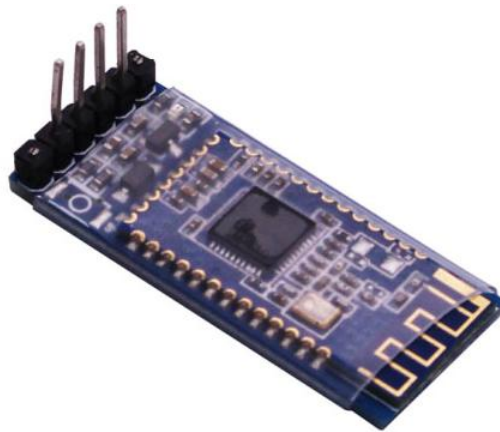


## Introduction of Bluetooth4.0 module



### 1. Introduction:

This Bluetooth module is designed for smart wireless data transmission. It adopts the CC2541 chip, 256KB space, and follows the V4.0BLE Bluetooth specification. It supports AT commands; users can change the serial port baud rate, device name, pairing password, and other parameters as needed. This module supports UART interface and supports SPP Bluetooth serial port protocol, which can realize its powerful functions with only a few peripheral components.

### 2. Specifications:

**PCB size:** 37mm\*16mm

**Weight:** 4g

**Transmission distance:** 10~20m

**Reaction rate:** <0.4s

**Operating frequency:** 2.4GHz ISM band

**Modulation method:** GFSK (Gaussian Frequency Shift Keying)

**Sensitivity:**  $\leq -84\text{dBm}$  at 0.1% BER

**Transmission rate:** Asynchronous: 6 kbps Synchronous: 6 kbps

**Security features:** Authentication and encryption

**Support Services:** Central & Peripheral UUID FFE0, FFE1

**Power consumption:** In the automatic sleep mode, the standby current is  $400\mu\text{A}$  to 1.5mA, and the transmission is 8.5mA.

**Power supply:** +3.3V DC 50mA

**Appearance size:** 26.9mm x 13mm x 2.2 mm

**Function:** master-slave

### 3. Physical characteristics

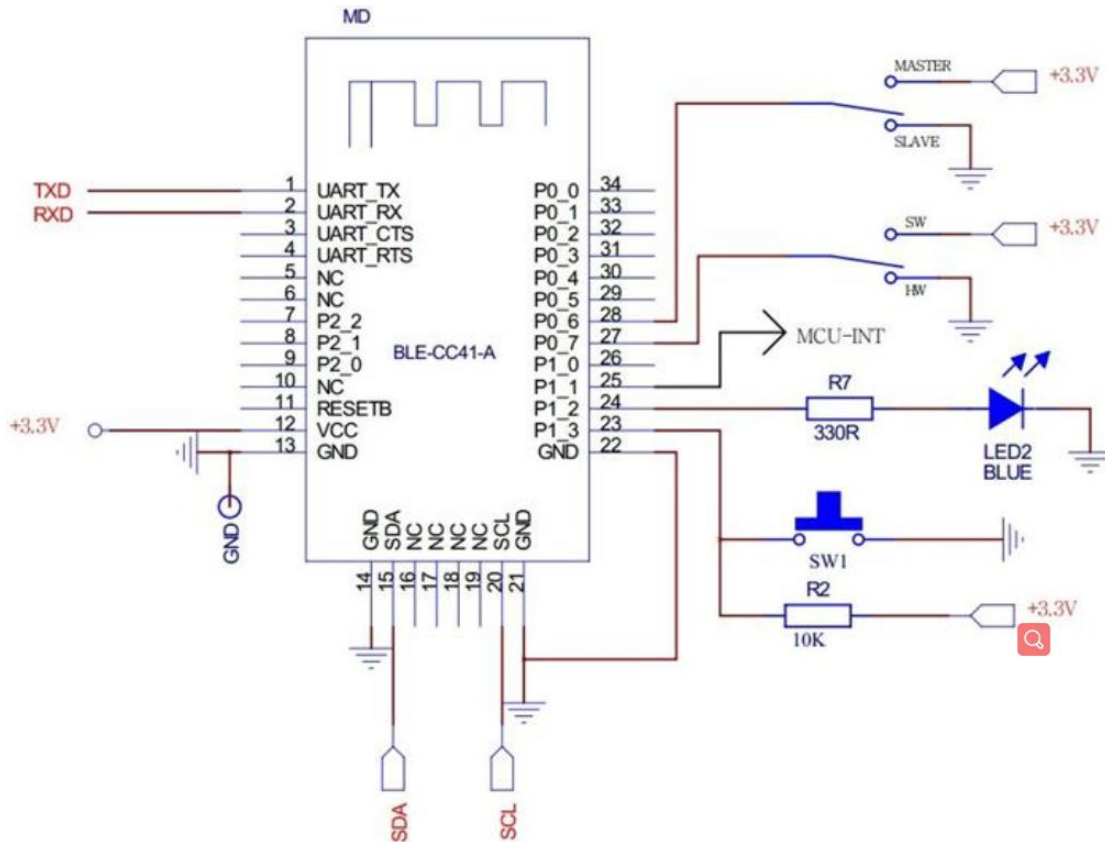
Operating Frequency Band	2.4GHz ISM band
Bluetooth Specification	BLE4.0
Output Power Class	Class 2
Operating Voltage	3.3V
Host Interface	UART
Memory Size	256KB
Dimension	27mm (L) x 13 (W) mm x 2mm (H)

#### 4. Electrical characteristics

Absolute Maximum Ratings		
Rating	Min	Max
Storage temperature	-40°C	+150°C
Supply voltage: VBAT	-0.4V	5.6V
Other terminal voltages	VSS-0.4V	VDD+0.4V

Recommended Operating Conditions		
Operating Condition	Min	Max
Operating temperature range	-40°C	+150°C
Guaranteed RF performance range <sup>(a)</sup>	-40°C	+150°C
Supply voltage: VBAT	2.2V	4.2V <sup>(b)</sup>

## 5.Application circuit diagram



!!!Note:The application circuit diagram is a Bluetooth serial port circuit diagram.

## 6.Dimensions

