

Raspberry Pi Advanced Starter Kit http://keyes-robot.taobao.com

17 bluetooth module

1 Project process:

```
pi@raspberrypi: ~/keyes_鏍雞帗娲鹃珮绾x增濓椾欢鑒勸枡/bluetooth
                                                                 pi@raspberrypi ~/keyes 树莓派高级版套件资料/bluetooth $ 1s
bluetooth.py Makefile serialRead.c serialTest.c

pi@raspberrypi ~/keyes_树莓派高级版套件资料/bluetooth $ vi serialRead.c

pi@raspberrypi ~/keyes_树莓派高级版套件资料/bluetooth $ make
     -c -o serialRead.o serialRead.c
gcc serialRead.c -o serialRead -lwiringPi
pi@raspberrypi ~/keyes_树莓派高级版套件资料/bluetooth $ ls
bluetooth.py serialRead
                          serialRead.o
             serialRead.c serialTest.c
pi@raspberrypi ~/keyes 树莓派高级版套件资料/bluetooth $ sudo ./serialRead
Keyes
                        Keyes
                                 Keyes
                                           Keves
                                                     Keyes
                                                              Keyes
Keyes
         Keyes
                   Keyes
                            Keyes
                                                Keyes
                                                           Keyes
                                                                     Key
                                     Keyes
es^Cpi@raspberrypi ~/keyes 树莓派高级版套件资料/bluetooth $
pi@raspberrypi ~/keyes_树莓派高级版套件资料/bluetooth $
```

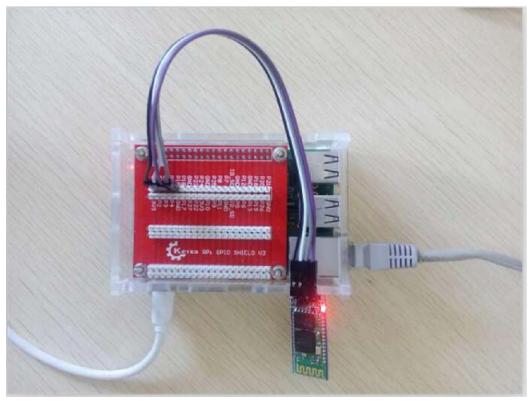
2 Project source code:

```
P pi@raspberrypi: ~/keyes_鑲致被娲鹃丽绾x增廉椾欢鑒動枡/bluetooth
#include <stdio.h>
#include <string.h>
#include <errno.h>
#include <wiringSerial.h>
int main ()
  int fd;
  if ((fd = serialOpen ("/dev/ttyAMAO", 9600)) < 0)
    fprintf (stderr, "Unable to open serial device: %s\n", strerror (errno)
    return 1 ;
 / Loop, getting and printing characters
  for (;;)
    putchar (serialGetchar (fd));
    fflush (stdout) ;
                                                            48,1
                                                                          Bot
```

3 Project circuit connection

Before the experiment, your cellphone need to download a Bluetooth assistant APP as specified, with Android operating system. After nstallation, open this APP, and open cellphone Bluetooth function, search nearby Bluetooth device, find HC-06 bluetooth and click pair, the PIN number is 1234. After the successful pairing, you can begin the experiment. In the serial port, you can send any random character, the module will feedback the character to your cellphone.

raspl	errypi	~/keyes_	树莓派高	5级版				ooth \$	gpio reada.	11	
ВСМ	wPi	Name	Mode	V	+B Plus Physical			Mode	Name	wPi	BCM
		3.3v	+ 	1	1	2			5 v		
2	8	SDA.1	ALT0	1	3 1	4			5V		
3	9	SCL.1	ALTO	11	1 5 1	6	I		0v		
4	7	GPIO. 7	IN	1	1 7 1	8	1	ALT0	TXD	15	14
	i i	0v	1		9 1	10	1	ALT0	RXD	16	15
17	0 1	GPIO. 0	I	0	11	12	0	IN	GPIO. 1	1	1 18
27	2	GPIO. 2	IN	0	13	14			0v		1
22	3	GPIO. 3	IN	0	15	16	0	IN	GPIO. 4	4	1 23
	1 1	3.3v	1	1	17	18	0	IN	GPIO. 5	1 5	24
10	12	MOSI	ALT0	1 0	19	20			0 v		
9	13	MISO	ALT0	0	21	22	0	IN	GPIO. 6	6	25
11	14	SCLK	ALT0	0	23	24	1	ALTO	CEO	10	8
	1 1	0v	1	1	25	26	1	ALTO	CE1	11	1 7
0	30	SDA.0	IN	1	27	28	1	IN	SCL.0	31	1 1
5	21	GPIO.21	IN	1	29	30	1		0v		1
6	22	GPIO.22	IN	1	31	32	0	IN	GPIO.26	26	1 12
13	23	GPIO.23	IN	0	33	34	1		0v		1
19	24	GPIO.24	IN	10	35	3.6	0	IN	GPIO.27	27	1 16
26	25	GPIO.25	IN	1 0	37	38	0	IN	GPIO.28	28	1 20
		0Δ	1	!	39	40	0	IN	GPIO.29	29	21
BCM	wPi	Name	Mode	V	Phys	ical	V	Mode	Name	WPi	BCM



```
Connection diagram:

VCC-----5V

GND-----GND

TXD-----RXD

RXD----TXD
```