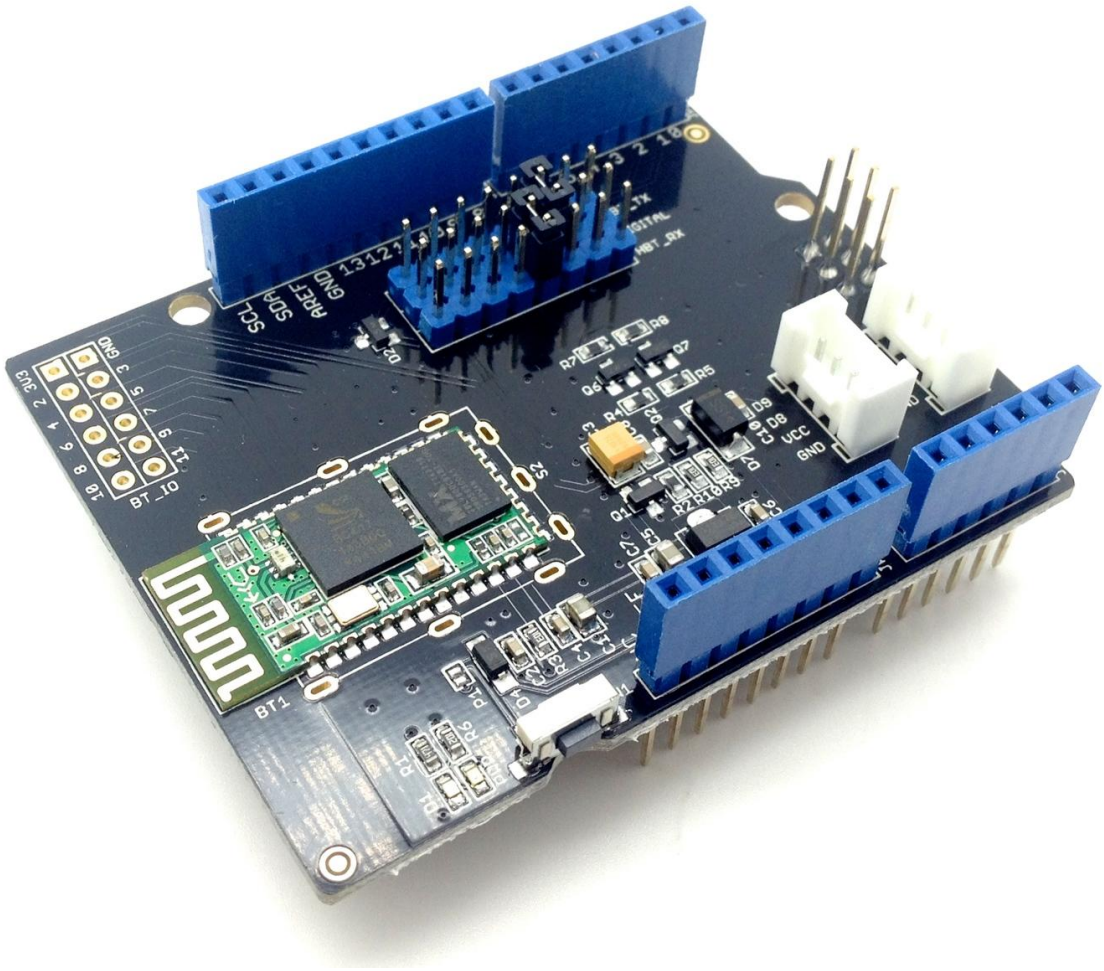
Bluetooth Shield V2.0 SKU:113030019



The Bluetooth Shield integrates a Serial Bluetooth module. It can be easily used with Arduino/Seeedstudio for transparent wireless serial communication. You can choose two pins from Arduino D0 to D7 as Software Serial Ports to communicate with Bluetooth Shield (D0 and D1 is Hardware Serial Port). The shield also has two Grove connectors (one is Digital, the other is Analog) for you to install Grove modules.

Version

Product Version	Changes	Released Date
Base Shield V1.2	Initial	Oct 2011
Base Shield V1.3	Change the Grove connector layout and quantity	Aug 2012
Base Shield V2.0	Change the Grove connector layout and quantity, as well as a power switch to enable both 3.3V and 5V.	Mar 2014

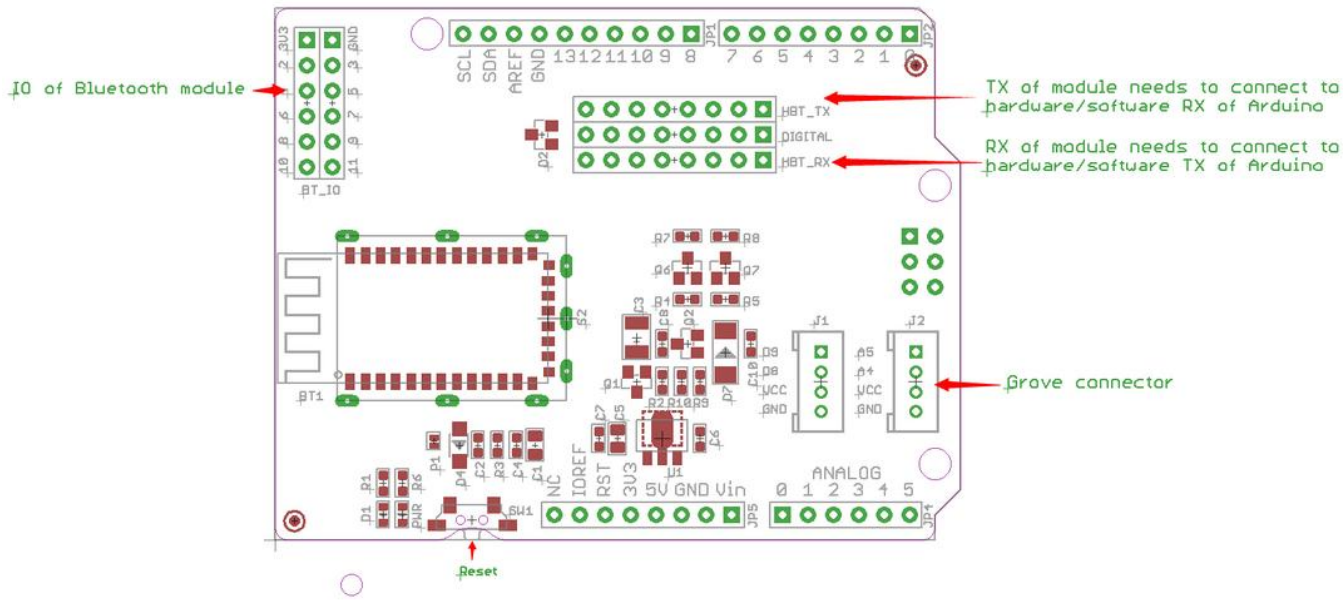
Features

- Input Voltage: 3.3V
- Baudrate: 9600, 19200, 38400, 57600, 115200, 230400, 460800
- Seeeduino/Arduino compatible
- Up to10m communication distance in house without obstacle
- UART interface (TTL) with programmable baud rate
- Default Baud rate: 9600, Data bits: 8, Stop bit: 1, Parity: No parity
- Default PINCODE:"1234"
- A full set of configuration commands
- On board PCB Antenna

Specifications

Parameter	Value/Range
Voltage	3.3V
Bluetooth version	v2.1+EDR
Main Chip	BT1
Dimension	L:100mm W:65mm H:30mm
Net Weight	40g

Interface function



Pad Type	Description
BT_IO	IO Port of Bluetooth module can be control: read, write.
BT_RX	UART Data input of Bluetooth module.
BT_TX	UART Data output Bluetooth module.

Two Grove connectors One is Digital (D8 and D9), the other is I2C/Analog (A4 and A5).

Demonstration

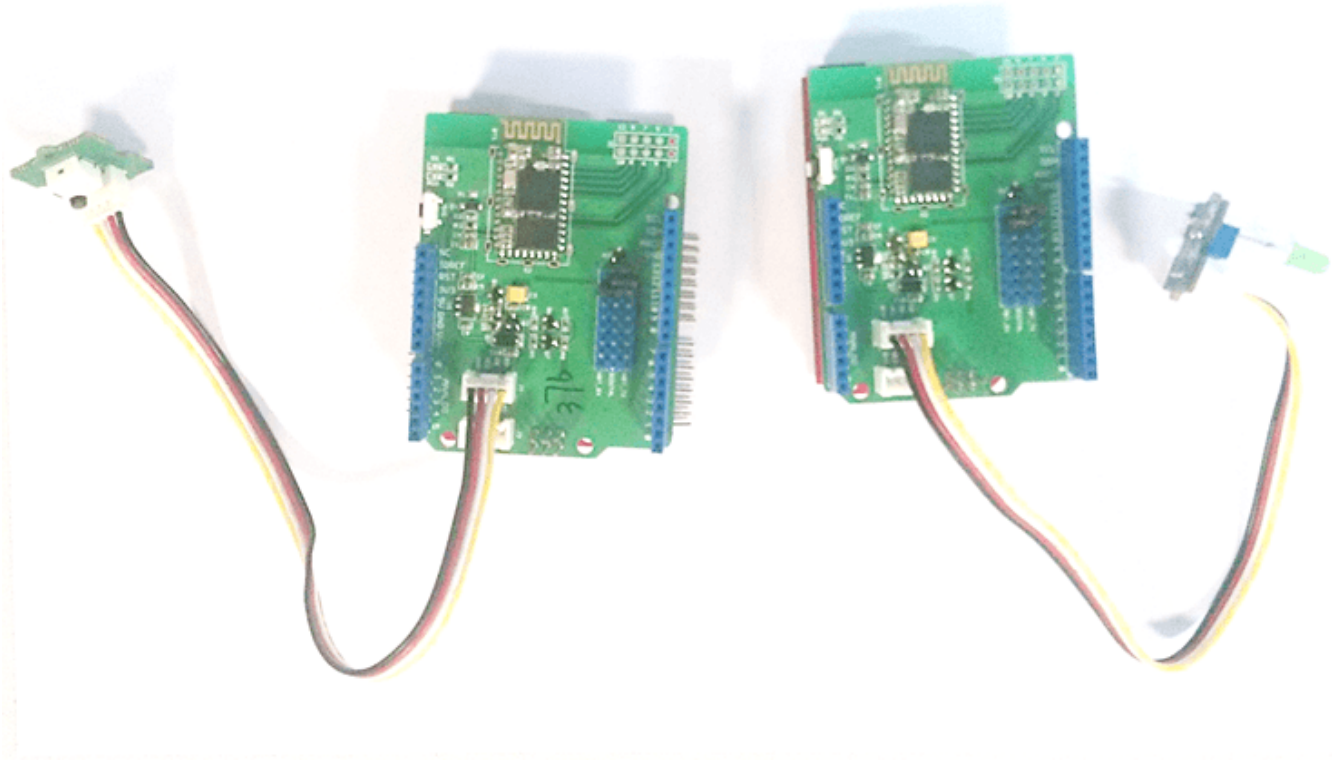
1：Two Bluetooth Shield Connect

This demo will show you how to connect two Bluetooth shield.

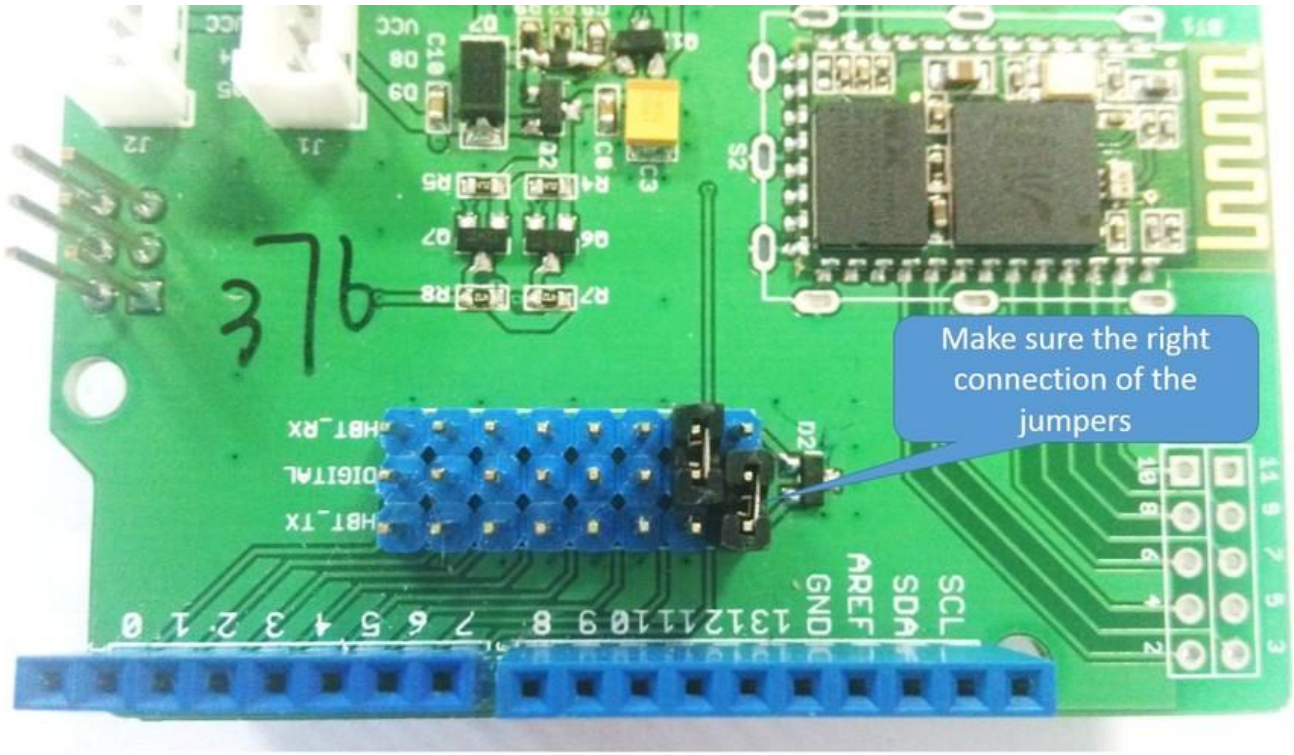
You need two piece of Seeeduino V3.0, One Bluetooth Shield as Master while the other as Slave.

**Hardware Installation **

as folowing:

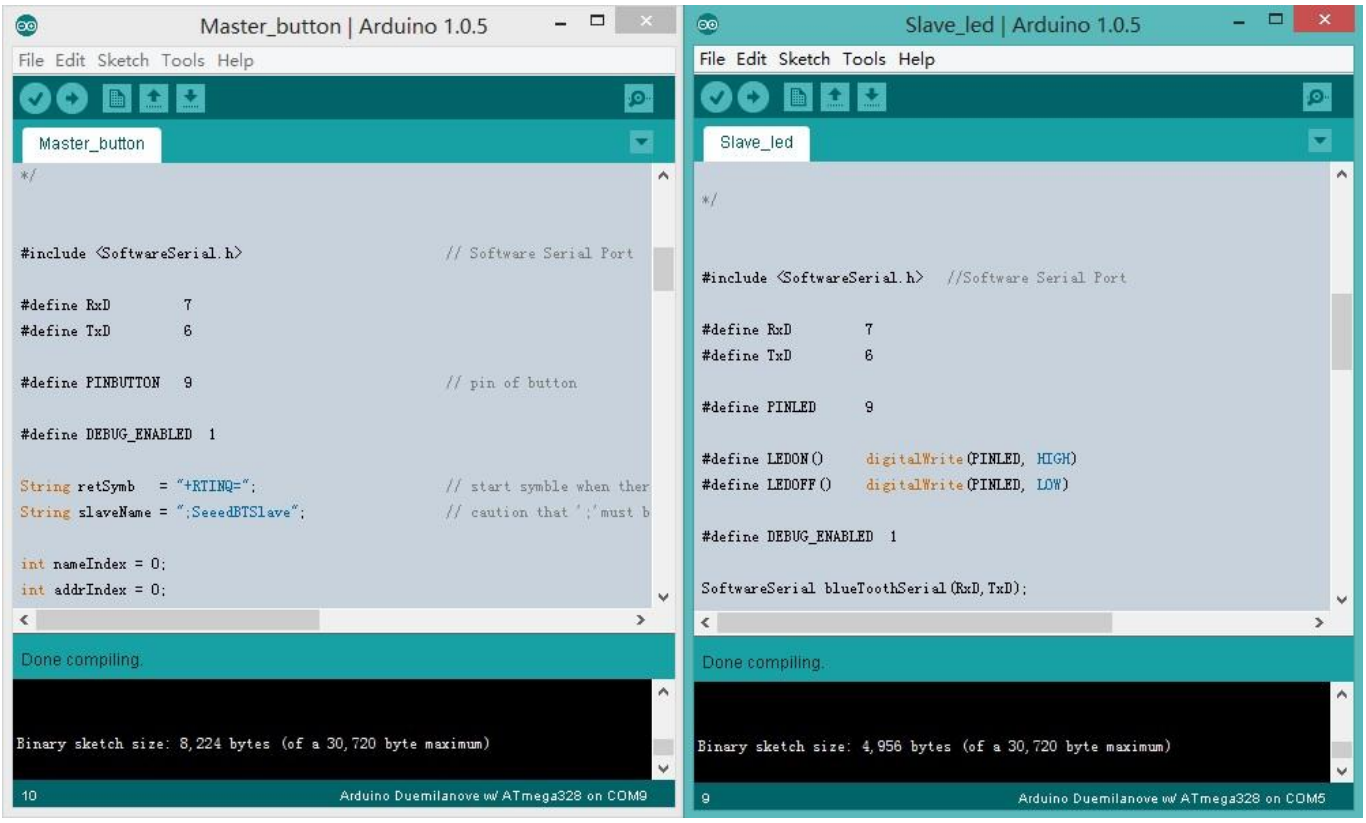


make sure the right connection of the jumpers



**Download Code and Upload **

1. You can download the code in github, click here,then extract it to libraries folder of Arduino.
2. Open Arduino IDE, open File -> Examples -> Bluetooth_Shield_V2_Demo_Code -> Master_Button, then you can open the code of Master
3. Open Arduino IDE, open File -> Examples -> Bluetooth_Shield_V2_Demo_Code -> Slave_led, then you can open the code of Slave
4. Click Upload to Upload the code, if you have any problem about how to start Arduino, please click here for some help.



Check The Result

1. After finish Uploading the code to both Master and Slave, reset the two devices meanwhile
2. You can see the led blink, indicate that devices was initializing and connecting.
3. After about servel seconds, led on, indicate that Master and Slave had connected.

!!!Note If the phenomenon is not observed above, try unplugging the power and re-plug in again.

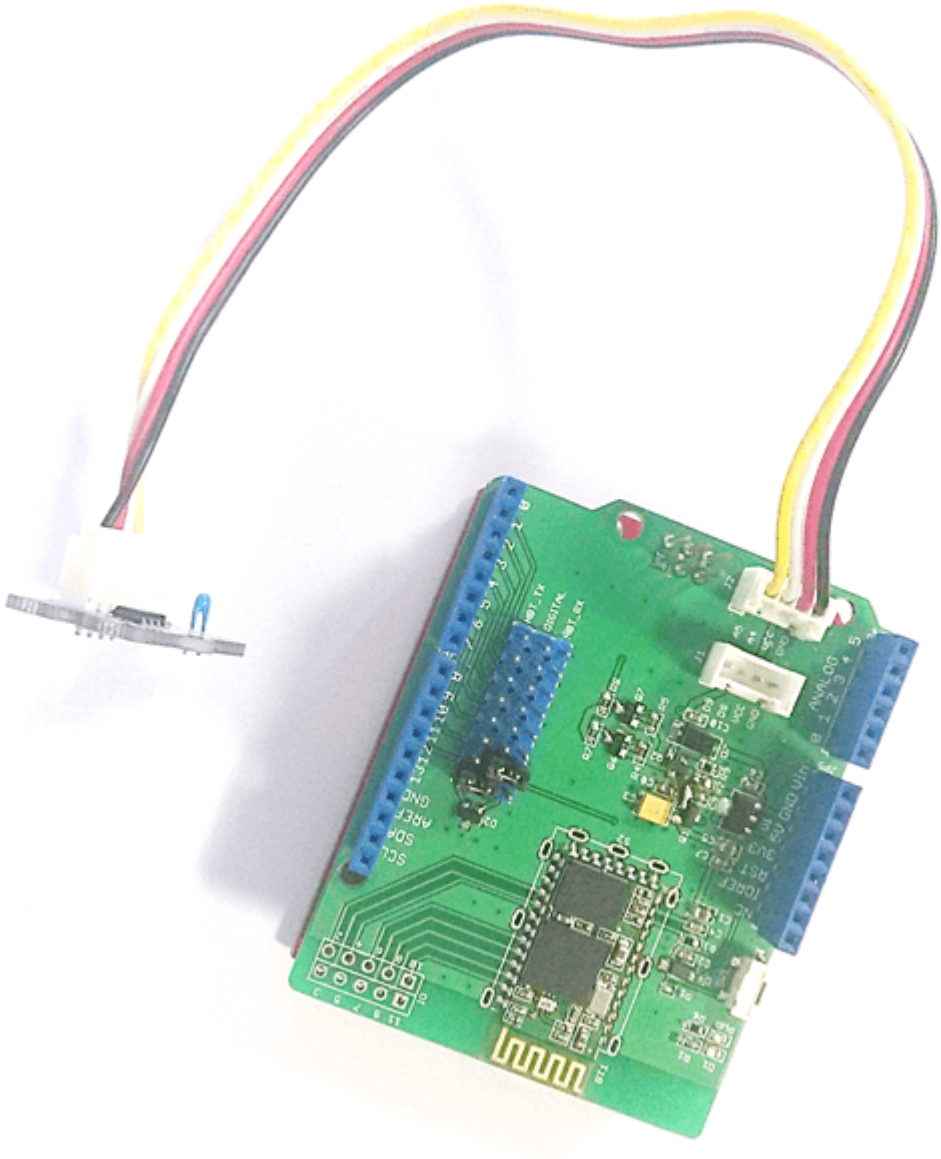
2：Connect to Smart Phone

This demo will show you how to connect Bluetooth Shield to a Smart Phone.

We need a Seeeduino V3.0, a Smart Phone that with Bluetooth function.

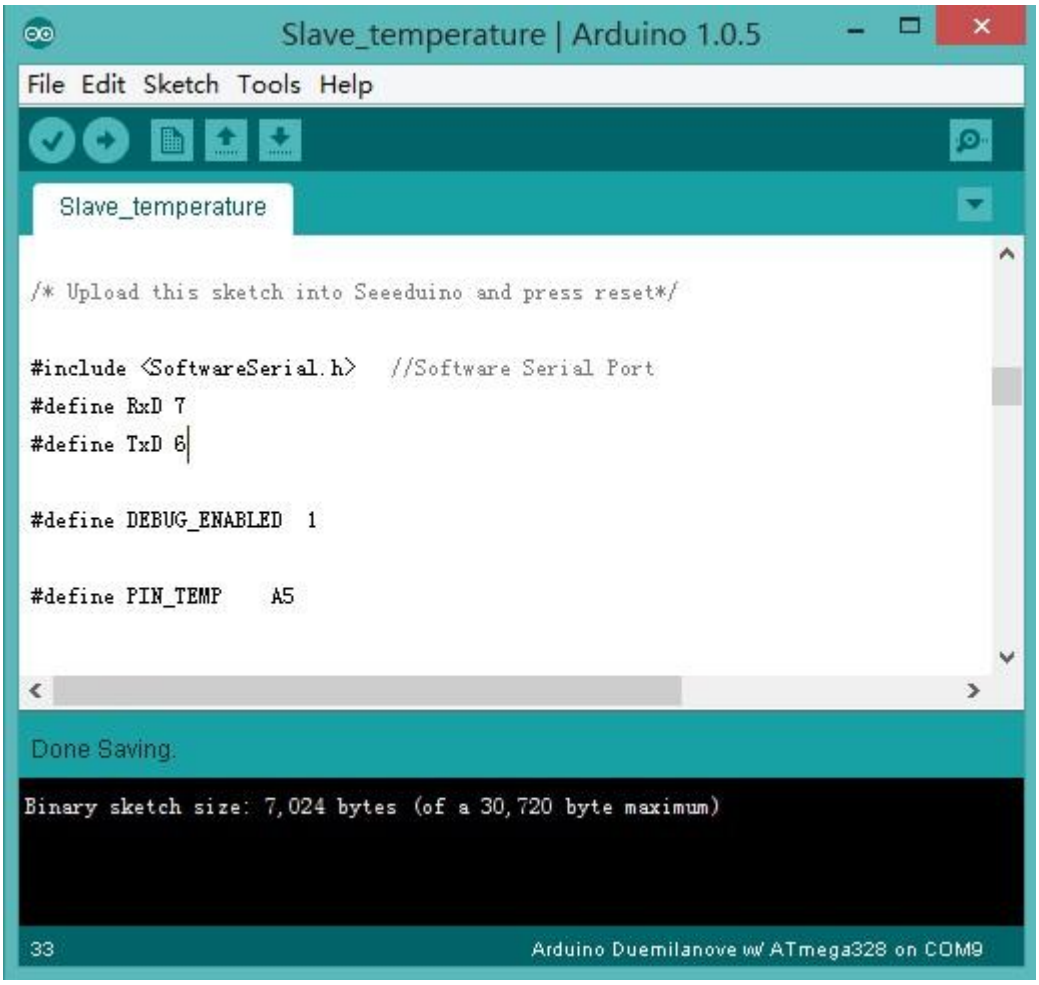
Via a Bluetooth SPP App

Hardware Installation



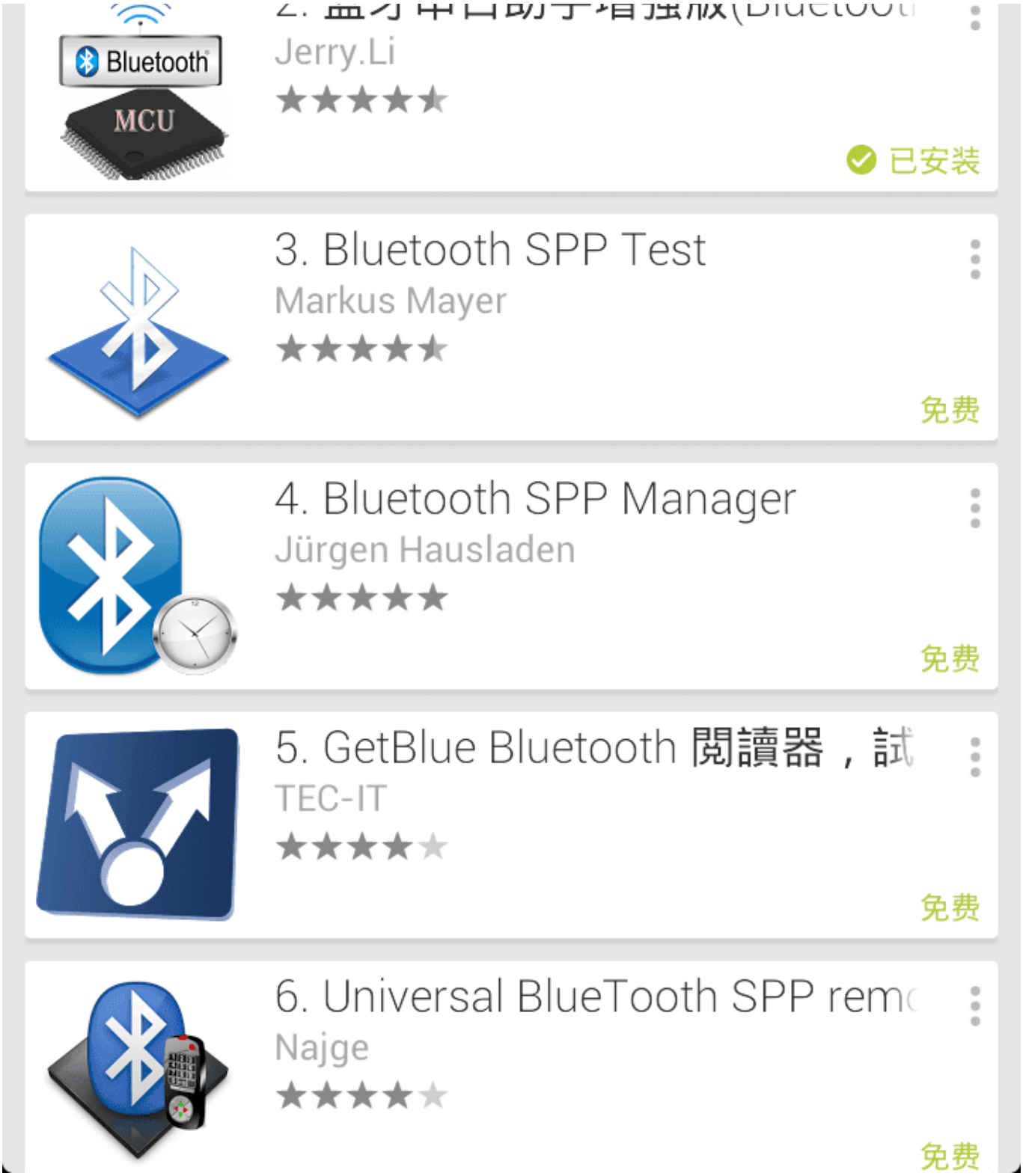
Download Code and Upload

1. You can download the code in github, click here,then extract it to libraries folder of Arduino.
2. Open Arduino IDE, File -> Examples -> Bluetooth_Shield_V2_Demo_Code -> Slave_Temperature, then you can open the code
3. Click Upload to Upload the code, if you have any problem about how to start Arduino, please click here for some help.



Download a SSP App

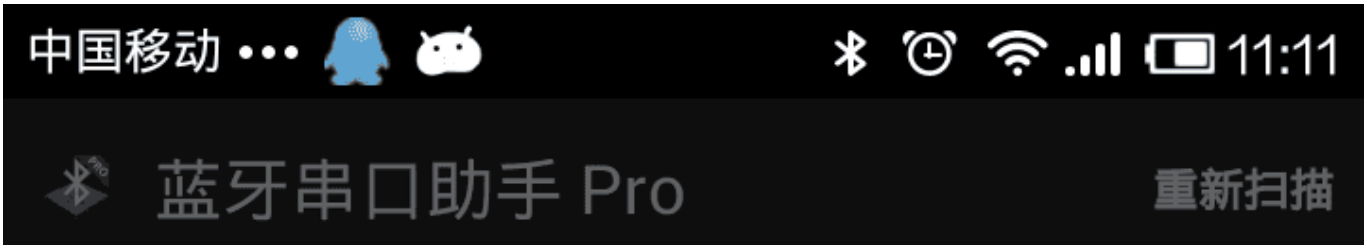
Here we us an Ardriod Phone, Mine is a Xiaomi 2A, open Google Play, search bluetooth spp, you can find many results.



Most of this app are useful, just choose one and have try.

Get Temperature

After installing an SPP app, try connecting it to SeeedBTSlave, pin code is: "0000"




需要连接的设备：
设备名称: Null
地址码: 00:13:EF:00:0D:4F
Class of Device(CoD):0
信号强度: -47
设备类型: BR/EDR Bluetooth
绑定状态: 未绑定
Service's UUID：
蓝牙配对请求
要与
SeeedBTSlave
设备配对，请键入该设备所需的 PIN：
0000
通常为 0000 或 1234
PIN 由字母或符号组成
您可能还需要在另一台设备上输入此 PIN。
取消
确定

When connect is ok, send 't' to SeeedBTSlave, and you can get the temperature now:

Resources

- Schematic and Layout in Eagle format
- module Datasheet

Tech Support

Please submit any technical issue into our forum or drop mail to techsupport@seeed.cc.