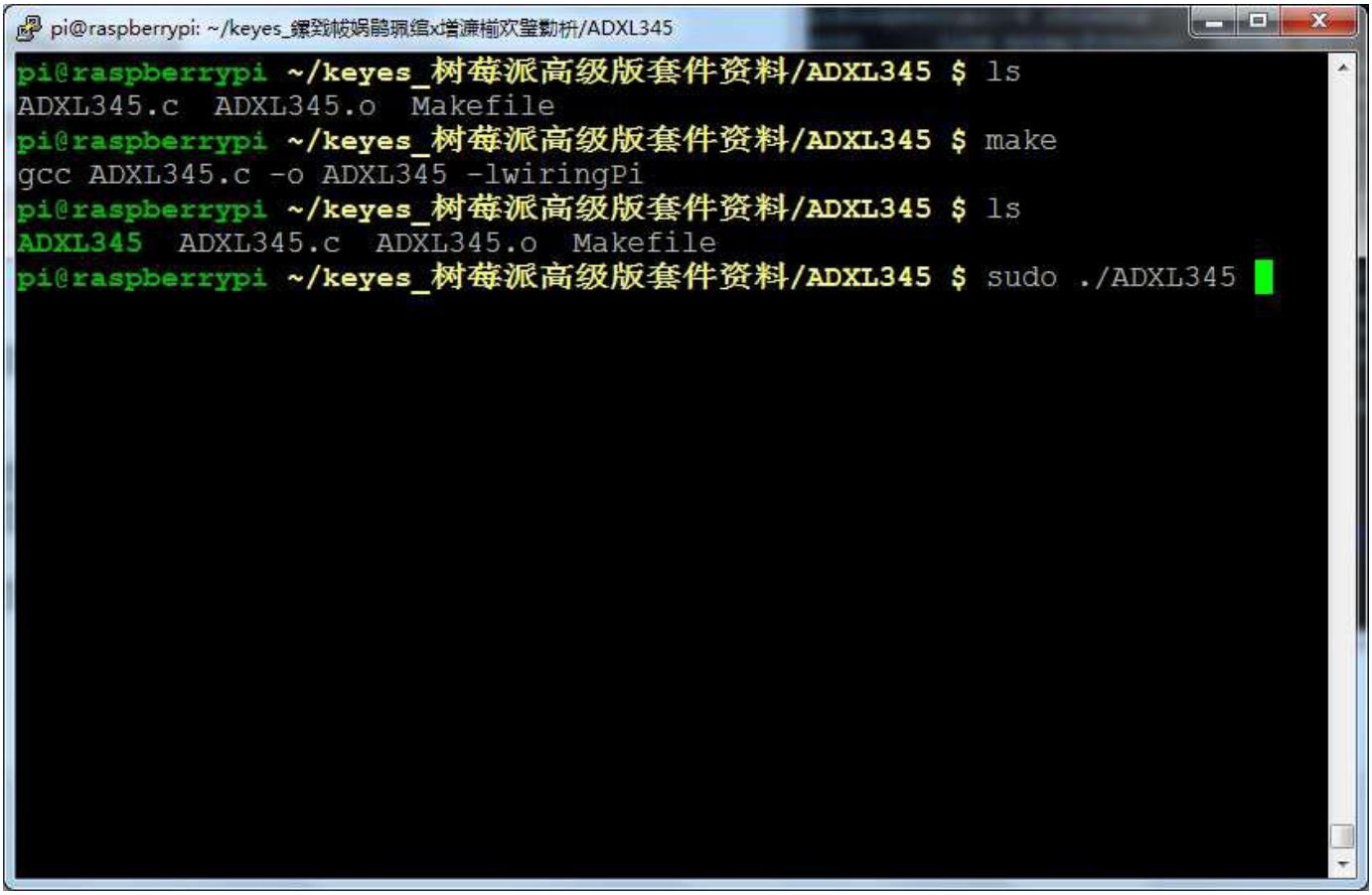
8 ADXL Acceleration sensor

1 Project process:



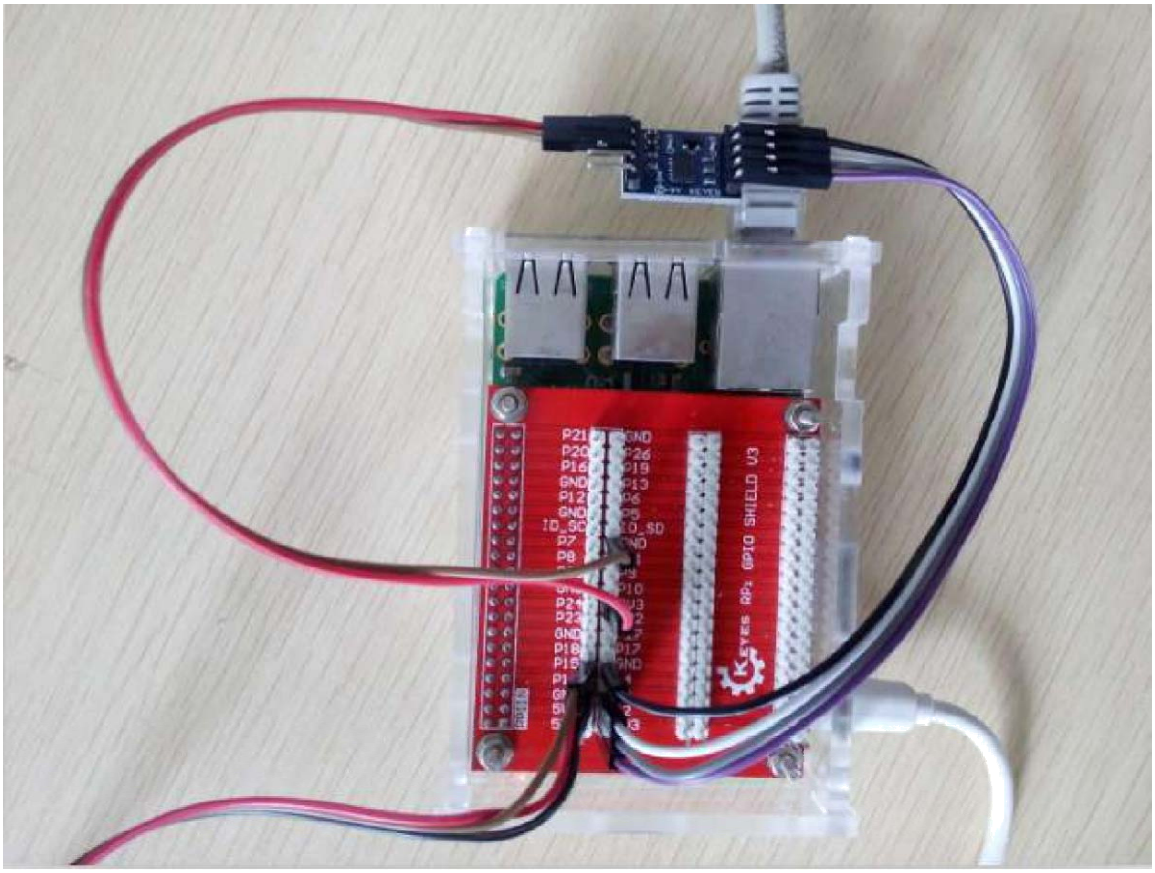
2 Project source code:

```
#include <wiringPiI2C.h>
#include <stdio.h>
#include <stdlib.h>
#include <errno.h>

#define  DevAddr  0x53  //device address

struct acc_dat{
        int x;
        int y;
        int z;
};

void adxl345_init(int fd)
{
        wiringPiI2CWriteReg8(fd, 0x31, 0x0b);
        wiringPiI2CWriteReg8(fd, 0x2d, 0x08);
//      wiringPiI2CWriteReg8(fd, 0x2e, 0x00);
        wiringPiI2CWriteReg8(fd, 0x1e, 0x00);
        wiringPiI2CWriteReg8(fd, 0x1f, 0x00);
        wiringPiI2CWriteReg8(fd, 0x20, 0x00);

        wiringPiI2CWriteReg8(fd, 0x21, 0x00);
"ADXL345.c" 80L, 1767C                          1,1          Top
```

3 Result

```
pi@raspberrypi ~/keyes_树莓派高级版套件资料/ADXL345 $ sudo ./ADXL345
x: 00205  y: 65409  z: 65509
x: 00206  y: 65410  z: 65510
x: 00206  y: 65409  z: 65512
x: 00205  y: 65410  z: 65511
x: 00205  y: 65409  z: 65510
x: 00206  y: 65407  z: 65509
x: 00206  y: 65410  z: 65511
x: 00205  y: 65412  z: 65511
x: 00205  y: 65409  z: 65510
x: 00206  y: 65409  z: 65510
x: 00206  y: 65411  z: 65510
x: 00205  y: 65409  z: 65510
x: 00205  y: 65409  z: 65510
x: 00207  y: 65408  z: 65511
x: 00206  y: 65412  z: 65510
x: 00205  y: 65409  z: 65509
x: 00205  y: 65409  z: 65510
x: 00204  y: 65410  z: 65511
x: 00206  y: 65411  z: 65510
x: 00205  y: 65410  z: 65512
^Cpi@raspberrypi ~/keyes_树莓派高级版套件资料/ADXL345 $
```

4 Project circuit connection



Connection diagram

Raspberry Pi	ADXL345 Module
GND	GND
3.3V	3.3V
SCL0	SCL
SDA0	SDA
3.3V	CS
GND	SDO