0.95inch RGB OLED

User Manual

1. Key Parameters

Driver Chip	SSD1331
Interface	SPI
Resolution	96x64
Display Size	0.95inch
Dimension	31.7mm*37mm
Colors	RGB, 65K colorful
Visible Angle	>160°
Operating Temp. (℃)	-20~70
Storage Temp. (℃)	-30~80

2. Operation Description

We will illustrate the usage of the module with an example by connecting Waveshare Open103R development board (STM32F103R MCU on board).

2.1. Hardware connections

Connect module to the SPI2 interface of Open103R development board, power up. OLED displays information shows as below.

Figure 1: OLED information display

2.2. Software configuration

Open the project file .\IDE\ OLED.uvproj in Keil. After compiling successfully, download the project to Open103R development board.

3. Pin descriptions

Table 1: Pin descriptions

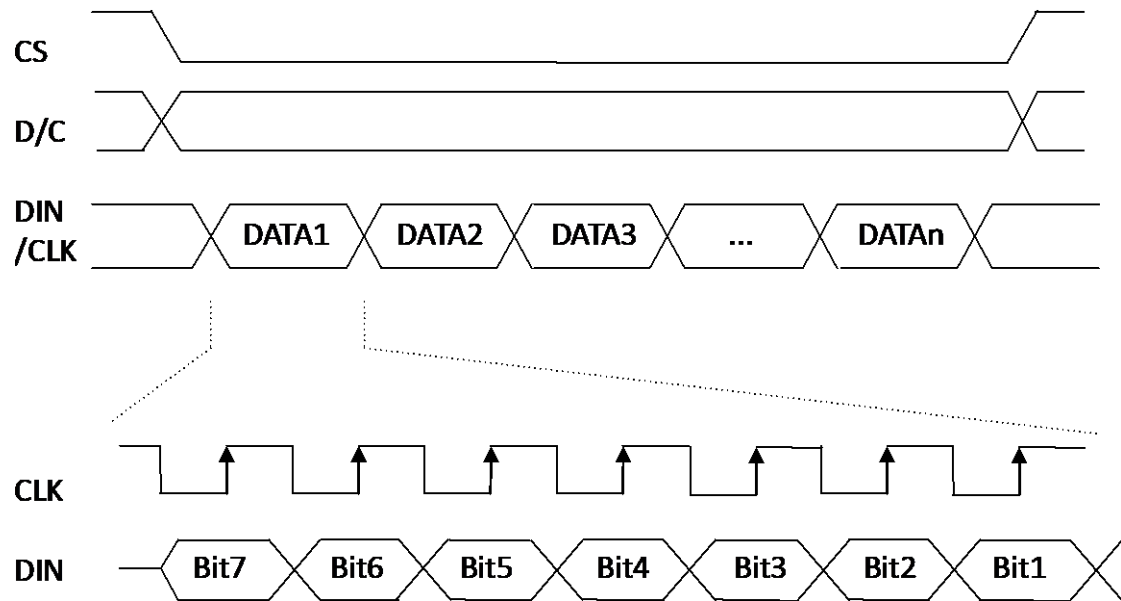| Pin No.	Symbol	Descriptions
1	VCC	Positive power supply (3.3~5V input voltage)
2	GND	Ground
3	NC	NC
4	DIN	Data
5	CLK	Clock
6	CS	Chip
7	D/C	This is Data/Command control pin. When it is pulled HIGH (i.e. connect to VDD), the data at D[7:0] is treated as data. When it is pulled LOW, the data at D[7:0] will be transferred to the command register.
8	RES	Reset signal input pin (active LOW)

SSD1331 RGB OLED SPI interface.

The serial interface consists of serial clock CLK, serial data DIN, DC and CS. DIN is shifted into an 8-bit shift register on every rising edge of CLK in the order of Bit7, Bit6… Bit0. DC is sampled on every eighth clock and the data byte in the shift register is written to the Display Data RAM or command register in the same clock.

Under serial mode, only write operations are allowed.

Table 2: Control pins of Serial interface

Function	CS	DC
Write command	L	L
Write data	L	H

Please refer to SSD1331-Revision 1.2.pdf for more detail about SSD1331.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for OLED Displays & Accessories *category:*

Click to view products by Waveshare *manufacturer:*

Other Similar products are found below :

OLED-100H008A-RPP5N00000 OLED-100H016B-RPP5N00000 OLED-200H016A-LPP5N00000 OLED-100H008A-GPP5N00000 OLED-100H008A-LPP5N00000 OLED-100H032A-BPP5N00000 DEP 128160A-W OLED-100H016F-RPP5N00000 OLED-100H016A-LPP5N00000 OLED-128Y032A-WPP3N00000 OLED-100H016A-WPP5N00000 OLED-100H016H-GPP5N00000 OLED-016O002B-BPP5N00000 OLED-096Y064A-LPP3N00000 OLED-096O064A-BPP3N00000 OLED-128Y064C-LPP3N00000 OLED-096Y064B-LPP3N00000 OLED-128Y032A-LPP3N00000 OLED-096Y064B-BPP3N00000 REH012864KYPP3N00F00 HDSP-U111-EG000 REC001601BWPP5N00100 REG010016FBPP5N00100 REG010016FGPP5N00100 REG010016FWPP5N00100 REG010032AWPP5N00100 REX064128AWPP3N0Y000 14747 REA160128AYPP3N00000 REN025664DGPP3L00000 REN025664DYPP3L00000 104020248 REX012864QGPP3N00000 10451 19750 19376 19299 16103 10507 10444 13992 14657 10514 9085 REG010008AGPP5N00000 REG010008AWPP5N00000 REG010016CRPP5N00000 REG010016DBPP5N00000 REG010016ERPP5N00000 REG010032BYPP5N00000