

# **PRODUCT Information**

## **INTRODUCTION**

Bluetooth module is a PCBA board with integrated Bluetooth function for short-range wireless communication is divided into Bluetooth data module and Bluetooth voice module by function. Bluetooth module refers to the set the basic circuit set of the chip with Bluetooth function, used for wireless network communication, can be roughly divided into. Three types: data transmission module, remote control module

## **PARAMETERS**

Product Model: HC-06

Working frequency: 2.4G

Communication interface: UART 3.3V TTL level

Working voltage: 3.0~3.6V

RSS I support: Not supported

Communication level: 3.3V

Transmitting power: 4dBm

Reference distance 10 meters

Air Speed: 2Mbps

Antenna interface: Built-in PCB antenna

Communication cable: 40mA

Receiving sensitivity: -85dBm @ 2Mbps

Working humidity: 10%-90%

Storage temperature: -40°C~+80°C

Working temperature: -25°C~+75°C

## DESCRIPTION

The bottom plate is equipped with a Bluetooth core module, which makes the module more versatile. connect to the serial port of the microcontroller. After pairing is successful, it can be used as a pair of serial lines to transparently transmit data.

PIN:

KEY,VCC,GND,RXD,TXD,STATE.STATE is the Bluetooth status pin, Output low when not connected,high when connected KEY is the pin for the AT instruction, which has the same function as the key.

Button:

Pressing the key is equivalent to pulling the 34 pin high/low, and it is used with the AT command..(Most AT commands require it is effective to send by pressing the button.)

Voltage:

Input voltage: 3.2-6V,the power supply comes with anti-reverse connection, but the reverse connection does not work.

Status indication:

When the master does not record the slave address, it flashes quickly; when it records the slave address, it flashes slowly.Slave is not connected time. After connection, both the master and the slave are blinking and stopped.

Interface:

The interface level is 3.2V~6V,which can be connected to various microcontrollers (Aduion, 51,AVR,PIC,ARM,MSP 4730,etc.), 5V microcontroller can be directly connected. Connect directly to the serial port of the microcontroller, cannot pass MAX 232 chip.

Communication instructions:

The effective distance in an open environment is 10 meters. It is also possible to exceed 10 meters, but the communication quality cannot be guaranteed.

Communication method (device support)

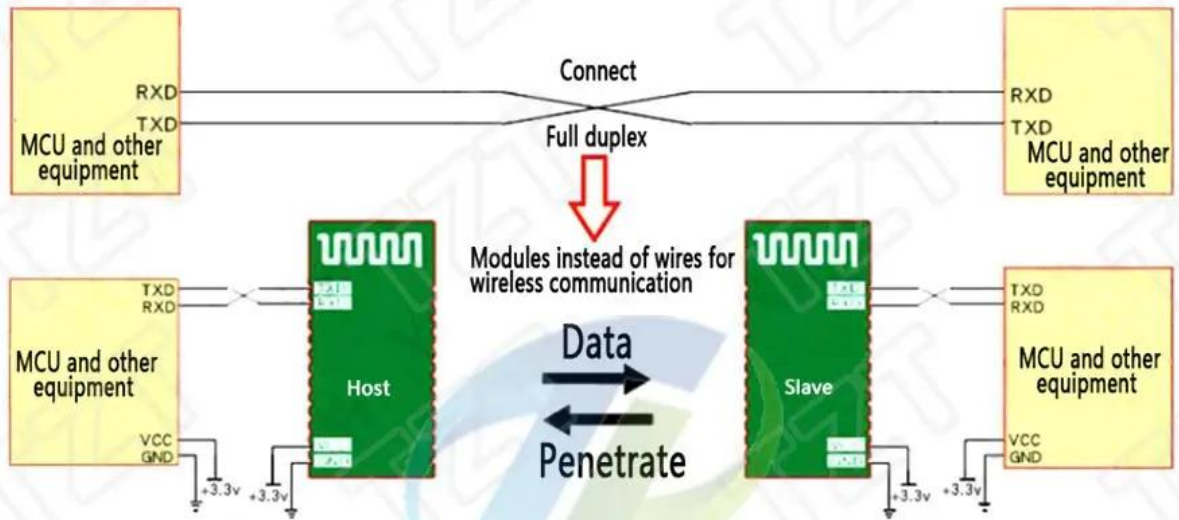
- 1.Connect with Bluetooth 2.0 device, one master and one slave, need to have the same pairing code and baud rate.
- 2.With mobile phones and laptops, you can connect with the built-in Bluetooth , or you can test through the serial port software

Defaults:

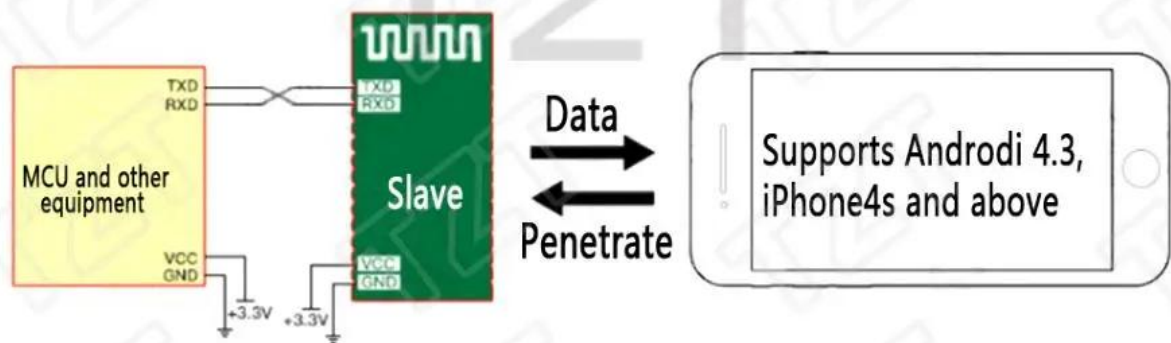
Slave, baud rate 9600, Bluetooth name HC-06, pairing password 1234, LED status light is on.

# INSTRUCTIONS FOR USE

Module-to-module connection transparent transmission (Instead of wired serial port)



Module and hand-held device pass through



After the modules are paired, they can be used as a wired serial cable. Ad long as the “fixed baud rate, 8 with serial data devices with “bit data bit, no parity” communication format, the module can replace the traditional serial line, no need to modify the program, save wiring work, and is very flexible to use.

Use with a desktop computer

You can use HC-06-USB to connect to a desktop computer for direct pairing. It is suitable for Bluetooth serial port communication between PC and device.

Use with a notebook

Power on the module and use the computer’s built-in Bluetooth to search for the connection. Suitable for laptops and devices Bluetooth serial port communication is used in the same way as the serial port.

Use with an Android phone

Power on the module, use the mobile phone's built-in Bluetooth connection, or use the serial port assistant to connect. Suitable for the Bluetooth serial port communication between the mobile phone and the device is the same as the serial port.

Link with Bluetooth host

HC-02 host and HC-06. Suitable for Bluetooth serial communication between two devices, using method same as serial port.

Adjustable parameter

You can change the baud rate, Bluetooth name, Bluetooth address and pairing password of the module, and other parameters (please refer to HC-02 specification)

Automatic connection specifications

When HC-02 and HC-06 host or HC-06-USB (default host) when the passwords are consistent, the module can be automatically connected within the effective communication distance. Host HC-06 or HC-06USB will remember the paired device. If you want to connect other slave code, need to clear the pairing memory first.

## **APPLICATIONS**

Bluetooth printer

Bluetooth remote control toy

Industrial remote control and telemetry

Traffic, underground positioning, alarm

Automatic data acquisition system

Interactive television voting equipment

Wireless LED display system

Bluetooth joystick, Bluetooth gamepad

Wireless data transmission, banking system

Wireless data acquisition

Automobile testing equipment

Bluetooth wireless data transmission

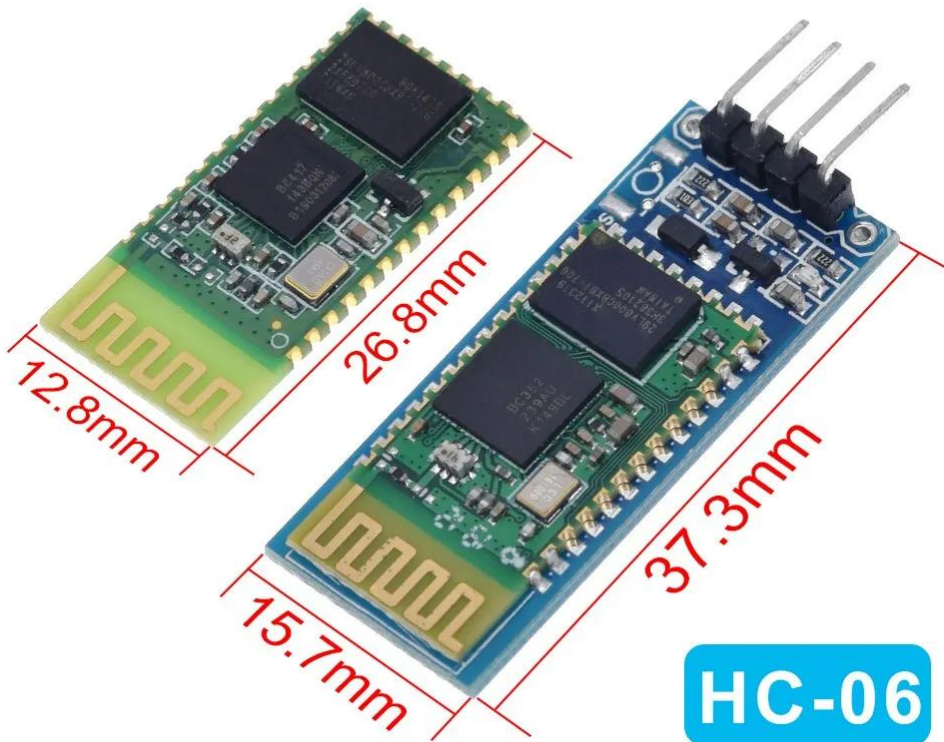
POS system, wireless keyboard, mouse

Government street light energy-saving equipment

Smart home, industrial control

Building automation, security, equipment room equipment, wireless monitoring and access control system

Weight :3.70g  
1.05g (without board)



**HC-06**