5-inch DSI LCD Module User Manual

Please read this manual carefully to ensure safe use of this product.

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1. Overview

1.1. Features

✧5.0-inch DSI touchscreen with 5-point capacitive touch control

✧IPS display panel with a native resolution of 1024 × 600

✧Tempered-glass touchscreen cover with a hardness rating of up to 6H

✧LCD driven via the DSI interface, with a refresh rate of up to 60 Hz

✧Supports software-controlled backlight brightness

✧Metal rear housing with a fully passive cooling design

1.2. Package Contents



1 × Flexible Flat Cable (20 cm, for Raspberry Pi 5)



1 × Flexible Flat Cable (16 cm, for Raspberry Pi 4)



4 × screw

2. Specifications

2.1. LCD Parameters

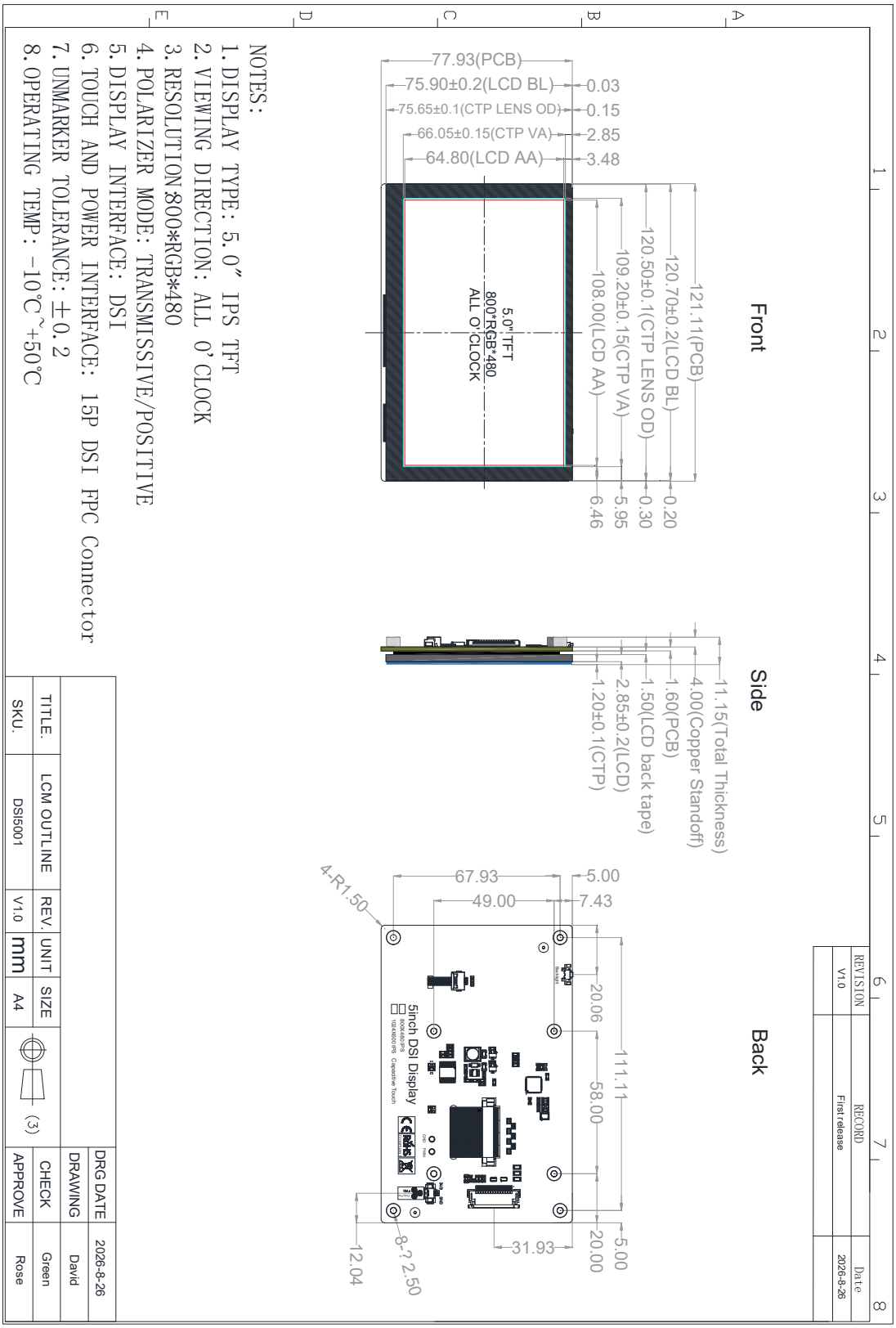
Item	Specifications	Unit
Screen Size	5.0	inch
Display Type	IPS	-
Resolution	1024*600	pixels
Active Display Area	108.00*64.80	mm
Viewing Angle	170	deg
Surface Brightness (Typical)	370	cd/m2
Backlight Type	LED	-
Operating Temperature	-10~50	℃
Storage Temperature	-30~70	℃
Module Dimensions	121.11*77.93*11.15	mm
Touchscreen Type	Capacitive Touchscreen	-
Surface Hardness	6H	-

2.2. Other Parameters

Item	Specifications	Unit
SKU	DSI5082	-
Total Power (Max.)		W
Weight (Including Packaging)		g

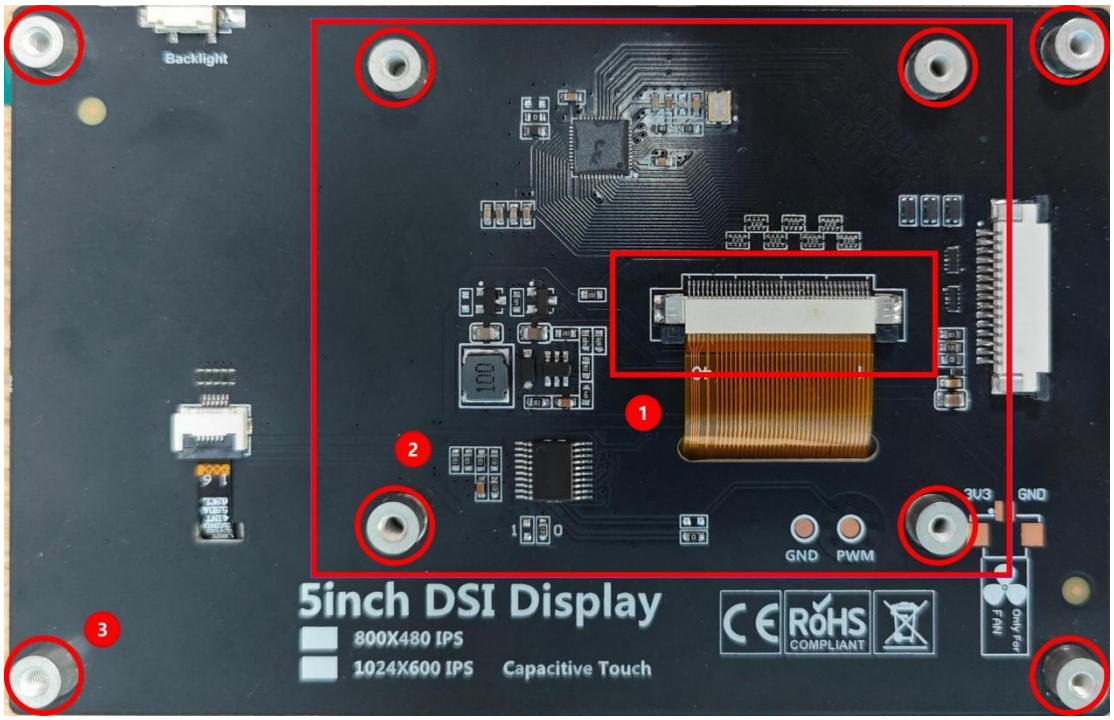
3. Dimension Drawing

3.1. Module Dimensions



4. Interface Description

4.1. Interface Description



Interface	Description
① DSI MIPI	For high-definition video input; connect to the Raspberry Pi using the 15-pin FPC cable.
② ×4 Metal Standoffs	Secure the Raspberry Pi with M2.5 screws.
③ ×4 Metal Standoffs	For external mounting.

5. Connection and Setup

5.1. Connecting to the Raspberry Pi

Raspberry Pi 4B:

As shown, first position the Raspberry Pi and tighten the screws. Then connect the MIPI FPC cable and finally plug in the power cable to power the Raspberry Pi.



Tighten the screws to secure the board.



Connect the MIPI FPC cable.



Connect the Raspberry Pi power cable.

Raspberry Pi 5:

As shown, first position the Raspberry Pi and tighten the screws. Then connect the MIPI FPC cable and finally plug in the power cable to power the Raspberry Pi.



Tighten the screws to secure the board.



Connect the MIPI FPC cable.



Connect the Raspberry Pi power cable.

5.2. Using the Display with a Raspberry Pi

Step 1: Download and Install Raspberry Pi Imager

Open a browser and visit the official website:

https://www.raspberrypi.com/software

Select and download the version compatible with your computer's operating system.

After downloading, install and launch Raspberry Pi Imager.

Step 2: Select the Device

On the software home page, click [Choose Device].

In the device list that appears, scroll to the bottom and select No filtering (show all available images).

Note: When No filtering is selected, the software will not filter OS images by Raspberry Pi model. All available operating systems will be displayed, including options compatible with Raspberry Pi 4B, Pi 5, and other boards.

Click [Next].

Step 3: Select the Operating System

Click [Choose OS].

Select the first option: Raspberry Pi OS (64-bit with Desktop), the official recommended default 64-bit operating system.

Step 4: Select the Storage Device (SD Card)

Insert the SD card into your computer's card reader and click [Choose

Storage].

Select your SD card from the list. (⚠ Be sure to check the drive letter. Do not select your computer's hard drive, as all its data will be erased.)

Step 5: Customize OS Settings (Optional; You Can Skip This Step)

After clicking Next, a customization window will appear. You can set the hostname, username and password, Wi-Fi, time zone, and other options in advance. Beginners can simply click [Next] to use the default settings.

Step 6: Write the OS Image

A confirmation dialog will warn that all data on the SD card will be erased. Make sure the card contains no important files, then click [Yes]. The software will automatically download the image, write it to the SD card, and verify it. Do not remove the card reader or disconnect the network or power during this process. Writing and verification take several minutes, depending on the SD card's read/write speed and your network connection.

Step 7: Image Writing Complete

The [Write Successful] message indicates that writing and verification are complete.

Click Continue, safely eject the SD card, and insert it into the Raspberry Pi to boot the system.

Step 8: Download and Install the LCD Driver

Log in to the Raspberry Pi system and open the command line (default username: pi; password: raspberry).

Get the latest driver from GitHub (the Raspberry Pi must be connected to the Internet).

Enter the following commands to install the driver.

```
sudo rm -rf DSI-1024x600
git clone https://github.com/goodtft/DSI-1024x600
chmod-R 755 DSI-1024x600
cd DSI-1024x600/
sudo ./DSI-1024x600-show
```

This driver supports dual-lane DSI only.

1. Run either of the following commands to display the help information.

```
sudo ./DSI-  1024x600-  show-h
sudo ./DSI-  1024x600-  show--help
```

2. You can specify the I2C bus when using the DSI1 interface.

A. Use the dual-lane DSI interface with the I2C0 bus:

```
sudo ./DSI- 1024x600-show i2c0
```

B. Use the dual-lane DSI interface with the I2C1 bus:

```
sudo ./DSI- 1024x600-show i2c1
```

3. The DSI0 interface can also be used (this option is supported only by Raspberry Pi hardware with two DSI interfaces).

A. Use the dual-lane DSI interface, I2C1 bus, and DSI0 interface:

```
sudo ./DSI-1024x600-show i2c1 dsi0
```

B. Use the dual-lane DSI interface, I2C0 bus, and DSI0 interface:

```
sudo ./DSI-1024x600-show i2c0 dsi0
```