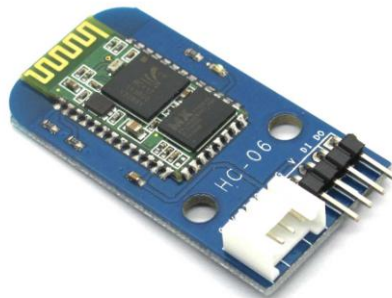


Electronic Brick of HC-06 Serial Port Bluetooth

Overview

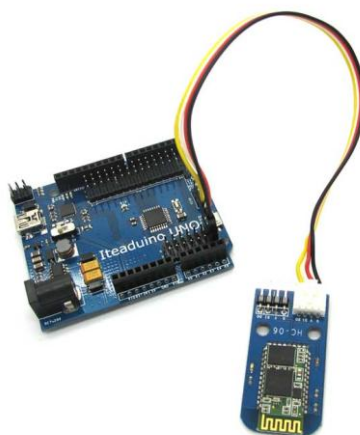


What is an electronic brick? An electronic brick is an electronic module which can be assembled like Lego bricks simply by plugging in and pulling out. Compared to traditional universal boards and circuit modules assembled with various electronic components, electronic brick has standardized interfaces, plug and play, simplifying construction of prototype circuit on one's own. There are many types of electronic bricks, and we provide more than twenty types with different functions including buttons, sensors, Bluetooth modules, etc, whose functions cover from sensor to motor drive, from Ethernet to wireless communication via Bluetooth, and so on. We will continue to add more types to meet the various needs of different projects.

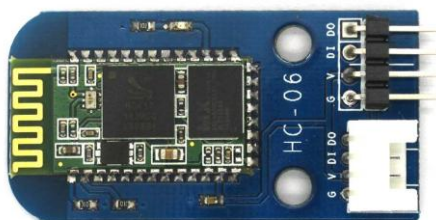
Electronic brick of HC-06 serial port Bluetooth can be connected to hardware UART or analog UART on the control board. With Bluetooth communication, it can achieve wireless transmission which can be applied in various kinds of remote communication occasions.

Features

1. Plug and play, easy to use. Compatible with the mainstream 2.54 buckled interfaces in the market.



2. With resetting button and status indicator



Specifications

PCB Size	39.5mm X 20.5mm X 1.6mm
Working voltage	3.3V DC
Operating voltage	3.3V DC
Compatible interfaces	2.544-pin buckled interface ⁽¹⁾
Communication protocols	Bluetooth 2.0
Communication range	<20m

Note 1: DO for data output (TX) port of UART, DI for data input (RX) port of UART, V and G for voltage at the common collector and ground respectively.



Electrical characteristics

Parameter	Min.	Typical	Max.	Unit
Working voltage	3.0	3.3	4.2	VDC
Digital output voltage (VCC=3.3V)	0	-	3.3	V
Working current (VCC=3.3V)	-	20	40	mA

Switch and Indicator

1. Resetting button

After pressing down resetting button, module will re-enter standby mode and the status lamp will flash.

2. Status lamp

When the module is under standby mode, status lamp will keep flashing; when the module is under connection mode, status lamp will keep being ON.

AT Command

Default :

Slave , 9600 bit/s baud rate, Pincode 1234.

AT command :

1. Communications test :

Sent : AT

Receive : OK

2. Change baud rate

Sent : AT+BAUD1

Receive : OK1200

Sent : AT+BAUD2

Receive : OK2400

1-----1200

2-----2400

3-----4800

4-----9600

5-----19200

6-----38400

7-----57600

8-----115200

Baud rate setting can be saved even if power is off.

3. Change name of Bluetooth device

Sent : AT+NAMEdevicename

Receive : OKname

(devicename is the name you want it to be, which will be shown when searched)

Name setting can be saved even if power is off.

4. Change Pincode

Sent : AT+PINxxxx

Receive : OKsetpin

(xxxx is the pin code that you want to set)

Pin code can be saved even if power is off.

DEMO

Connect D0 port of electronic brick of serial port Bluetooth to D0 port of Arduino board, D1 port to D1 port of Arduino board, and we will use the following program to keep sending character string of HELLO and have them displayed via Bluetooth serial port software of cellphone.

```
void setup() {
  Serial.begin(9600);
}

void loop() {
  Serial.println("HELLO");    //Send the "HELLO" character string to HC-06
  delay(1000);               // wait for a second
}
```

Revision record

Version	Description	Date	Written by
v1.0	Initial edition	19 th , April, 2013	Stan Lee