

8 ADXL Acceleration sensor

1 Project process:

```
pi@raspberrypi ~/keyes 類就說論照經濟論的發版套件资料/ADXL345 $ 1s
ADXL345.c ADXL345.o Makefile
pi@raspberrypi ~/keyes_树莓派高级版套件资料/ADXL345 $ make
gcc ADXL345.c -o ADXL345 -lwiringpi
pi@raspberrypi ~/keyes_树莓派高级版套件资料/ADXL345 $ 1s
AAXL345 ADXL345.c -o ADXL345.o Makefile
pi@raspberrypi ~/keyes_树莓派高级版套件资料/ADXL345 $ 1s
AAXL345 ADXL345.c ADXL345.o Makefile
pi@raspberrypi ~/keyes_树莓派高级版套件资料/ADXL345 $ sudo ./ADXL345
```

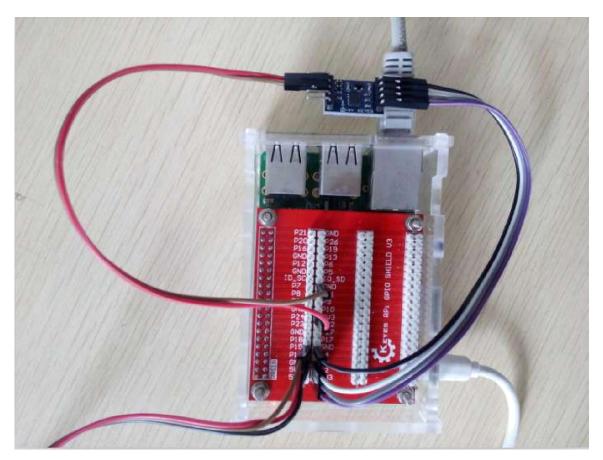
2 Project source code:

```
P pi@raspberrypi: ~/keyes_鐵點被誤點確這x增源樹次監動枡/ADXL345
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 adx1345 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

```
_ 🗆 🗆 X
Ppi@raspberrypi: ~/keyes_鏍致帧娲鹃珮绾x增濂椾欢豎勬枡/ADXL345
pi@raspberrypi ~/keyes 树莓派高级版套件资料/ADXL345 $ sudo ./ADXL345
         y: 65409 z: 65509
x: 00205
         y: 65410
                    z: 65510
x: 00206
         y: 65409
x: 00206
                   z: 65512
         y: 65410
x: 00205
                   z: 65511
x: 00205
          y: 65409
                    z: 65510
x: 00206
          y: 65407
                    z: 65509
          y: 65410
                    z: 65511
x: 00206
                    z: 65511
x: 00205
          y: 65412
         y: 65409
x: 00205
                    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
         y: 65409
x: 00205
                   z: 65509
x: 00205
                   z: 65510
         y: 65409
                   z: 65511
x: 00204
          y: 65410
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



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