

Caution:

This device complies with Part 15 of the FCC Rules / Industrie Canada licence-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

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.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Information for the OEM Integrators

This device is intended for OEM integrators only. It is only equipped in a host that complies with the following condition:

1. It has power regulation circuit; the supply voltage for this module is 3.3 V dc.
2. It has an enclosure that covers all the PCB.

Label Information to the End User by the OEM or Integrators

If the FCC ID of this module is not visible when it is installed inside another device, then the outside of the device into which the module is installed must be label with

“Contains FCC ID: 2AKEQ-T8267L and IC: 22176-T8267L

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DongXing BLE modules

Specifications and design guidelines

Version history

DATE	Version	Author	Content	review	The release date
2016-09-09	V1.1	Tomlin	Set up the first draft		2016-09-09

Catalog

1.Product Introduction

The Mesh Bluetooth module, this module uses the Telink chip as a wireless transceiver chip, is a complete, low cost low power wireless transceiver module. The module integrates the peripheral devices needed by the chip, and has 3 PWM output.

Application of light adjustment / color control, The utility model is suitable for the design of various mechanical structures, simplifies the design of the PCB mainboard and facilitates the production.

2.Product features

*Bluetooth standard: Bluetooth V4.2

* integrated voltage regulator

*Frequency range: 2402~2480MHz

* 3.3 V power supply

*Sensitivity up to -87dBm *power on reset function

*Max output power: 7dBm

*Network: Mesh

* transmit power consumption current: 15mA@0dBm, 22mA@+7dBm

*Operating temperature range: -40°C ~ +125°C

3.Applications

*Mesh intelligent dimming, color

*This module can adjust light, color and switch control by 3 PWM signal. Can achieve monotonic light, dimmer, RGB

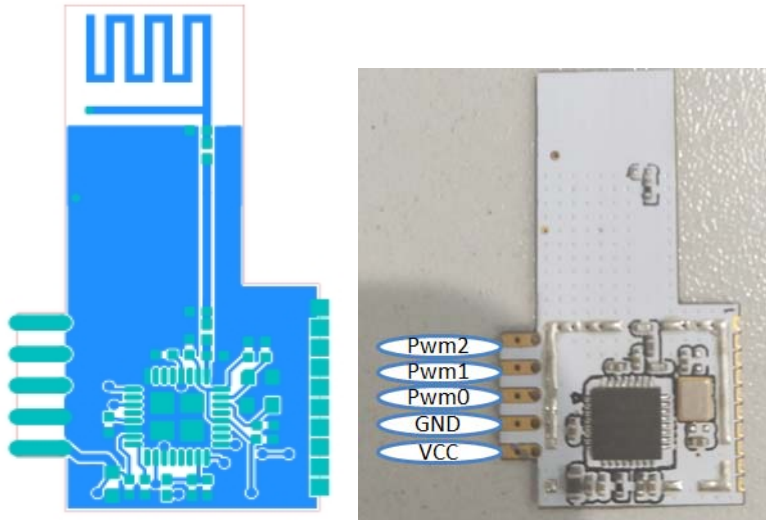
*Low power consumption long standby, you can use the button battery, with keyboard interface without external MCU

4.Pin definition

Module pin	Pin name
1	Vcc
2	Gnd
3	PWM0
4	PWM1
5	PWM2

5. Module physical map

5.1 The Module physical map



6. Layout notes

6.1 patch

1 modules within the PCB antenna around the 10mm without the need to base the PCB copper and any metal device or shell;

2 module PCB antenna corresponding to the bottom of the best position can be hollowed out floor;

The two GND pins of the 4 module are connected to the GND of the backplane.

6.2 other

- 1、 modules within the PCB antenna around the 10mm without the need to base the PCB copper and any metal device or shell;
- 2、 module PCB antenna corresponding to the bottom of the best position can be hollowed out floor;
- 3、 An increase of 10uF and a 0.1uF capacitor between the VDD and GND in the vicinity of the module.
- 4、 plate insert required floor thickness as much as possible 1.2mm, the module of the two sides of the welding reinforcement