## RR-BT01

# (CSR8670 Bluetooth Module Specifications)

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### 1. INTRODUCTION

Nowadays, the application of Bluetooth technology is more and more widespread, and has been integrated into our daily life, making our leisure and entertainment life more comfortable and portable. Earlier Bluetooth technology was applied to mobile phones, to facilitate the transmission of photos and information between users, but also to support wireless gaming mobile games Battle, in the early stages has received a large number of users. After the development of Bluetooth technology to version 4.2, its compatibility and transmission bandwidth has been significantly improved, this wireless transmission protocol allows equipment and equipment to achieve real-time and efficient data transmission, to bring users more fun and more practical function.

The RR-BT01 uses the current state-of-the-art Bluetooth 5.0 chip (CSR8670), with strong compatibility and transport stability, effective transmission distance of 20 meters, almost compatible with all Bluetooth-enabled devices, you can easily get rid of the computer / TV connection; In addition, RR-BT01 can connect two Bluetooth devices at the same time, to achieve the "one to two" powerful features, so you and your friends at any time to share your favorite movies and music can be said to be a very useful Bluetooth transmitter.



## 2. GENERAL SPECIFICATION

Bluetooth Specification			
Chipset	CSR8670		
Module	RR-BT01		
Dimension	20mm(W) x25mm(L) x 9.5mm(H) (MAX)		
BT Standard	BT V5.0 specification		
RF TX Output Power	10dBm (Max)		
Sensitivity	-88dBm@0.1%BER		
Frequency Band	2.402GHz~2.480GHz ISM Band		
Baseband Crystal OSC	26MHz		
Hopping	1600hops/sec, 1MHz channel space		
RF Input Impedance	50 ohms		
Major Interface	<ul><li>Line in : Input L/R</li><li>EN</li><li>LED</li></ul>		
Profile	Bluetooth audio transmitter		
Power			
Supply Voltage	3.3V~5.5V Volt DC		
Working Current	~25mA		
Standby Current	No support		
Operating Environment			
Temperature	-40°C to +85°C		
Humidity	10%~90% Non-Condensing		
Environmental	RoHS Compliant		

Table 1

## 3. PHYSICAL CHARACTERISTIC

## 3.1 Physical Dimensions

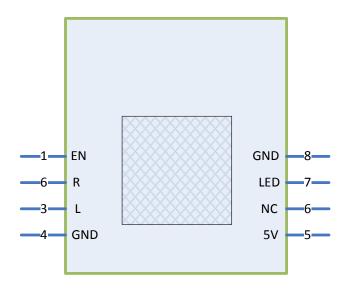


Figure 1: PIN Diagram(Top View)

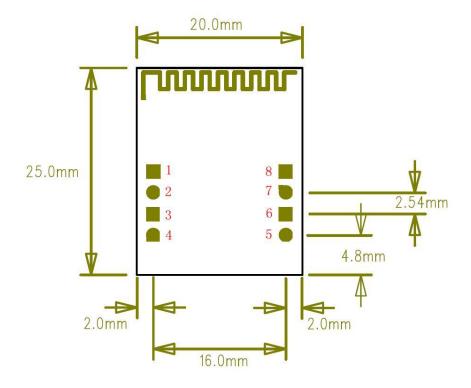


Figure 2: Footprint

#### 3.2 Pin Description

Pin	Pin Name	Pad Type	Description
1	EN	I	Switch control pin, active High
2	R	Α	Right channel input
3	L	А	Left channel input
4	GND	AVSS	Analog ground
5	5V	PWR	DC 5V power supply
6	NC		
7	LED	0	LED driver, active Low
8	GND	VSS	Power Ground

Table 2

#### 4. WARNINGS

#### **FCC/IC Statements**

(OEM) Integrator has to assure compliance of the entire end-product incl. the integrated RF Module. For 15 B (§15.107 and if applicable §15.109) compliance, the host manufacturer is required to show compliance with 15 while the module is installed and operating.

Furthermore the module should be transmitting and the evaluation should confirm that the module's intentional emissions (15C) are compliant (fundamental / out-of-band). Finally the integrator has to apply the appropriate equipment authorization (e.g. Verification) for the new host device per definition in §15.101.

Integrator is reminded to assure that these installation instructions will not be made available to the end-user of the final host device.

The final host device, into which this RF Module is integrated" has to be labeled with an auxiliary label stating the FCC ID of the RF Module, such as "Contains FCC ID: 2APTM-RR-BT01

"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 to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment."

the Integrator will be responsible to satisfy SAR/ RF Exposure requirements, when the module integrated into the host device.

The final host device, into which this RF Module is integrated" has to be labeled with an auxiliary label stating the IC of the RF Module, such as Contains transmitter module IC: 23871-RRBT01. Le dispositif hôte final, dans lequel ce module RF est intégré "doit être étiqueté avec une étiquette auxiliaire indiquant le CI du module RF, comme" Contient le module émetteur IC: 23871-RRBT01.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1)this device may not cause interference, and(2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables auxappareils 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 lefonctionnement.

#### Module statement

The single-modular transmitter is a self-contained, physically delineated, component for which compliance can be demonstrated independent of the host operating conditions, and which complies with all eight requirements of § 15.212(a)(1) as summarized below.

- 1) The radio elements have the radio frequency circuitry shielded.
- 2) The module has buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal.
- 3) The module contains power supply regulation on the module.
- 4) The module contains a permanently attached antenna.
- 5) The module demonstrates compliance in a stand-alone configuration.
- 6) The module is labeled with its permanently affixed FCC ID label.
- 7) The module complies with all specific rules applicable to the transmitter, including all the conditions provided in the integration instructions by the grantee.
- 8) The module complies with RF exposure requirements.

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 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

#### Radio Frequency Exposure Statement for IC

To comply with IC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20mm from all persons and must not be colocated or operating in conjunction with any other antenna or transmitter, except in accordance with IC multi-transmitter product procedures.

#### Déclaration d'exposition à la radiofréquence pour IC

Pour respecter les exigences de conformité d'exposition aux radiofréquences, l'antenne utilisée pour cet émetteur doit être installée de façon à offrir une distance de séparation d'au moins 20 mm et ne doit pas être colocalisée ni fonctionner avec d'autres antennes ou transmetteurs. Procédures du produit IC multi-émetteur.