

Project 11: pcf8591 reading analog signal

```
pi@raspberrypi: ~/树莓派基础套件程序资料/第十一课 \ pcf8591模拟信号读取/
pi@raspberrypi: ~/树莓派基础套件程序资料/第十一课 \ pcf8591模拟信号读取 $ ls
bright.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第十一课 \ pcf8591模拟信号读取 $ nano bright.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第十一课 \ pcf8591模拟信号读取 $ 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	OUT	15	14
		0v			9	10	1	ALTO	16	15
17	0	GPIO. 0	IN	0	11	12	0	IN	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	0	OUT	GPIO. 6	6
11	14	SCLK	ALTO	0	23	24	1	ALTO	CEO	10
		0v			25	26	1	ALTO	CE1	11
28	17	GPIO.17	IN	0	51	52	0	IN	GPIO.18	18
30	19	GPIO.19	IN	0	53	54	0	IN	GPIO.20	20
BCM	wPi	Name	Mode	V	Physical	V	Mode	Name	wPi	BCM

```
pi@raspberrypi: ~/树莓派基础套件程序资料/第十一课 \ pcf8591模拟信号读取 $ gcc -Wall -o bright bright.c -lwiringPi
pi@raspberrypi: ~/树莓派基础套件程序资料/第十一课 \ pcf8591模拟信号读取 $ ls
bright bright.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第十一课 \ pcf8591模拟信号读取 $ sudo ./bright
Raspberry Pi - Quick2Wire Analog Test
value=-1
value=-1
value=-1
value=-1
value=-1
value=-1
value=-1
value=-1
value=-1
value=-1
```

Pic. 1

```

pi@raspberrypi: ~/... 检测 pcf8591 模块
GNU nano 2.2.6      File: bright.c

int value ;

// Enable the on-board GPIO

wiringPiSetup () ;

// Add in the pcf8591 on the q2w board

pcf8591Setup (Q2W_ABASE, 0x48) ;

printf ("Raspberry Pi - Quick2Wire Analog Test\n") ;

// Setup the LED

pinMode (LED, PWM_OUTPUT) ;
pwmWrite (LED, 0) ;

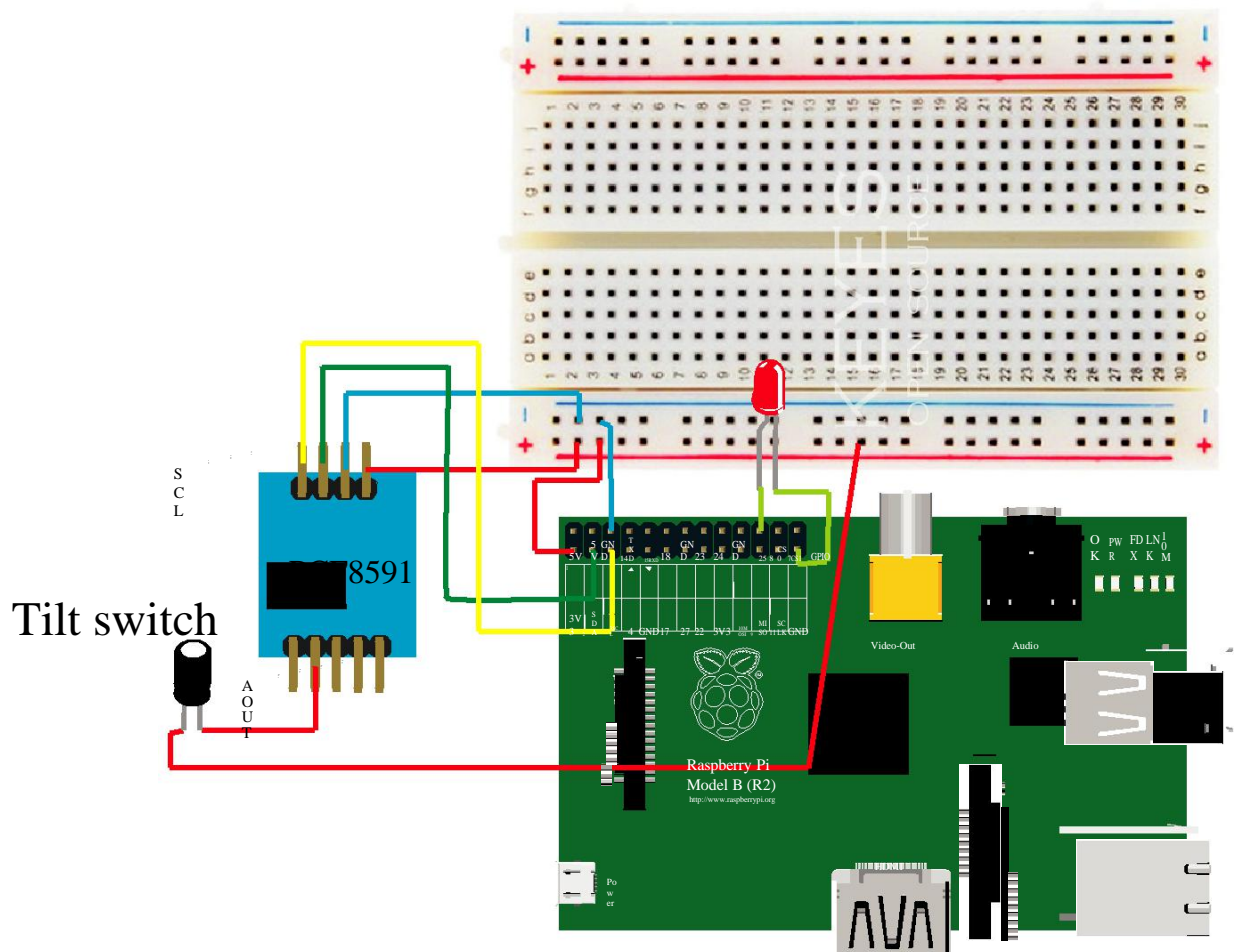
for (;;)
{
    value = analogRead (Q2W_ABASE + 0) ;
    pwmWrite (LED, value * 4) ;
    printf("value=%d\n",value);
    delay (100) ;
}

return 0 ;
}

```

^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
 ^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell

Pic. 2



Pic. 3