

Project 7: RGB_LED

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pi@raspberrypi: ~/键盘被妈俱纭€廉榭欢绑婧簪壁勤枞/纭 纭璇? RGB_LED涓€文僊
pi@raspberrypi -/树莓派基础套件程序资料 $ cd 第七课\ \ RGB_LED三彩/
pi@raspberrypi -/树莓派基础套件程序资料/第七课 RGB_LED三彩 $ ls
RGBPi.c
pi@raspberrypi -/树莓派基础套件程序资料/第七课 RGB_LED三彩 $ nano RGBPi.c
pi@raspberrypi -/树莓派基础套件程序资料/第七课 RGB_LED三彩 $ gpio readall
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| BCM | wPi |   Name   | Mode | V | Physical | V | Mode | Name   | wPi | BCM |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      |      | 3.3v     |      |   | 1 || 2 |      |      | 5v     |      |      |
| 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 | 1    | OUT  | TxD    | 15   | 14   |
|      |      | 0v       |      |   | 9 || 10 | 0    | OUT  | RxD    | 16   | 15   |
| 17   | 0    | GPIO. 0  | IN   | 0 | 11 || 12 | 1    | OUT  | GPIO. 1 | 1    | 18   |
| 27   | 2    | GPIO. 2  | OUT  | 0 | 13 || 14 |      |      | 0v     |      |      |
| 22   | 3    | GPIO. 3  | OUT  | 0 | 15 || 16 | 0    | OUT  | GPIO. 4 | 4    | 23   |
|      |      | 3.3v     |      |   | 17 || 18 | 0    | OUT  | GPIO. 5 | 5    | 24   |
| 10   | 12   | MOSI     | ALT0 | 0 | 19 || 20 |      |      | 0v     |      |      |
| 9    | 13   | MISO     | ALT0 | 0 | 21 || 22 | 0    | OUT  | GPIO. 6 | 6    | 25   |
| 11   | 14   | SCLK     | ALT0 | 0 | 23 || 24 | 1    | ALT0 | CE0    | 10   | 8    |
|      |      | 0v       |      |   | 25 || 26 | 1    | ALT0 | CE1    | 11   | 7    |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 28   | 17   | GPIO.17  | IN   | 0 | 51 || 52 | 0    | IN   | GPIO.18 | 18   | 29   |
| 30   | 19   | GPIO.19  | IN   | 0 | 53 || 54 | 0    | 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/第七课 RGB_LED三彩 $ gcc -Wall -o RGBPi RGBPi.c -lwi
ringPi
pi@raspberrypi -/树莓派基础套件程序资料/第七课 RGB_LED三彩 $ ls
RGBPi RGBPi.c
pi@raspberrypi -/树莓派基础套件程序资料/第七课 RGB_LED三彩 $ sudo ./RGBPi
^Cpi@raspberrypi -/树莓派基础套件程序资料/第七课 RGB_LED三彩 $ █

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Pic. 1

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pi@raspberrypi: ~/... RGB_LED...
GNU nano 2.2.6 File: RGBPi.c Modified

#include <wiringPi.h>
#include <softPwm.h>
#include <stdio.h>
#include <stdlib.h>
#include <stdint.h>

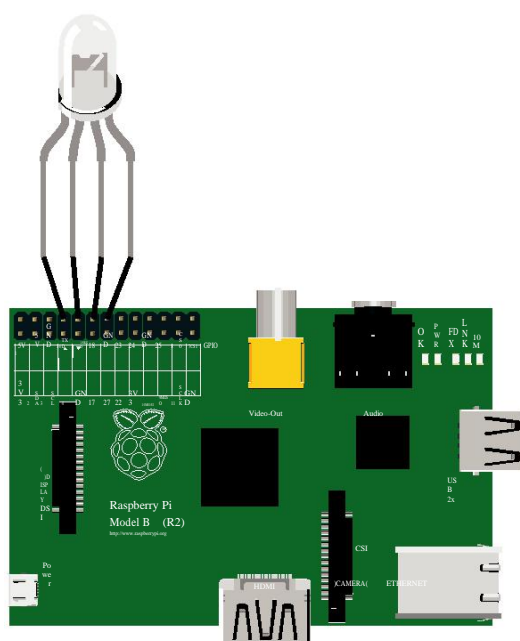
void color(unsigned char red, unsigned char green, unsigned char blue)
{
    softPwmWrite(15,100-red);
    softPwmWrite(16,100-green);
    softPwmWrite(1,100-blue);
}

int main()
{
    wiringPiSetup();
    softPwmCreate(15,0,100);
    softPwmCreate(16,0,100);
    softPwmCreate(1,0,100);

    //pinMode(5,PWM_OUTPUT);
    //pinMode(6,OUTPUT);
    //pinMode(10,PWM_OUTPUT);
    //pinMode(11,PWM_OUTPUT);

    for(;;)
    {
        ^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