



2 MQ5 module

1 Project process

```
pi@raspberrypi: ~/keyes_树莓派高级套件资料/MQ-5
pi@raspberrypi -/tree_树莓派高级套件资料/MQ-5 $ ls
MQ5.c
pi@raspberrypi -/tree_树莓派高级套件资料/MQ-5 $ vi MQ5.c
pi@raspberrypi -/tree_树莓派高级套件资料/MQ-5 $ gpio readall
```

BCM	wPi	Name	Mode	V	Physical	V	Mode	Name	wPi	BCM
		3.3v			1	2		5v		
2	8	SDA.1	ALTO	1	3	4		5V		
3	9	SCL.1	ALTO	1	5	6		0v		
4	7	GPIO. 7	IN	1	7	8	1	ALTO	TrD	15
		0v			9	10	1	ALTO	RxD	16
17	0	GPIO. 0	IN	0	11	12	1	ALT5	GPIO. 1	1
27	2	GPIO. 2	IN	0	13	14		0v		
22	3	GPIO. 3	IN	0	15	16	0	IN	GPIO. 4	4
		3.3v			17	18	0	IN	GPIO. 5	5
10	12	MOSI	ALTO	0	19	20		0v		
9	13	MISO	ALTO	0	21	22	1	IN	GPIO. 6	6
11	14	SCLK	ALTO	0	23	24	1	OUT	CE0	10
		0v			25	26	1	OUT	CE1	11
0	30	SDA.0	IN	1	27	28	1	IN	SCL.0	31
5	21	GPIO.21	IN	1	29	30		0v		
6	22	GPIO.22	IN	1	31	32	0	IN	GPIO.26	26
13	23	GPIO.23	IN	0	33	34		0v		
19	24	GPIO.24	IN	0	35	36	0	IN	GPIO.27	27
26	25	GPIO.25	IN	0	37	38	0	IN	GPIO.28	28
		0v			39	40	0	IN	GPIO.29	29

```
pi@raspberrypi -/tree_树莓派高级套件资料/MQ-5 $ gcc MQ5.c -o MQ5 -lwiringPi
pi@raspberrypi -/tree_树莓派高级套件资料/MQ-5 $ ls
MQ5 MQ5.c
pi@raspberrypi -/tree_树莓派高级套件资料/MQ-5 $
```

2 Project source code

```
pi@raspberrypi: ~/keyes_網電虛真機型器件資料/MQ-5
#include <wiringPi.h>
#include <pcf8591.h>
#include <stdio.h>
#define LED 1
#define Q2W_ABASE 120
int main()
{ wiringPiSetup();
  pcf8591Setup (Q2W_ABASE, 0x48);
  int val=1,value;
  pinMode(6,INPUT);
  pinMode(10,OUTPUT);
  pinMode(11,OUTPUT);
  digitalWrite(6,HIGH);
  digitalWrite(10,HIGH);
  digitalWrite(11,HIGH);

  for(;;)
  {
//    digitalWrite(6,LOW);
//    delay(500);
//    digitalWrite(6,HIGH);
//    digitalWrite(10,LOW);
//    delay(500);
//    digitalWrite(10,HIGH);
//    digitalWrite(11,LOW);
//    delay(500);
//    digitalWrite(11,HIGH);
    val=digitalRead(6);
    value = analogRead (Q2W_ABASE + 0);
    printf("value=%d  ",value);
    printf("val=%d\n",val);
    delay(300);
  }
}
```

3 Result

```
pi@raspberrypi: ~/keyes_網電虛真機型器件資料/MQ-5
pi@raspberrypi ~$keyes_網電虛真機型器件資料/MQ-5 $ sudo ./MQ5
value=15 val=1
value=15 val=1
value=15 val=1
value=14 val=1
value=15 val=1
value=15 val=1
value=15 val=1
value=14 val=1
value=15 val=1
value=14 val=1
value=15 val=1
value=15 val=1
value=15 val=1
value=24 val=1
value=66 val=0
value=89 val=0
value=100 val=0
value=106 val=0
value=112 val=0
value=115 val=0
value=118 val=0
value=121 val=0
value=124 val=0
value=122 val=0
value=120 val=0
value=119 val=0
value=115 val=0
value=92 val=0
value=83 val=0
value=79 val=0
value=78 val=0
value=73 val=0
value=64 val=0
value=60 val=0
value=58 val=0
^Cpi@raspberrypi ~$keyes_網電虛真機型器件資料/MQ-5 $
```

4 Circuit connection

