

树莓派第十二课 LM35温度传感器

```

pi@raspberrypi: ~/树莓派基础套件程序资料/第十二课/LM35温度传感器
pi@raspberrypi: ~/树莓派基础套件程序资料/第十二课/LM35温度传感器 $ ls
LM35.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第十二课/LM35温度传感器 $ nano LM35.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第十二课/LM35温度传感器 $ gpio readall
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| BCM | wPi |   Name   | Mode | V | Physical | V | Mode |   Name   | wPi | BCM |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|    2 |    8 |  SDA.1   | ALT0 | 1 |    3     | 4 |      |  5V      |     |     |
|    3 |    9 |  SCL.1   | ALT0 | 1 |    5     | 6 |      |  0v      |     |     |
|    4 |    7 | GPIO. 7  | IN   | 1 |    7     | 8 | ALT0 |  TxD     | 15  | 14  |
|      |     |  0v      |      |   |    9     |10 | ALT0 |  RxD     | 16  | 15  |
|   17 |    0 | GPIO. 0  | IN   | 0 |   11     |12 | IN   | GPIO. 1  |  1  | 18  |
|   27 |    2 | GPIO. 2  | IN   | 0 |   13     |14 |      |  0v      |     |     |
|   22 |    3 | GPIO. 3  | IN   | 0 |   15     |16 | IN   | GPIO. 4  |  4  | 23  |
|      |     |  3.3v    |      |   |   17     |18 | IN   | GPIO. 5  |  5  | 24  |
|   10 |   12 |  MOSI    | ALT0 | 0 |   19     |20 |      |  0v      |     |     |
|    9 |   13 |  MISO    | ALT0 | 0 |   21     |22 | IN   | GPIO. 6  |  6  | 25  |
|   11 |   14 |  SCLK    | ALT0 | 0 |   23     |24 | ALT0 |  CE0     | 10  |  8  |
|      |     |  0v      |      |   |   25     |26 | ALT0 |  CE1     | 11  |  7  |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|   28 |   17 | GPIO.17  | IN   | 0 |   51     |52 | IN   | GPIO.18  | 18  | 29  |
|   30 |   19 | GPIO.19  | IN   | 0 |   53     |54 | IN   | GPIO.20  | 20  | 31  |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| BCM | wPi |   Name   | Mode | V | Physical | V | Mode |   Name   | wPi | BCM |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
pi@raspberrypi: ~/树莓派基础套件程序资料/第十二课/LM35温度传感器 $ gcc -Wall -o LM35 LM35.c -lwiringPi
pi@raspberrypi: ~/树莓派基础套件程序资料/第十二课/LM35温度传感器 $ ls
LM35 LM35.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第十二课/LM35温度传感器 $ sudo ./LM35

```

图一

```
pi@raspberrypi: ~/... LM35.c
GNU nano 2.2.6 File: LM35.c

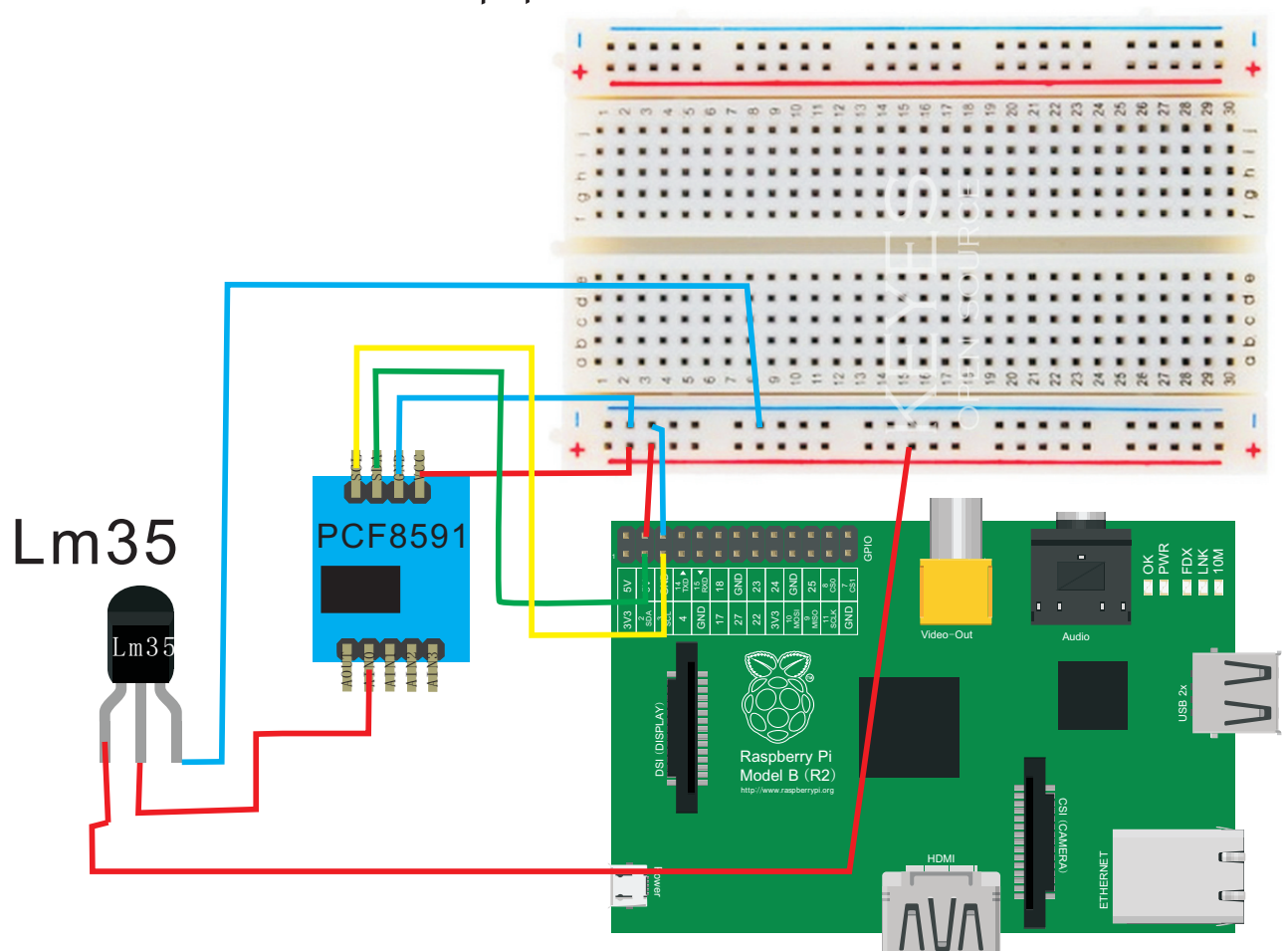
#include <wiringPi.h>
#include <pcf8591.h>
#include <stdio.h>

int main()
{
    int value;
    int dat;
    wiringPiSetup();
    pcf8591Setup(120, 0x48);
    for(;;)
    {
        value=analogRead(120+0);
        dat=(125*value*4)>>8;
        printf("dat=%d\n",dat);
        delay(100);
    }
    return 0;
}
```

[Read 25 lines]

^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

图二



图三