# RB-Dfr-95 DFRobot Bluetooth Bee



This DFRobot Bluetooth Bee Bluetooth wireless module adapts XBEE design. It has compact size, the pinout is compatible with XBEE which is suitable for all kinds of microcontroller systems who have 3.3V power out, the module can use the AT commands to set baud rate.

The Bluetooth Bee modules comes with an on-board antenna, the antenna provides better signal quality. It acts like a transparent serial port, which works with a variety of Bluetooth adapter and Bluetooth phone.

The module has been tested with all the Bluetooth adapter on the market matching to use (with the Bluetooth, including laptops and mobile phones).

Bluetooth Bee Bluetooth wireless module can modify the baud rate to use XBEE adapter. You can use XBEE Arduino controller receives the base plug, enabling Bluetooth wireless control.

# **Specifications**

• Bluetooth chip: CSR BC417143

• Bluetooth protocol: Bluetooth Specification v2.0 + EDR

• USB Protocol: USB v1.1/2.0

• Operating frequency: 2.4 ~ 2.48GHz unlicensed ISM band

• Modulation: GFSK (Gaussian Frequency Shift Keying)

• Transmit Power: ≤ 4dBm, Class 2

• Transmission distance: 20 ~ 30m in free space

• Sensitivity: ≤-84dBm at 0.1% BER

• Transfer rate: Asynchronous: 2.1Mbps (Max) / 160 kbps; Synchronous: 1Mbps/1Mbps

• Safety features: Authentication and encryption

• Support profiles: Bluetooth serial port

Serial port settings: 1200 ~ 1382400 / N / 8 / 1

• Baud rate default: 9600

• Pair: 1234

• Input Voltage: +3.3 DC/50mA

• Operating temperature:  $-20 \,^{\circ}\text{C} \sim +55 \,^{\circ}\text{C}$ 

• Module Size: 32 x 24 x 9mm

### **AT Commands**

The current version of the module only supports AT commands used to set the baud rate. The default baud rate for this module is 9600bps.

## **Test Command**

• Transmit:AT

• Return:OK

(No Carriage Return is Required)

# **Change Baud Rate**

• Transmit : AT+BAUD1

• Return: OK1200

• Transmit : AT+BAUD2

Return: OK2400

### **Baud Rate List**

- 1-----1200
- 2-----2400
- 3-----4800
- 4-----9600
- 5-----19200
- 6-----38400
- 7-----57600
- 8-----115200
- 9-----230400
- A-----460800
- B-----921600
- C-----1382400