15 OLED_IIC display module

1 System configuration process:

sudo apt-get update sudo apt-get install build-essential python-dev python-pip sudo pip install RPi.GPIO sudo apt-get install python-imaging python-smbus sudo apt-get install git

git clone https://github.com/adafruit/Adafruit_Python_SSD1306.git cd Adafruit_Python_SSD1306

sudo python setup.py install

2 Project process:

3 Project source code

```
import time

import Adafruit_GPIO.SPI as SPI
import Adafruit_SSD1306

import Image
import ImageDraw
import ImageFont


# Raspberry Pi pin configuration:
RST = 24
# Note the following are only used with SPI:
DC = 23
SPI_PORT = 0
SPI_DEVICE = 0

# Beaglebone Black pin configuration:
# RST = 'P9_12'
# Note the following are only used with SPI:
# DC = 'P9_15'
# SPI_PORT = 1
# SPI_DEVICE = 0

# 128x32 display with hardware I2C:
disp = Adafruit_SSD1306.SSD1306_128_32(rst=RST)
                                              46,1              20%
```
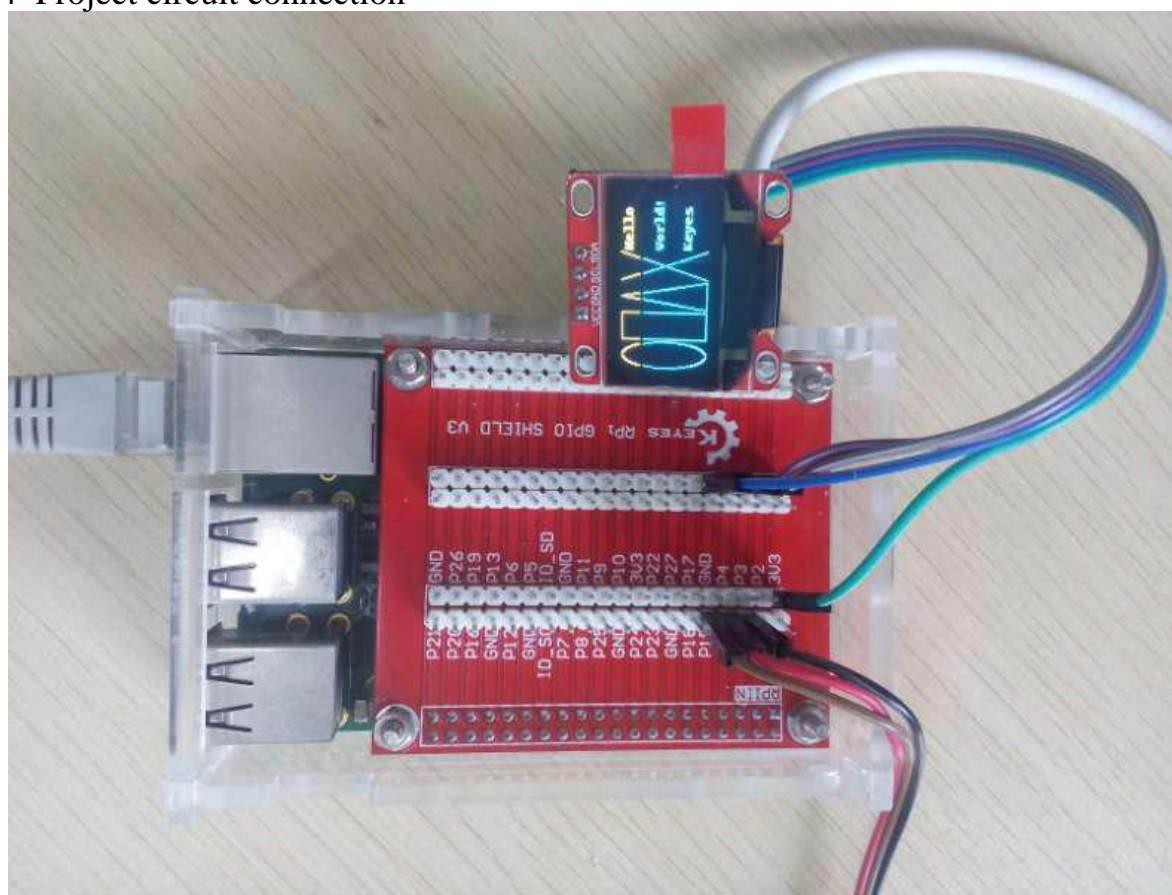
4 Project circuit connection

```
pi@raspberrypi ~/keyes_树莓派高级版套件资料/OLED_IIC $ gpio readall
 +-----+-----+---------+------+---+--B Plus--+---+------+---------+-----+-----+
 | 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 | ALT0 | TxD     | 15  | 14  |
 |     |     |      0v |      |   |  9 || 10 | 1 | ALT0 | RxD     | 16  | 15  |
 |  17 |   0 |  GPIO. 0 |  IN | 0 | 11 || 12 | 0 | IN   | GPIO. 1 | 1   | 18  |
 |  27 |   2 |  GPIO. 2 |  IN | 0 | 13 || 14 |   |      | 0v      |     |     |
 |  22 |   3 |  GPIO. 3 |  IN | 0 | 15 || 16 | 0 | IN   | GPIO. 4 | 4   | 23  |
 |     |     |    3.3v |      |   | 17 || 18 | 1 | OUT  | GPIO. 5 | 5   | 24  |
 |  10 |  12 |    MOSI | ALT0 | 0 | 19 || 20 |   |      | 0v      |     |     |
 |   9 |  13 |    MISO | ALT0 | 0 | 21 || 22 | 0 | IN   | GPIO. 6 | 6   | 25  |
 |  11 |  14 |    SCLK | ALT0 | 0 | 23 || 24 | 1 | ALT0 | CE0     | 10  | 8   |
 |     |     |      0v |      |   | 25 || 26 | 1 | ALT0 | CE1     | 11  | 7   |
 |   0 |  30 |   SDA.0 |  IN  | 1 | 27 || 28 | 1 | IN   | SCL.0   | 31  | 1   |
 |   5 |  21 | GPIO.21 |  IN  | 1 | 29 || 30 |   |      | 0v      |     |     |
 |   6 |  22 | GPIO.22 |  IN  | 1 | 31 || 32 | 0 | IN   | GPIO.26 | 26  | 12  |
 |  13 |  23 | GPIO.23 |  IN  | 0 | 33 || 34 |   |      | 0v      |     |     |
 |  19 |  24 | GPIO.24 |  IN  | 0 | 35 || 36 | 0 | IN   | GPIO.27 | 27  | 16  |
 |  26 |  25 | GPIO.25 |  IN  | 0 | 37 || 38 | 0 | IN   | GPIO.28 | 28  | 20  |
 |     |     |      0v |      |   | 39 || 40 | 0 | IN   | GPIO.29 | 29  | 21  |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode |  Name   | wPi | BCM |
 +-----+-----+---------+------+---+--B Plus--+---+------+---------+-----+-----+
pi@raspberrypi ~/keyes_树莓派高级版套件资料/OLED_IIC $
```

Connection diagram

```
VCC-------3.3V
GND-------GND
SCL-------SCL
SDA-------SDA
~
~
~
```