# Ks0174 keyestudio HM-10 Bluetooth-4.0 V2

Introduction:

keyestudio HM-10 Bluetooth-4.0 V2 adopts TI CC2541 chip, configuration space of 256Kb.
It supports AT command. Users can modify working mode (master/slave), baud rate, device name, paring password, etc.

Specification:

Bluetooth protocol: Bluetooth Specification V4.0 BLE

No byte limit in serial port Transceiving

In open environment, realize 100m

USB protocol: USB V2.0

Working frequency: 2.4GHz ISM band

Modulation method: GFSK(Gaussian Frequency Shift Keying)

Transmission power: -23dbm, -6dbm, 0dbm, 6dbm, can be modified by AT command.

Sensitivity: ≤-84dBm at 0.1% BER

Transmission rate: Asynchronous: 6Kbytes; Synchronous: 6kbytes

Security feature: Authentication and encryption

Supporting service: Central & Peripheral UUID FFE0, FFE1

Power consumption: Auto sleep mode, stand by current 400uA - - 800uA, 8.5mA during transmission.

Power supply: 5V DC

Working temperature: –5 to +65 Centigrade

Circuit Connection:
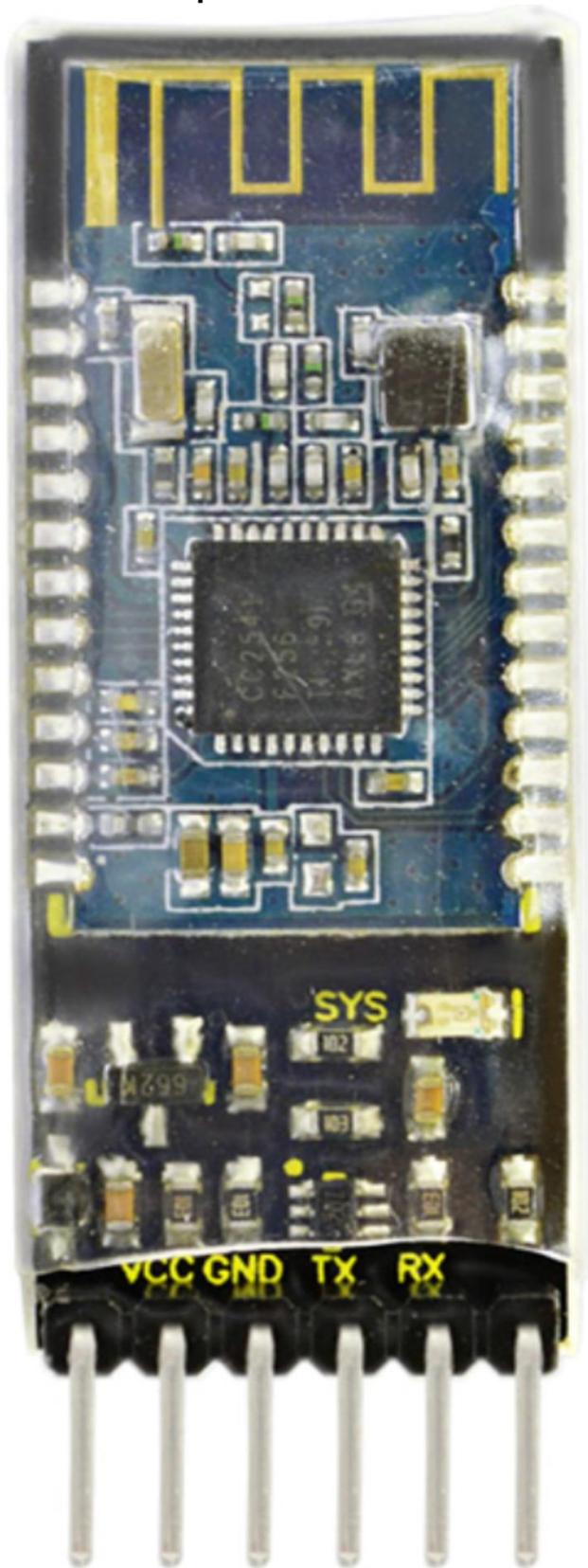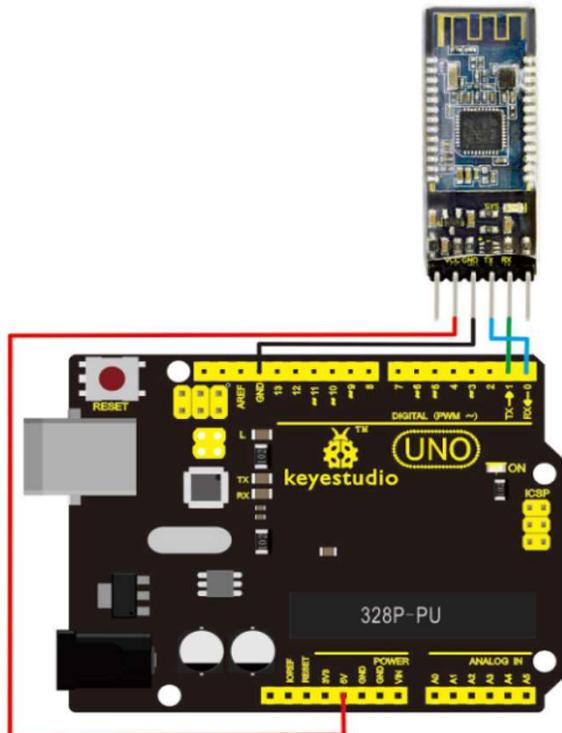
Sample Code:

```
int val;
int ledpin=13;
void setup()
{
Serial.begin(9600);
 pinMode(ledpin,OUTPUT);
} void loop()
{ val=Serial.read();
if(val=='a')
 {
digitalWrite(ledpin,HIGH);
delay(250);
digitalWrite(ledpin,LOW);
delay(250);
 Serial.println("keyestudio");
}
}
```

Result:

Open APP HC-COM, click search device, select the device, device is connected; the LED on the Bluetooth module is on. Enter "a" in HC-COM, click send, Bluetooth APP will display keyestudio. Every time HC-COM sends an "a", the Pin13 LED on the main board blinks once.

Resources:

https://wiki.keyestudio.com/Ks0174_keyestudio_HM-10_Bluetooth-4.0_V2