1.5" IIC OLED MODULE

Overview

1.5" IIC OLED MODULE is a commonly used OLED module for any platform which has the IIC interface. There are 128*128 dots included in the 1.5 inch sized OLED screen, and each dots can be set 256 levels different contrast. 5V~3.3V power adaptor is also included on the module.

Features

- **On board level conversion chip for 5V/3.3V MCU**
- **256 level contrast can be set**
- **commonly used IIC interface**

Specifications

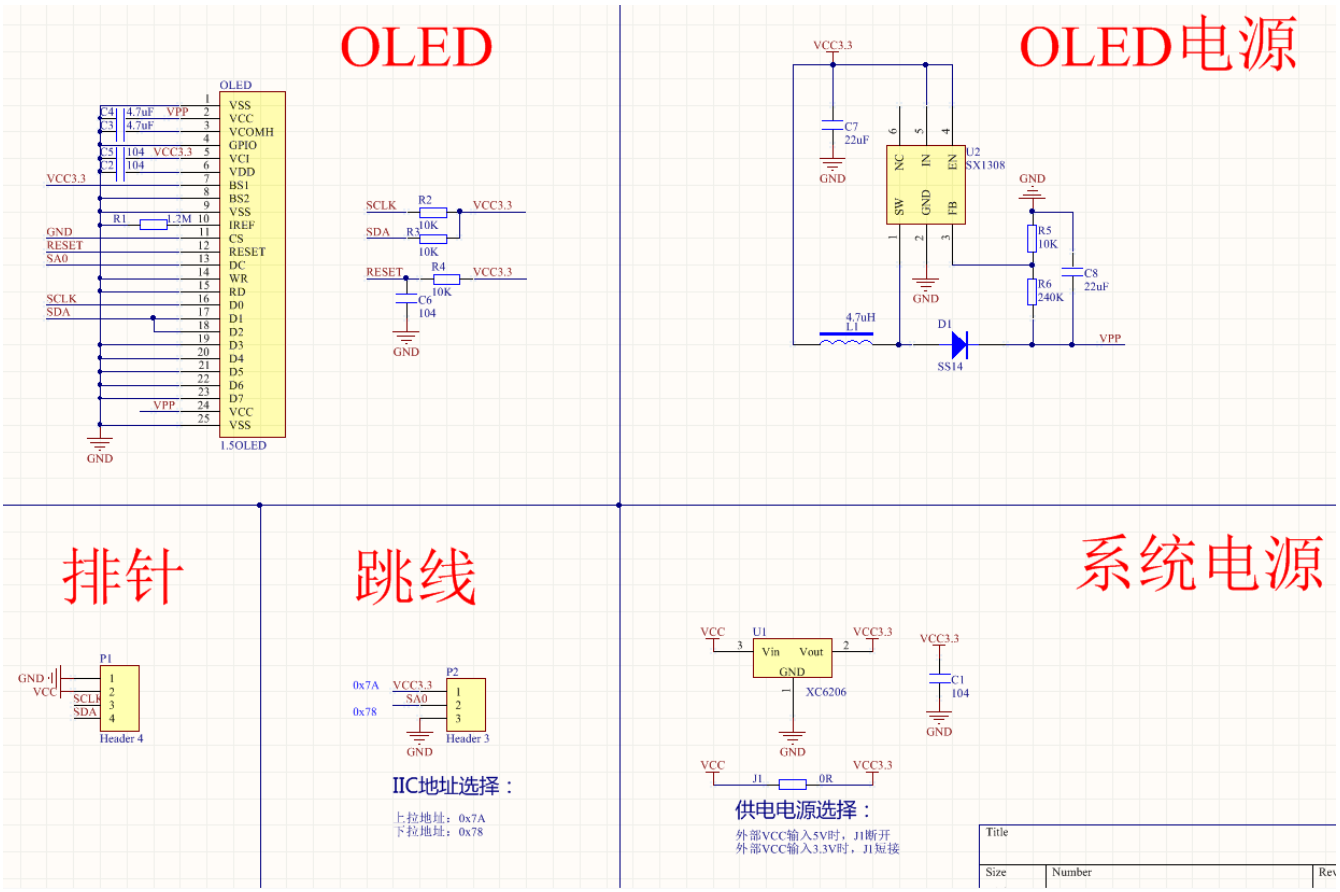
Item	Description
Display Type	1.5 inch OLED
Display Resolution	128*128
Control IC	Solomon SSD1327
Interface	2 wire IIC interface
PCB Module size	34.30mmX48.5mmX1.6mm
Module weight	15g
Option	256 level contrast can be set

Electrical Characteristics

Specification		Min	Type	Max	Unit
Power Voltage(VDD/VCC)		3.3	5	5.5	VDC
IO Pins Voltage	MCU Voltage = 3.3V	3	3.3	3.6	V
	MCU Voltage = 5V	3	3.3	3.6	
Current Consumption	Total black	0	0	1	uA
	Total white	-	12	-	uA

Hardware

- **Schematic diagram**



Wiring & Test

STM32 test platform

Instructions for Hardware IO Connection		
LCD Pin	STM32 Pin	Note
SCL	PB6	IIC clock pin
SDA	PB5	IIC data pin
GND	GND	connect to GND of power
VCC	5V or 3.3V	connect to power

1. **Connect hardware as IO connection show**
2. **Burn the firmware into STM32 and run**
3. **Demo project shows the font, Chinese, image and contrast function**

Arduino

Instructions for Hardware IO Connection		
LCD Pin	Arduino UNO Pin	Note
SCL	A5	IIC clock pin
SDA	A4	IIC data pin
GND	GND	connect to GND of power
VCC	5V or 3.3V	connect to power

1. **Connect hardware as IO connection show**
2. **Burn the firmware into UNO and run**
3. **Demo project shows the font, Chinese, image and contrast function**

Raspberry Pi (base on BCM2835)

Instructions for Hardware IO Connection		
LCD Pin	Raspberry Pi Pin	Note
SCL	SCL1	IIC clock pin
SDA	SDA1	IIC data pin
GND	GND	connect to GND of power
VCC	5V or 3.3V	connect to power

1. **Enable IIC function on raspberry pi**
   sudo raspi-config
   select Interface Option -> I2C ->yes
2. **Install BCM2835 library**
   Download the newest library from: http://www.airspayce.com/mikem/bcm2835/
   Unzip library and install:
   tar -zxvf bcm2835-1.xx.tar.gz
   cd bcm2835-1.xx
   /configure
   make
   sudo make check
   sudo make install
3. **Build the project**
   Copy the project into raspberry pi
   Enter the folder BCM2835 and build the project
   sudo make
4. **RUN the project**
   sudo ./15OLED