

Interfacing BT06 Bluetooth Module with Arduino

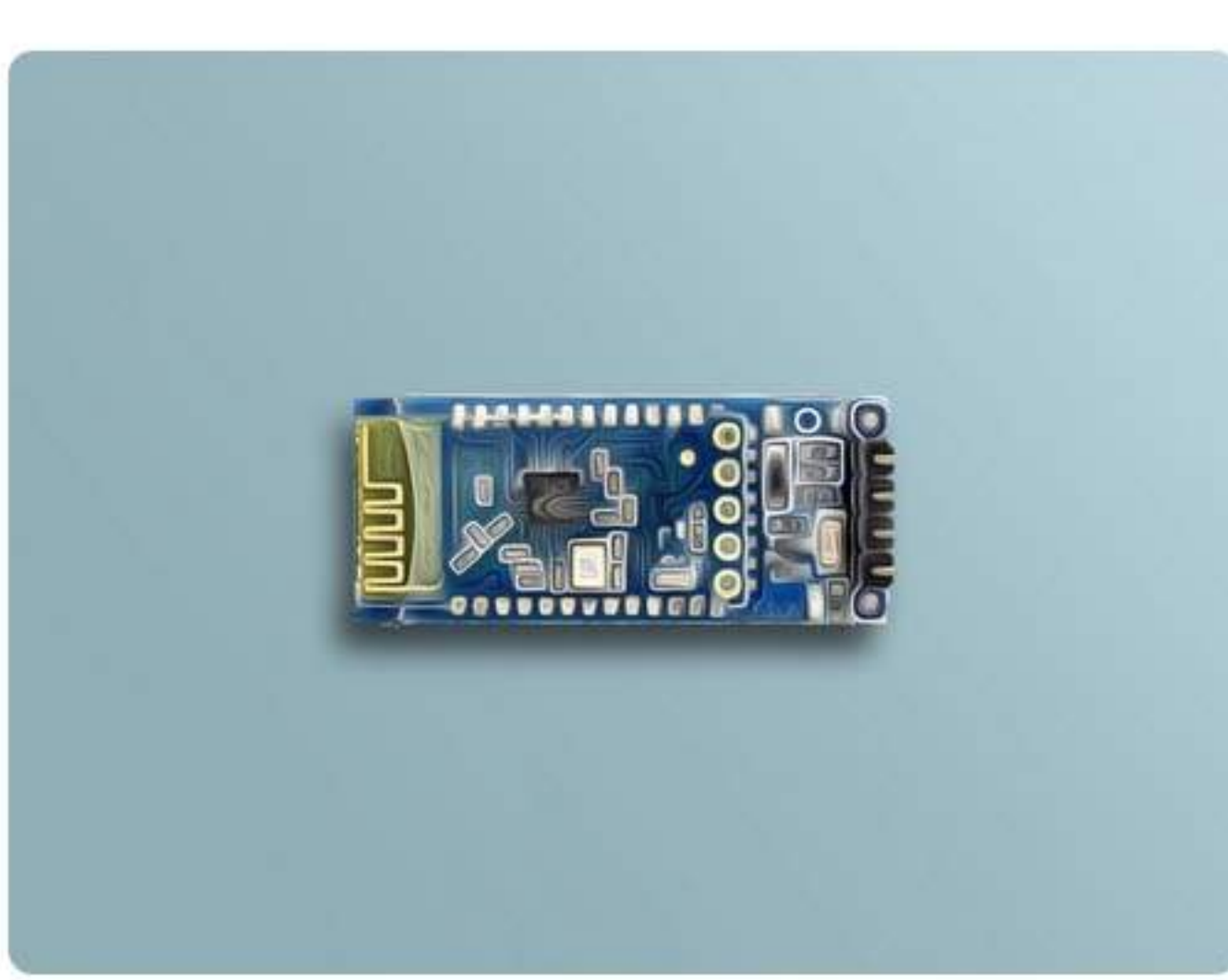


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BT06 Bluetooth Serial Module Features

Bluetooth modules are a type of wireless communication modules that can be added to a project through serial or SPI communication protocols.

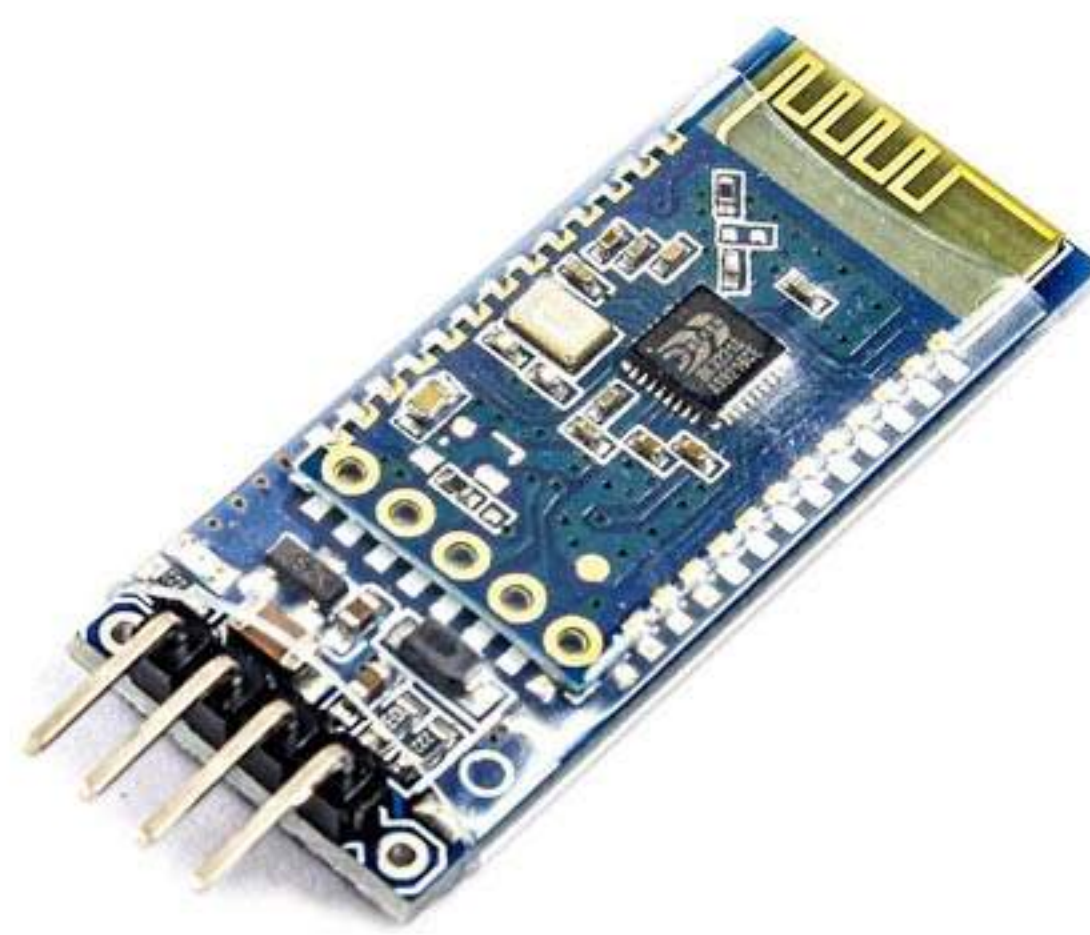
The advantage of using Bluetooth modules is that they are easy to set up and use.

The BT06 module uses serial protocol for communication.



Note

All Bluetooth modules that use serial communication protocols, support AT Commands, which are listed in the datasheet of each product.

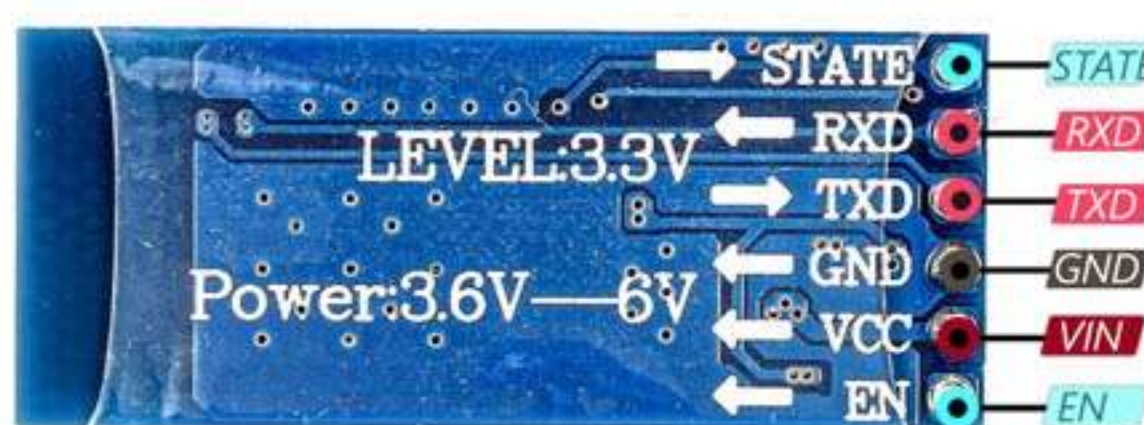


BT06 Bluetooth Serial Module Pinout

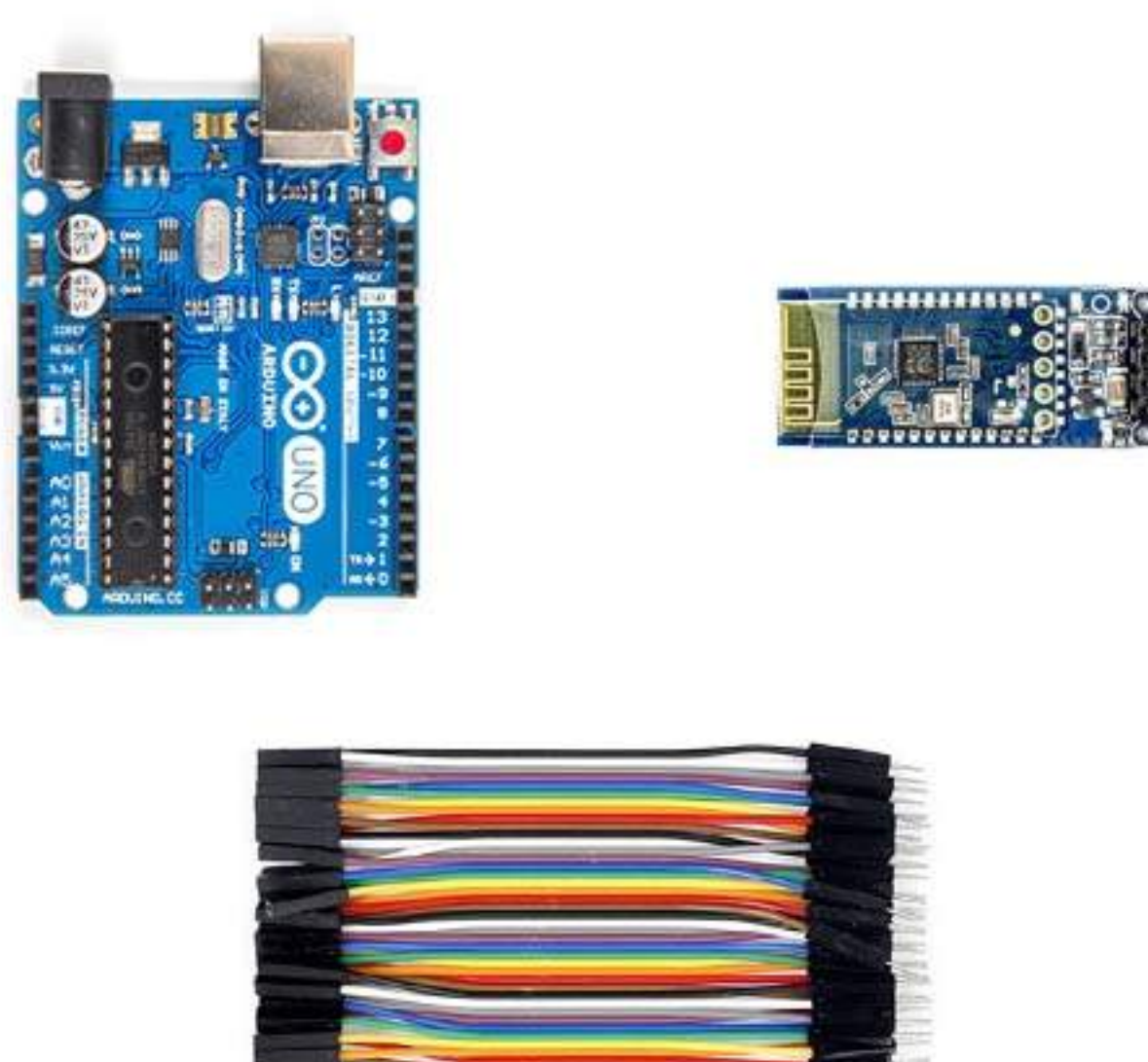
This module has 6 pins:

- **VIN:** Module power supply – 3.6-6 V
- **GND:** Ground
- **STATE:** Connection State
- **EN:** Enable AT Command settings
- **RX:** Receive Serial Data
- **TX:** Transmit Serial Data

You can see the pinout of this module here.



Required Material



Arduino UNO R3	x	1
BT06 Bluetooth Serial Wireless Data Transmission Module	x	1
Male to Female jumper wire	x	1

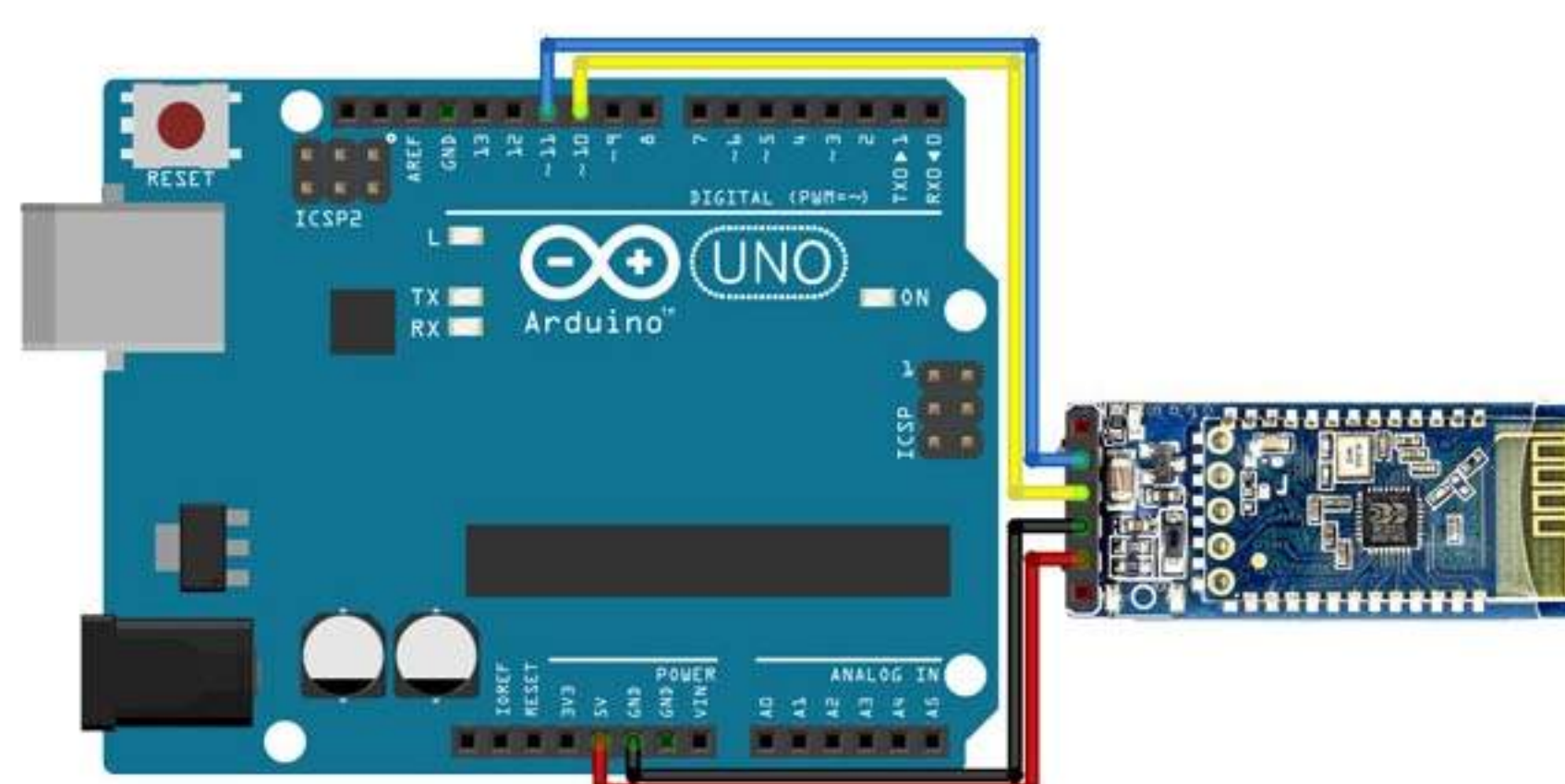
Software Apps

Arduino IDE

Interfacing BT06 Bluetooth Serial Module with Arduino

Step 1: Circuit

The following circuit shows how you should connect the Arduino to the BT06 module. Connect wires accordingly.



Step 2: Library

Install the following library on your Arduino IDE.

<https://github.com/PaulStoffregen/SoftwareSerial>



Tip

If you need more help with installing a library on Arduino, read this tutorial: [How to Install an Arduino Library](#)

Step 3: Code

Upload the following code to the Arduino board.

```
1 /*
2  Modified on March 09, 2021
3  Modified by MohammedDmirchi from https://github.com/PaulStoffregen/SoftwareSerial
4  Home
5  */
6
7
8  #include <SoftwareSerial.h>
9
10 SoftwareSerial mySerial(10, 11); // RX, TX
11
12 void setup() {
13   // Open serial communications and wait for port to open:
14   Serial.begin(9600);
15   while (!Serial) {
16     ; // wait for serial port to connect. Needed for native USB port only
17   }
18
19   // set the data rate for the SoftwareSerial port
20   mySerial.begin(9600);
21 }
22
23 void loop() { // run over and over
24   if (mySerial.available()) {
25     Serial.write(mySerial.read());
26   }
27   if (Serial.available()) {
28     mySerial.write(Serial.read());
29   }
30 }
```

This code is to test the connection between the Arduino serial monitor and the device connected to the Bluetooth module.