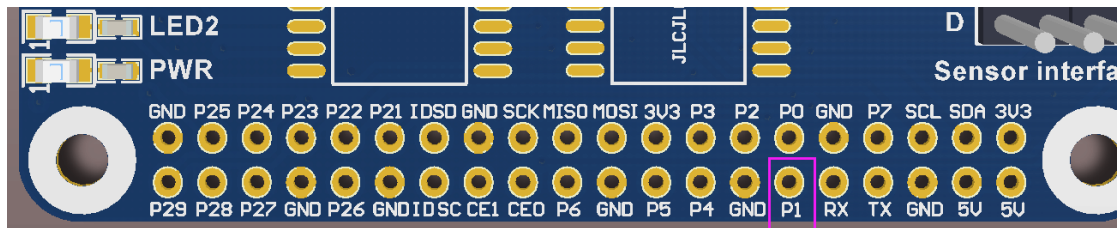


# PWM CONTROL BACKLIGHT

--WAVESHARE LCDS

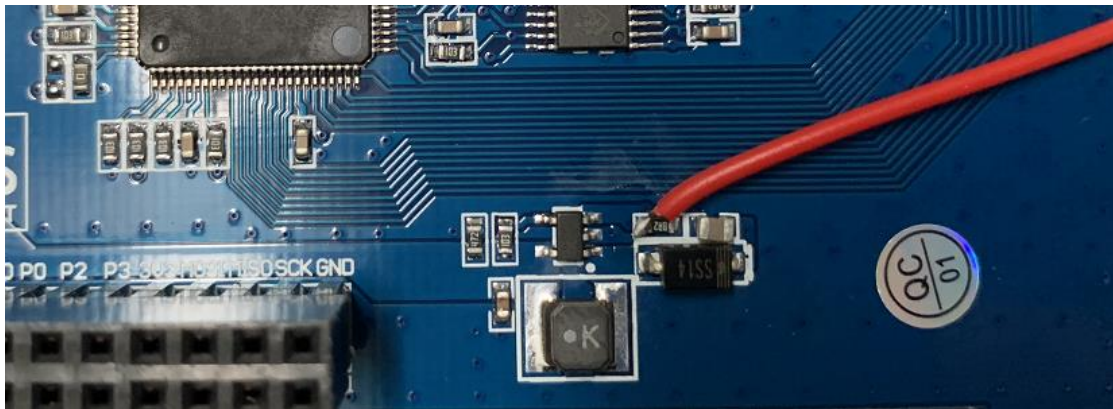
## Control Pin

The control pin is P1 of Raspberry Pi.



## 4inch HDMI LCD

Wire the pad to P1 of Raspberry Pi as below:



Execute commands on Terminal of Raspbian to adjust the backlight

```
gpio -g pwm 18 1024

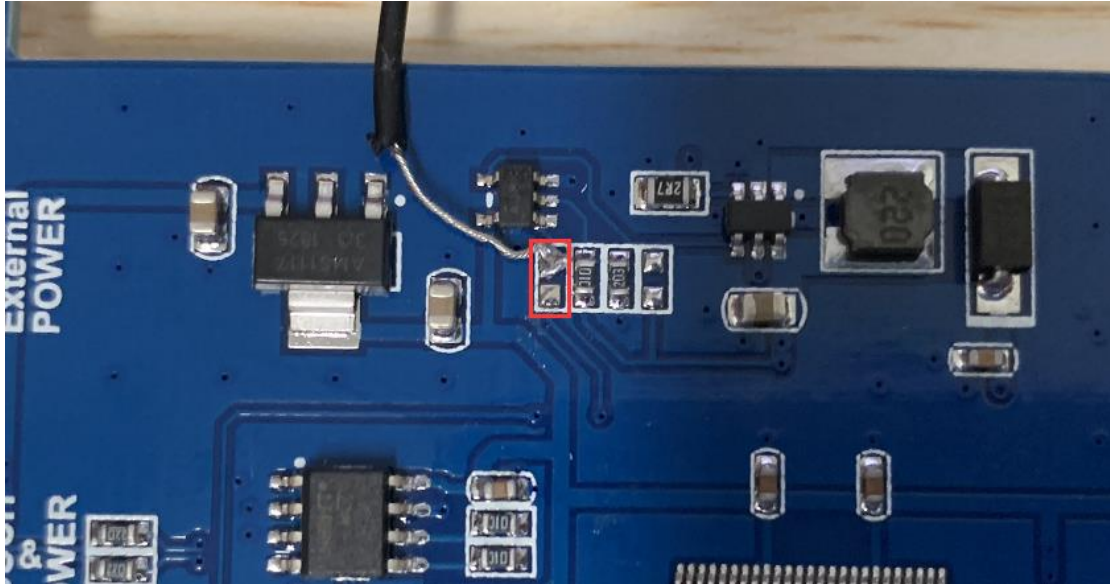
gpio -g mode 18 pwm #set the pin as PWM

gpio pwmc 1000

gpio -g pwm 18 X #change the brightness, X ranges 0~1024
```

## 5inch HDMI LCD (B)

Remove the 0Ω resistor and wire the pad to P1 of raspberry Pi as below:



Execute commands on Terminal of Raspbian to adjust the backlight

```
gpio -g pwm 18 1024  
  
gpio -g mode 18 pwm #set the pin as PWM  
  
gpio pwmc 1000  
  
gpio -g pwm 18 X #change the brightness, X ranges 0~1024
```

## 5inch HDMI LCD (G)/5inch HDMI LCD (H)

Remove the 22Ω resistor and wire the pad to P1 of raspberry Pi as below

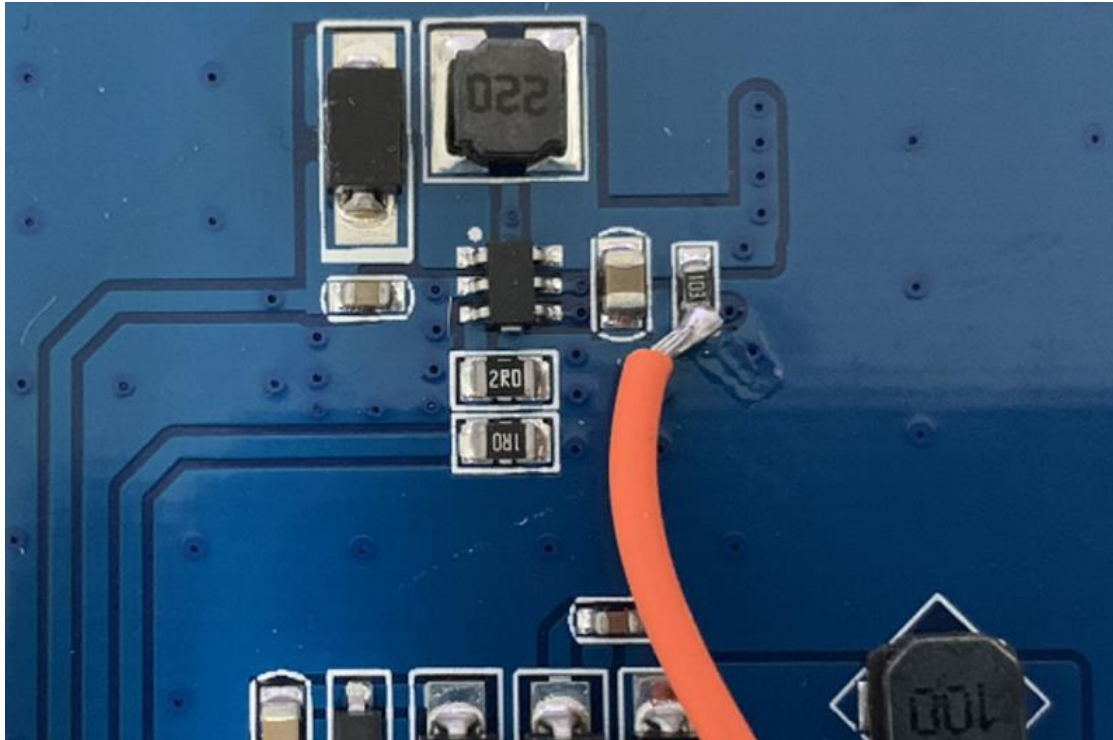


Execute commands on Terminal of Raspbian to adjust the backlight

```
gpio -g pwm 18 1024  
  
gpio -g mode 18 pwm #set the pin as PWM  
  
gpio pwmc 1000  
  
gpio -g pwm 18 X #change the brightness, X ranges 0~1024
```

## 7inch HDMI LCD (B)

Connect the pad to P1 of Raspberry Pi as below:

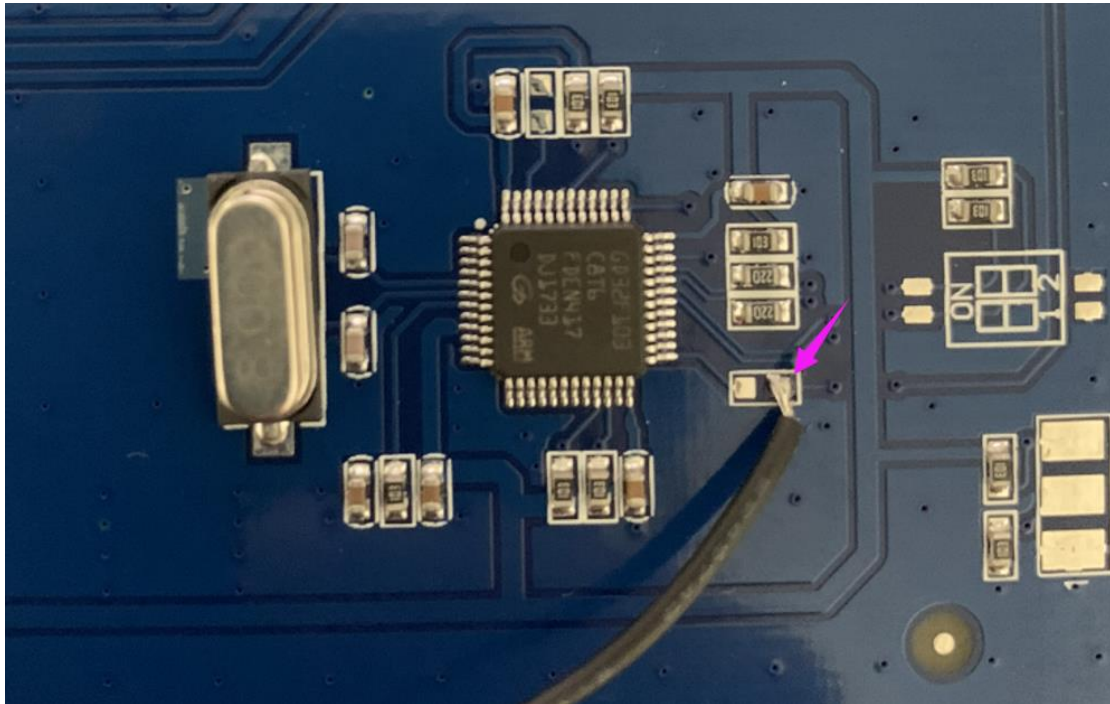


Execute commands on Terminal of Raspbian to adjust the backlight

```
gpio -g pwm 18 1024  
  
gpio -g mode 18 pwm #set the pin as PWM  
  
gpio pwmc 1000  
  
gpio -g pwm 18 X #change the brightness, X ranges 0~1024
```

## 7inch HDMI LCD (C) Rev2.2 version

Connect the pad to P1 of Raspberry Pi as below.

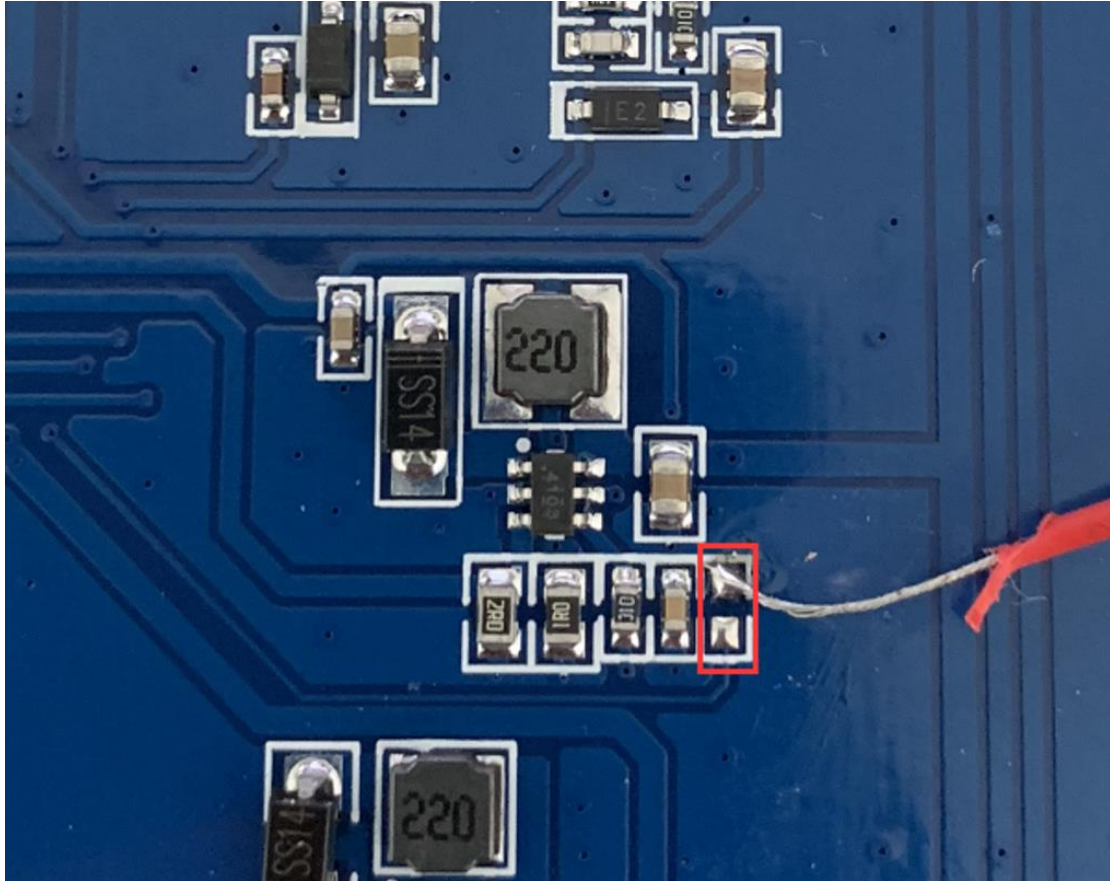


Execute commands on Terminal of Raspbian to adjust the backlight

```
gpio -g pwm 18 1024  
  
gpio -g mode 18 pwm #set the pin as PWM  
  
gpio pwmc 1000  
  
gpio -g pwm 18 X #change the brightness, X ranges 400~500
```

## 7inch HDMI LCD (H)

Remove the 22Ω resistor, wire the pad to P1 of Raspberry Pi as below:



Execute commands on Terminal of Raspbian to adjust the backlight

```
gpio -g pwm 18 1024
```

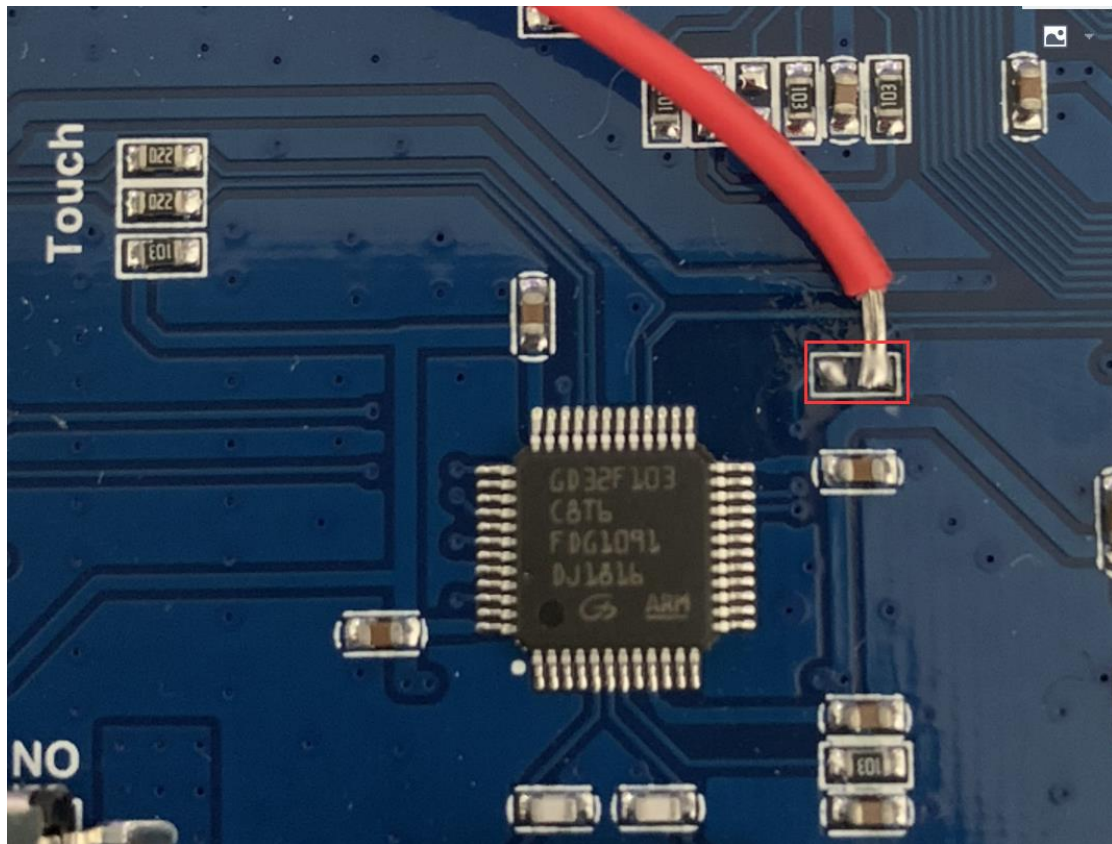
```
gpio -g mode 18 pwm #set the pin as PWM
```

```
gpio pwmc 1000
```

```
gpio -g pwm 18 X #change the brightness, X ranges 0~1024
```

## 10.1inch HDMI LCD (B)

Remove the 0Ω resistor, and wire the pad to P1 of Raspberry Pi



Execute commands on Terminal of Raspbian to adjust the backlight

```
gpio -g pwm 18 1024
```

```
gpio -g mode 18 pwm #set the pin as PWM
```

```
gpio pwmc 1000
```

```
gpio -g pwm 18 X #change the brightness, X ranges 0~1024
```