Chapter2 Control buzzer

1.About buzzer:

The difference between active buzzer and passive buzzer:

1.1 Passive buzzer

The passive internal does not have an oscillator source, and the DC signal cannot make it sound. It must be driven with a turbulent current, 2K-5KHZ square wave PWM. That is 5k vibrations per second, each full cycle takes 200us, the high point is part of the time, and the low level is part of the time. The sound frequency is controllable.

1.2 Active buzzer

The active buzzer has an internal source of oscillation, so it will be sounded as soon as it is powered. Program control is convenient. A high-low level of the MCU can make it sound.

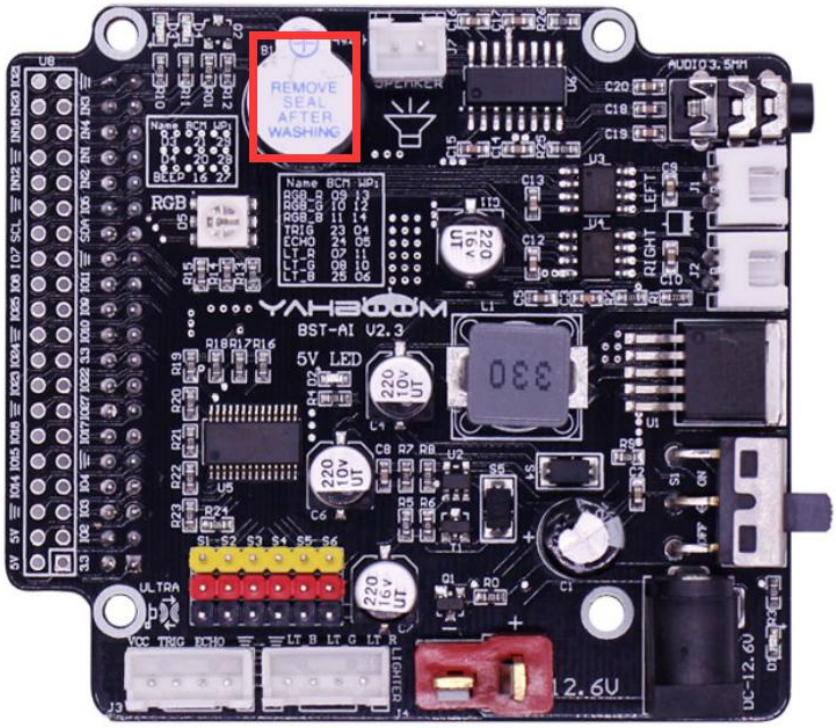
In this course, we adopt Active buzzer:

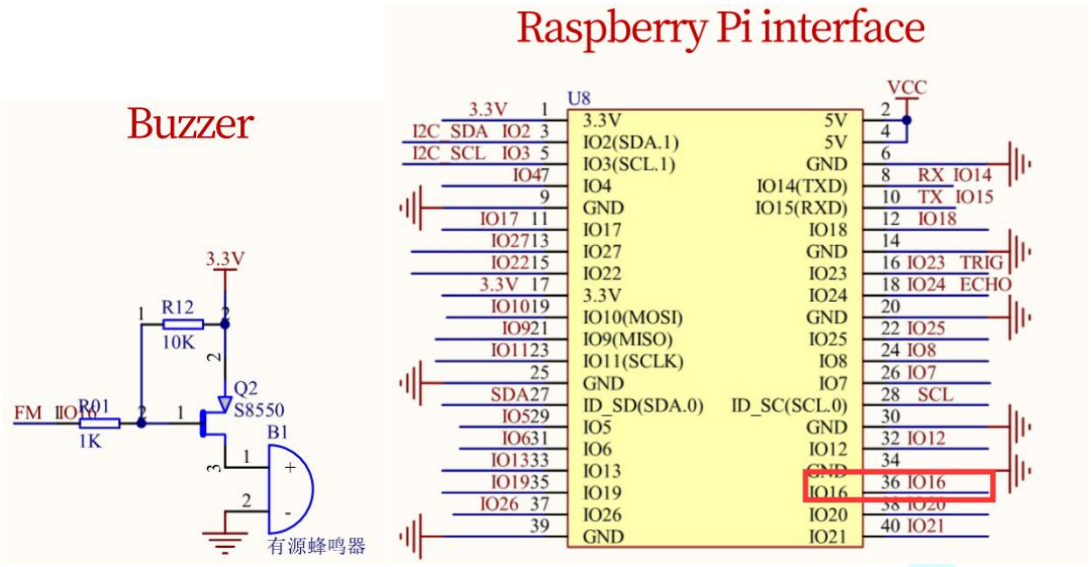
Voltage：3.5—5.5V

Frequency：<25mA

2.Schematic diagram

The RGB module needs to be connected to the location shown on the expansion board as shown in the figure 1-1 below.





According to the schematic diagram, the pins connected to the RGB module are pin16 of the Raspberry Pi physical pins, that is, corresponding to the GPIO16.

3.About code

The code as shown in the figure below:

```
#!/usr/bin/env python2
# -*- coding: utf-8 -*-
"""
Created on Thu Jan 10 10:01:05 2019

@author: pi
"""

import RPi.GPIO as GPIO
import time

buzzer=16

GPIO.setmode(GPIO.BCM)

GPIO.setup(buzzer,GPIO.OUT)


while True:
    GPIO.output(buzzer,True)
    time.sleep(0.2)
    GPIO.output(buzzer,False)
    time.sleep(0.2)
```