
20	GND	Ground	-
21	P0_5	Digital I/O	Digital I/O
22	P0_4	Digital I/O	Digital I/O
23	P0_3	Digital I/O	Digital I/O
24	P0_2	Digital I/O	Digital I/O
25	P0_1	Digital I/O	Digital I/O
26	P0_0	Digital I/O	Digital I/O
27	RST	Digital input	Reset, active-low
28	GND	Ground	-

4 Electical characters

Parameter	SPECIFICATION
Supply Voltage	2~3.6V(Typical3.3V)
Frequency Resolution	2.400~2.4835GHz
Current Consumption	25mA
Operating Temperature	-40~85℃
IO Control Level	0~VDD
RX Channel Bandwidth	1Mbps
Transmission Distance	≈50m

Modular Approval:
The MBZ001 module is designed to comply with the FCC statement. FCC ID is 2ACQ5MBZ001 . The host system using MBZ001, should have label indicated it contain modular's FCC ID 2ACQ5MBZ001.

RF warning for Portable device:
This equipment complies with FCC' s RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna(s) must not be co-located or conjunction with any other antenna or transmitter.

15.19 Labelling requirements.
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.

15.21 Information to user.
Note: 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 Revogi Innovation Co., Ltd. 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.

the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

IMPORTANT NOTE: In the event that these conditions cannot be met (for example co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

Manual Information To the End User:
The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

Installation Guide:
The host with the modular is Product name: Smart Bulb, Model: LTZ004, Brand name: N/A ; The host product was made by the SkyRC Technology Co., Ltd.

The Host integrator should equip the modular with shield in the host product.
The shieding size is L:14mm, W: 13mm, H: 1mm.
The chip CC2530 of the Modular is integrated with the power supply regulation. The modular is powered by 2.0-3.6VDC .