

***LH-8267M BLE MODULE
Specification***

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1、 Overview

LH-8267M is a BLE Mesh module based on Bluetooth chip designed by Longhorn intelligent tech Co.,LTD. which can output 4-way PWM at the same time. The biggest advantage of this module is that it can control any Bluetooth module in the same network by connecting a Bluetooth, and it can also carry out group control and all control.

2、 Characteristic

- 1) BLE mode, can realize Mesh Bluetooth network function.
- 2) Power Supply: 1.9V-3.6V。
- 3) TX output power:+7dBm, The launch power is more than twice as high as the market equivalent.
- 4) Rx Sensitivity:-92dBm@BLE 1Mbps
- 5) small in size, 20*15*2.7mm。
- 6) Support straight - stick & patch, suitable for bulb, ceiling, light, etc.
- 7) Support Bluetooth 4.0 protocol and MESH networking.
- 8) 4 channel PWM, support RGBW dimming, 1 road wall control switch detection
- 9) Support IIC 、 UART
- 10) It can be certified by BQB, FCC, CE and ROHS.
- 11) Firmware supports offline recovery and soft restore factory Settings (production end).
- 12) Support firmware OTA for upgrade



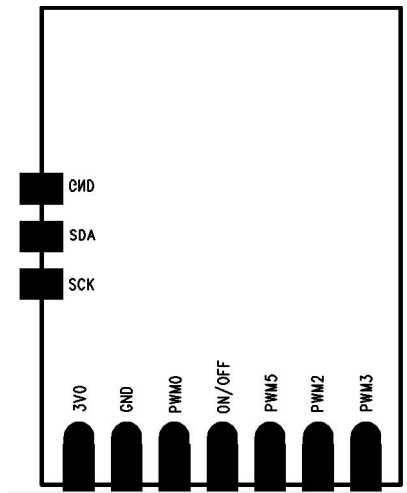
3、 Application

- 1) ceiling light, Ball steep light, Shoot the light
- 2) smart socket.
- 3) Remote control
- 4) Home and building automation.
- 5) Wireless sensor network

4、 Pin definition and description

Picture 1

Pin description



5、 I/O and PWM

The module has 4 channels PWM output, the PWM0 in the base is the warm color output, PWM1 is the cool color output, the frequency of PWM output is 500Hz, and the PWM level output is low level and effective.

Take warm white as an example, the output of high level when turning off the light, the output of low level at full brightness.

ON/OFF as the switch control

SDA/SCK is the input and output of I2C communication signals.

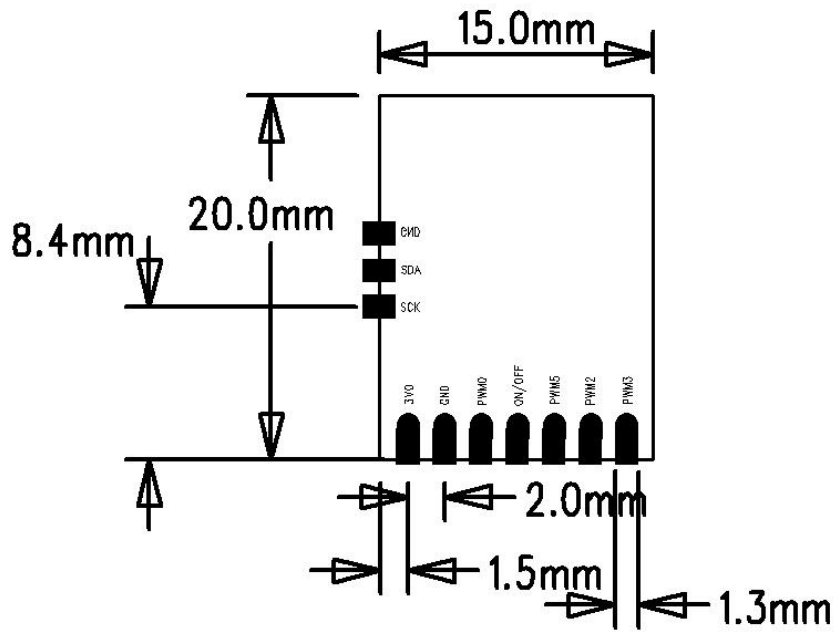
6、 Design considerations

- 1) Modules should be away from transformers, large inductors, alternating current and so on.
- 2) The antenna needs to be clear below.

7、 Electrical characteristics

Rating	Value	Unit
Supply Voltage	1.9-3.6	V
Voltage on I/O pin	VCC±0.3	V
Work temperature rang	-40~+85	°C
RF sensitivity	-92	dBm
RF Power	7	dBm
Operating Current	28	mA
Suspend mode	12	uA

8. Module dimension figure.



9. Revision history

No	Revision	Date	Description	Draft
1	Rev1.00	Apr. 05 th 2018	First release	Dylan
2	Rev1.01	May.03 th 2018	Add FCC Warning Add FCC ID number Revise	Dylan
3	Rev1.02	June.08 th 2018	Modify module image Remove the watermark	Dylan

FCC NOTICE:

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.

Please notice that 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 FCC ID:2APP2-LH8267M"

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled

environment. This equipment should be installed and operated with a minimum distance of 20cm

between the radiator & your body. This transmitter must not be co-located or operating in

conjunction with any other antenna or transmitter.

The module is limited to OEM installation ONLY.

The OEM integrator is responsible for ensuring that the end-user has no manual instruction to remove or install module.

The module is limited to installation in mobile application.

A separate approval is required for all other operating configurations, including portable configurations with respect to Part 2.1093 and difference antenna configurations.

There is requirement that the grantee provide guidance to the host manufacturer for compliance with Part 15B requirements.