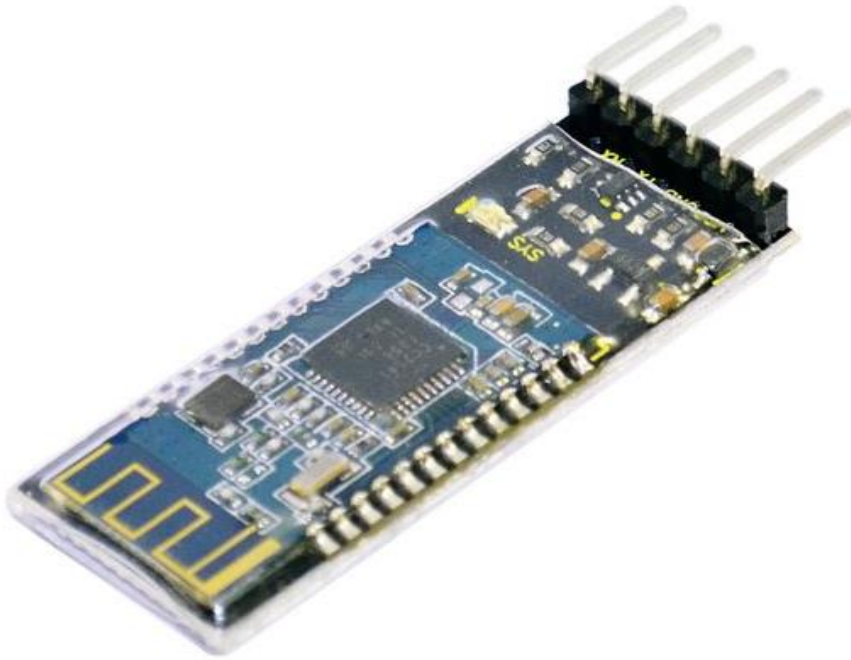


HM-10 BLUETOOTH 4.0 V2 MODULE



PART NUMBER: KS0174

MANUFACTURER: KEYESTUDIO

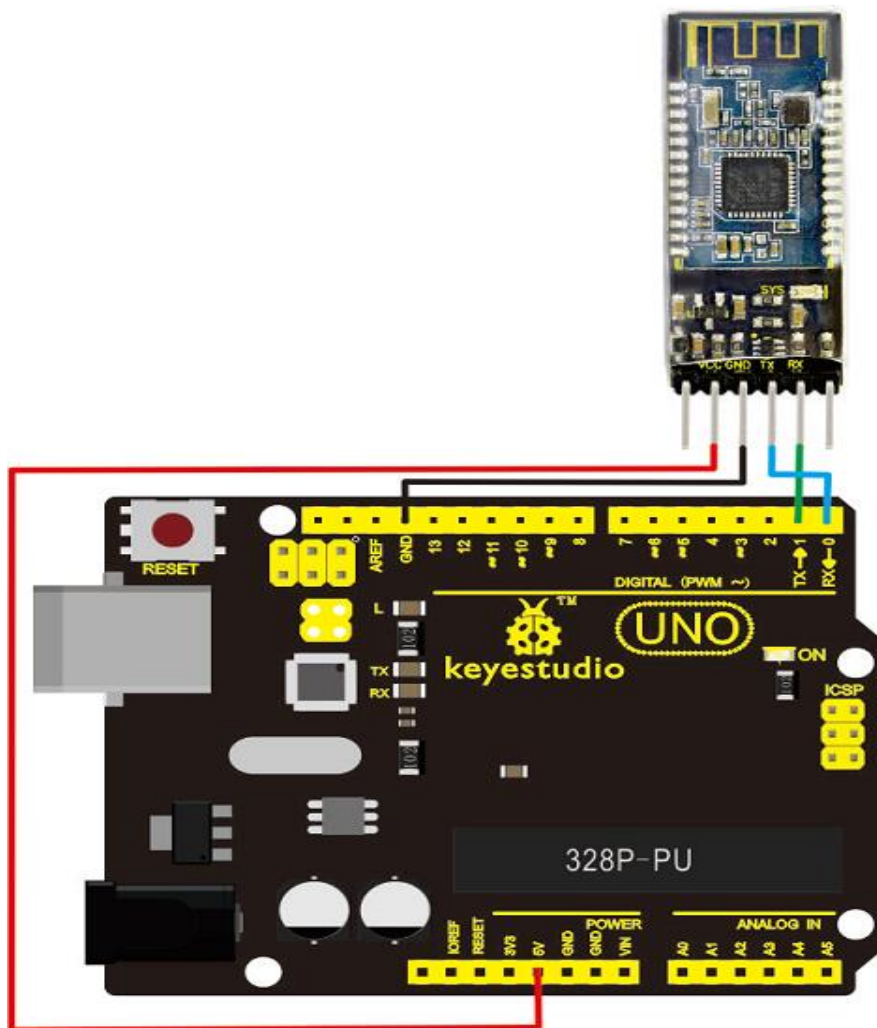
INTRODUCTION

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, pairing password, etc.

SPECIFICATIONS

- Bluetooth protocol: Bluetooth Specification V4.0 BLE
- No byte limit in serial port Transceiving
- In open environment, realize 100m ultra-distance communication with iphone4s
- 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: $\leq -84\text{dBm}$ at 0.1% BER
- Transmission rate: Asynchronous: 6K bytes ; Synchronous: 6k Bytes
- 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 DIAGRAM 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.

