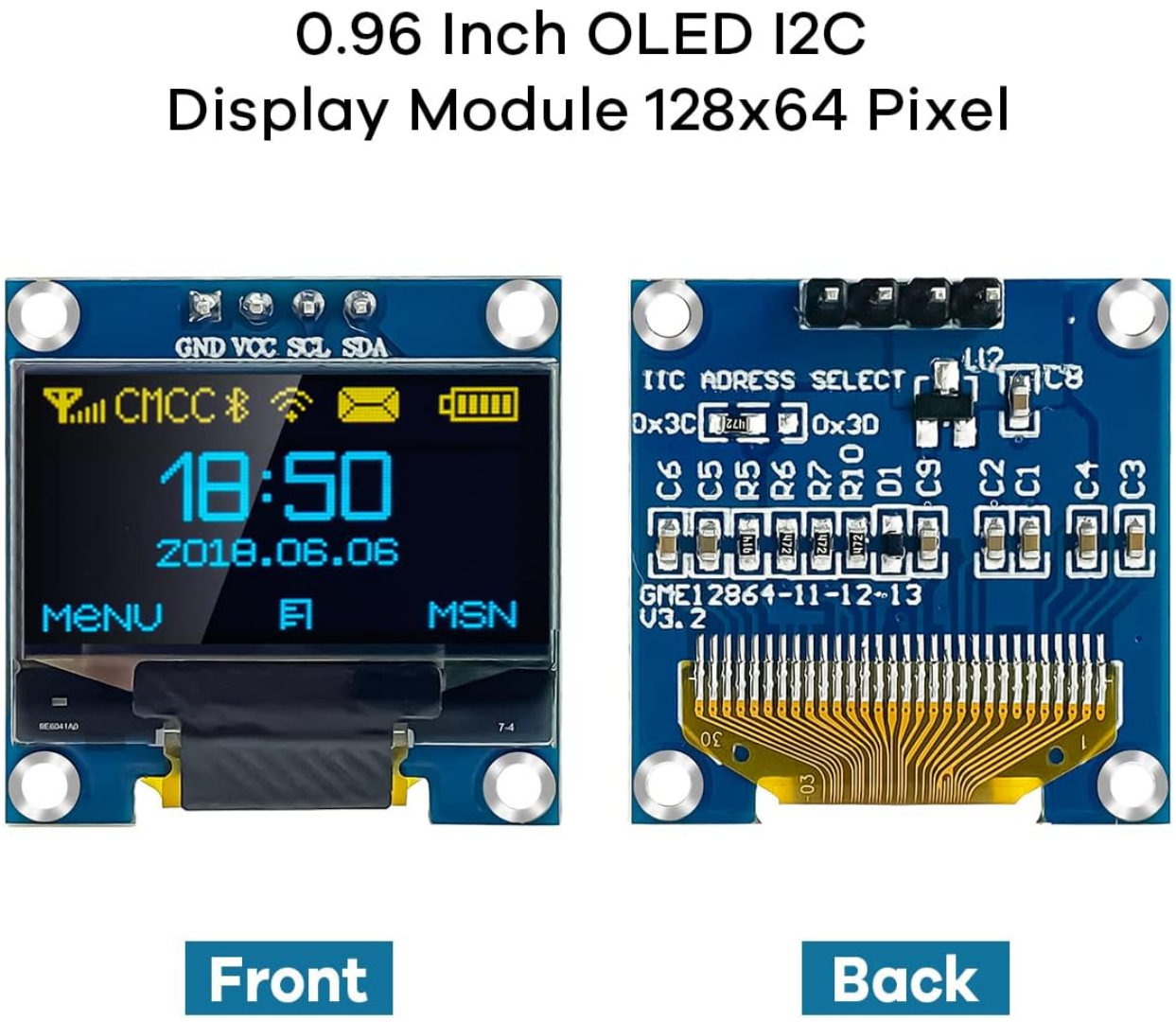
0.96inch OLED Module

Product picture



Product description

- High resolution: 128x64 (have the same resolution as 12864, high PPI)
- Large viewing angle: greater than 160° (a screen with the largest viewing angle in the monitor)
- Ultra-low power consumption: it's 0.06w in normal condition(far less than TFT display)
- Wide voltage supply (3V~5V), 3.3V and 5V level logic compatible, no level shifter IC
- IIC interface and only requires 2 IOs to light up easily
- The range of working temperature is industrial (-20°C~70°C)
- Military-grade process standards, long-term work steadily
- Provide rich multi-platform routines and the technology support of underlying driver
- Have three color display schemes of yellow and blue,white,blue to choose from

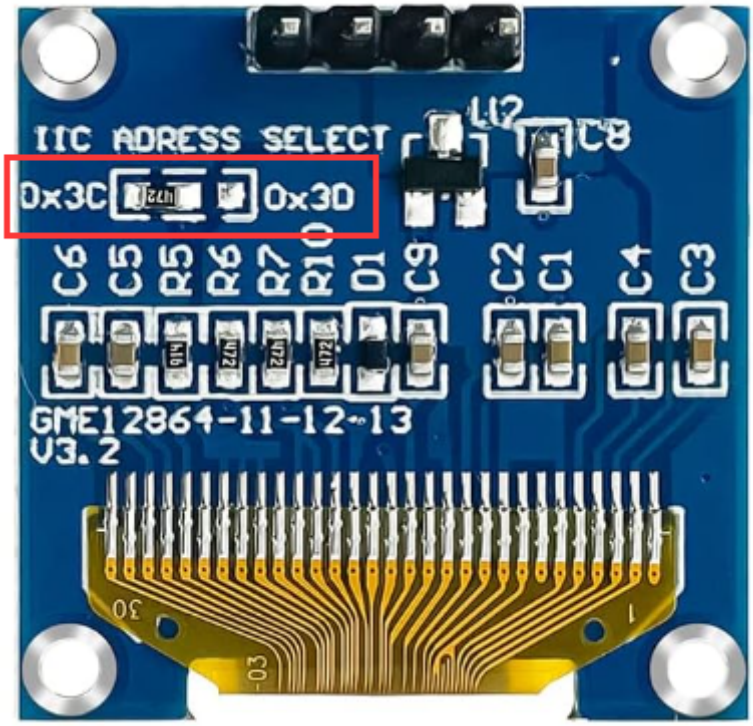
Product parameters

name	color category		
display color	white	blue	Blue and yellow
size	0.96(inch)		
type	OLED		
OLED driver chip	SSD1306		
resolution	128*64 (Pixel)		
Module interface	IIC，4PIN		
Effective display area	21.744x10.864(mm)		
Module size	27.3x27.8(mm)		
Field of View	>160°		
Working temperature	-20℃~60℃		
storage temperature	-30℃~70℃		
Working voltage	3.3V / 5V		
power dissipation	TBD		
product weight(Package containing)	8 (g)		

Interface definition

PIN	label	Pin description
1	GND	OLED GND
2	VCC	OLED VCC input(3.3V~5V)
3	SCL	OLED clock signal of IIC bus
4	SDA	OLED data signal of IIC bus

Hardware description



IIC hardware adjustment instructions of device address to slave device：

As the picture shows， in the red rectangle,if the resistor is connected to 0x3C,it indicates that the IIC slave address is 0x3C.

if the resistor is connected to 0x3D,it indicates that the IIC slave address is 0x3D.

Demo

You can control OLED screens with different I2C addresses using the **U8g2 library**. You can initialize the I2C address of the OLED screen using the setI2CAddress() function. You can refer to the following demo code.

```
#include <Wire.h>
#include <U8g2lib.h>

#define SCREEN_WIDTH 128
#define SCREEN_HEIGHT 64

U8G2_SSD1306_128X64_NONAME_1_HW_I2C u8g2_1(U8G2_R0, /* reset=*/ U8X8_PIN_NONE);
// First screen object
U8G2_SSD1306_128X64_NONAME_1_HW_I2C u8g2_2(U8G2_R0, /* reset=*/ U8X8_PIN_NONE);
// Second screen object

void setup() {
  Wire.begin();

  // Initialize the first OLED screen, address 0x3D
  u8g2_1.setI2CAddress(0x3D << 1);
  u8g2_1.begin();
```

```
  // Initialize the second OLED screen, address 0x3C
  u8g2_2.setI2CAddress(0x3C << 1);
  u8g2_2.begin();
}

void loop() {
  // Display "OLED1" on screen 1
  u8g2_1.firstPage();
  do {
    u8g2_1.setFont(u8g2_font_ncenB10_tr);
    u8g2_1.drawStr(0, 15, "OLED1");
  } while (u8g2_1.nextPage());

  // Display "OLED2" on screen 2
  u8g2_2.firstPage();
  do {
    u8g2_2.setFont(u8g2_font_ncenB10_tr);
    u8g2_2.drawStr(0, 15, "OLED2");
  } while (u8g2_2.nextPage());

  delay(2000);
  // Delay for 2 seconds
}
```