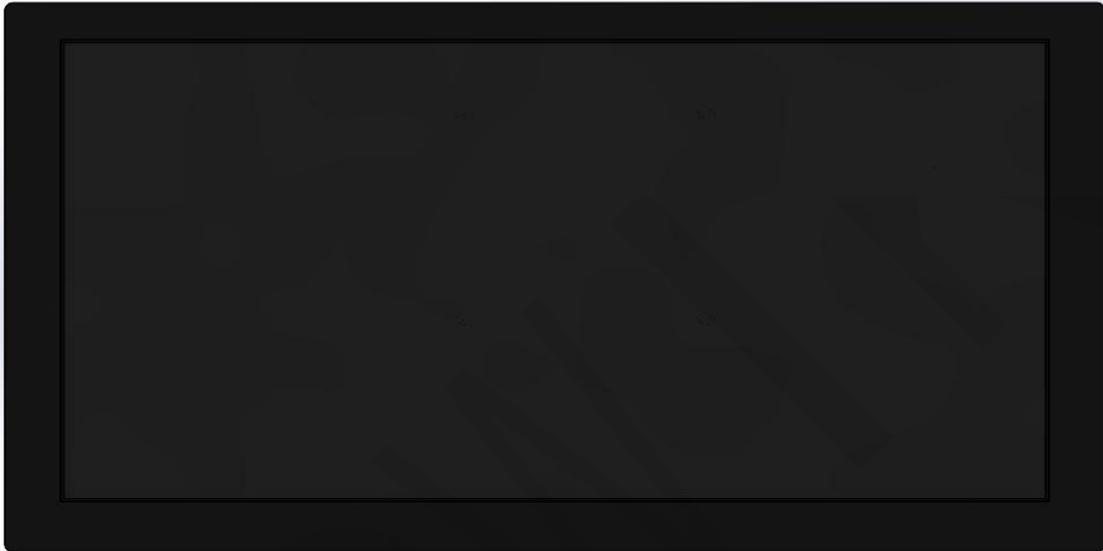


MPI1010

10.1 inch IPS Display Module Specification



ShenZhen QDtech electronic technology Co.,LTD.

REV	Record	Date
V1.0	First Release	2025-12-31

CONTENTS

1. GENERAL DESCRIPTION	3
1.1. Image.....	3
1.2. Accessory List.....	3
2. PRODUCT FEATURES	4
2.1. Feature Description.....	4
3. PRODUCT PARAMETERS	4
3.1. TFT Parameters.....	4
3.2. Touch screen parameters.....	5
3.3. Size Parameters.....	5
3.4. Electrical parameters.....	5
3.5. Basic Parameters.....	5
4. PRODUCT INTERFACE	6
4.1. Interface Function Description.....	6
4.2. Raspberry Pi Connection Instructions.....	6
5. PRODUCT OUTLINE DRAWING	8
5.1. MPPI1010 OUTLINE DRAWING.....	8
6. PRECAUTIONS	9
6.1. Safe Use of Products.....	9
6.2. Frequently Asked Questions FAQ.....	9

1. GENERAL DESCRIPTION

1.1. Image

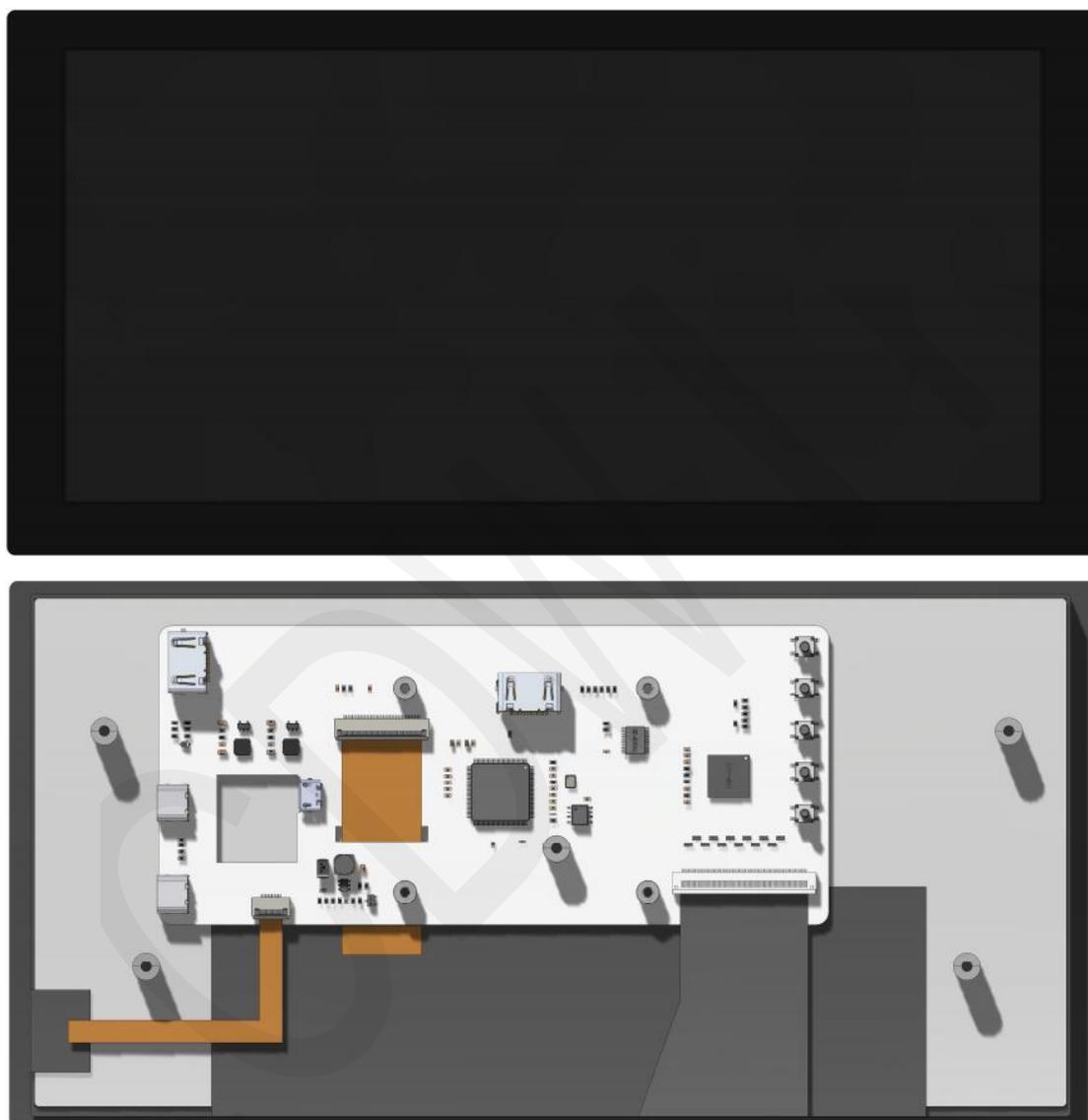


Figure 1.1 MPI1010 product diagram

1.2. Accessory List



2. PRODUCT FEATURES

2.1. Feature Description

- 10.1-inch IPS color screen, 1540x720 resolution, maximum support for 16.7 million colors (RGB888), rich display colors
- 2.8-inch IPS color screen with 240x320 resolution, supporting up to 262K colors (RGB666), offering rich display colors
- Wide viewing angle
- True color reproduction, Excellent picture quality, High-definition viewing range, Extremely detailed display
- Compatible with Raspberry Pi development boards
- Equipped with capacitive touch screen for convenient human-computer interaction
- Standard TYPE-C interface for convenient power supply

3. PRODUCT PARAMETERS

3.1. TFT Parameters

item	Parameters	Unit
Screen size	10.1	inch
Screen type	IPS TFT	-
Effective display area	232.848(W)x108.864(H)	mm
resolution	1540*720	-
length-width ratio	19:9	-

Number of colors	MAX: 16.7M (RGB888)	-
Display interface	HDMI	-
Pixel size	0.1512(H)x0.1512(W)	mm
Viewing angle	ALL 0'CLOCK	deg
Back brightness (typical value)	280	cd/m ²
Backlight lamp type	8 series 4 parallel	-
Operating temperature	-40~85	°C
Storage temperature	-40~95	°C

3.2. Touch Screen Parameters

item	Parameters	Unit
Effective area size	10.1	inch
Touch screen type	Capacitive touch screen	-
Driver IC	GT9110	-
Communication interface	I2C	-
Structural material	G+F	-
Operating temperature	-40~85	°C
temperature	-40~95	°C

3.3. Size Parameters

item	Parameters	Unit
LCD screen size	241.9±0.2(W)x120.4±0.2(H)x1.228± 0.12(D)(Without the wiring and adhesive tape)	mm
Module size	260.14(W)x130.13(H)x16.93(D)	mm

3.4. Electrical Parameters

item	Parameters	Unit
Working voltage	5.0	V
Backlight current	85	mA
Total current	690	mA
Consumption power	3.45	W

3.5. Basic Parameters

item	Parameters	Unit
SKU	MPI1010	-
Power interface	TYPE-C	-
Weight (including packaging)		g

4. PRODUCT INTERFACE

4.1. Interface Function Description

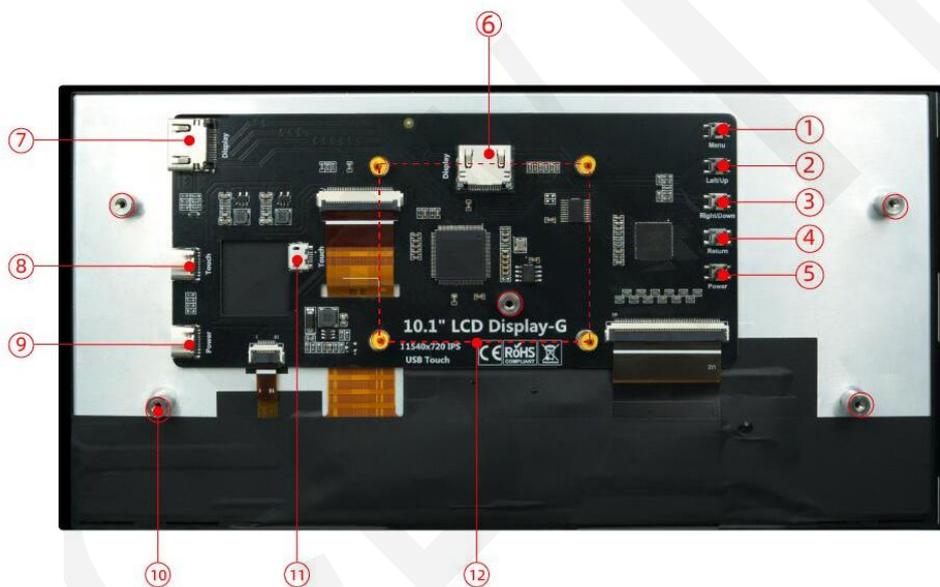


Figure 4.1 MPI1010 product interface diagram

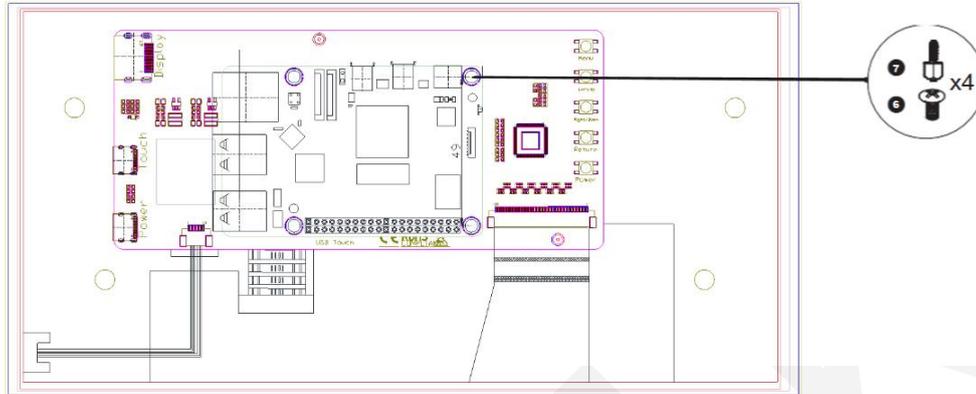
Interface name	Function Description
①Menu	Display OSD settings menu / Select key

②Left/UP	Move selection when setting menu
③Right/Down	Direction key -> (Backlight quick adjustment key)
④Return	When setting the display menu, go back to the previous level.
⑤Power	Turn on or off the LCD display to reduce power consumption
⑥HDMI	For HDMI high-definition video input, use a adapter to connect to the Raspberry Pi
⑦HDMI	For HDMI high-definition video input, connect the main device using an HDMI cable.
⑧Type C (Touch)	For touch and power supply (5V)
⑨Type C (Power)	Power supply (5V)
⑩Hole × 4	Used for fixing acrylic sheets
⑪Micro USB (Touch)	Connect the Raspberry Pi using a adapter for touch functionality.
⑫ Hole × 4	Used for fixing the Raspberry Pi

4.2.Raspberry Pi Connection Instructions

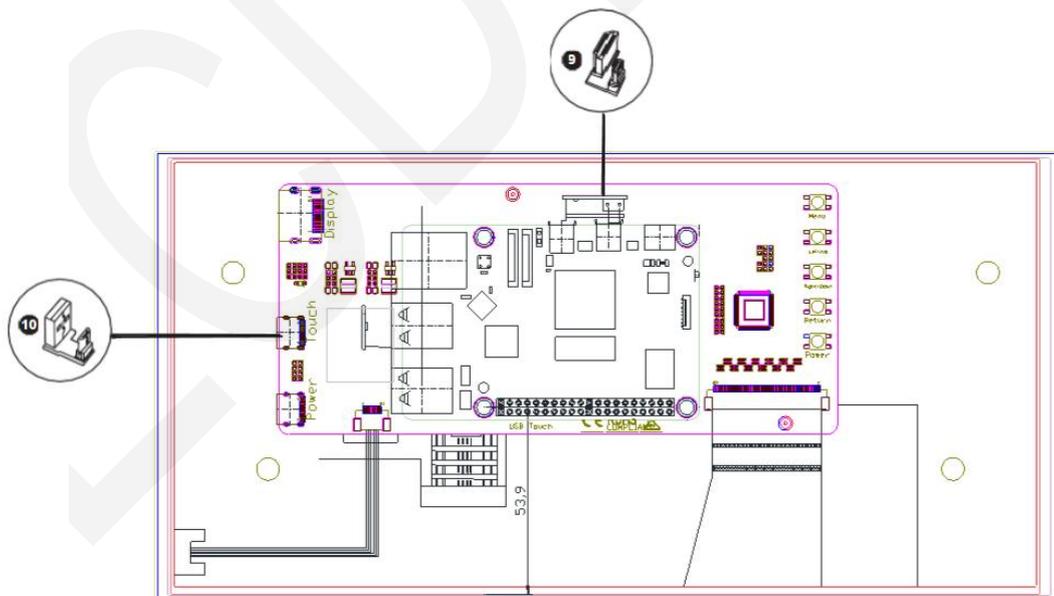
Step 1 、

Use Copper Pillars and RPI Screws Pack to secure the Raspberry Pi to the back of the display screen.

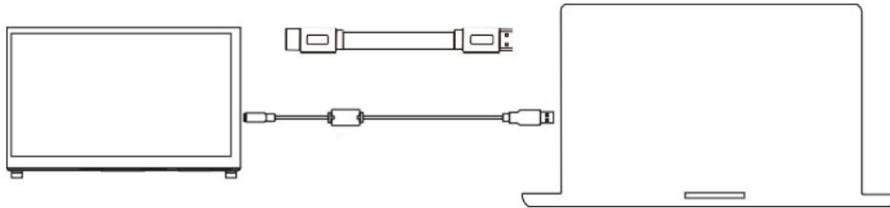


Step 2 、

Use Micro-HD Adapter and USB-Micro Adapter to connect the Raspberry Pi to the screen.
(if you are using Raspberry Pi 5, use USB-Micro Adapter and Micro-HD Adapter for connect.)



Connect To Computer



Step 1: Connect the HD cable.

Step 2: Connect MicroUSB cable for display power supply and touch communication.

Step 3: Set the HD output resolution of the computer (up to 1920*1080 resolution), and set this monitor as the main monitor.

5. PRODUCT OUTLINE DRAWING

5.1. MPI1010 OUTLINE DRAWING

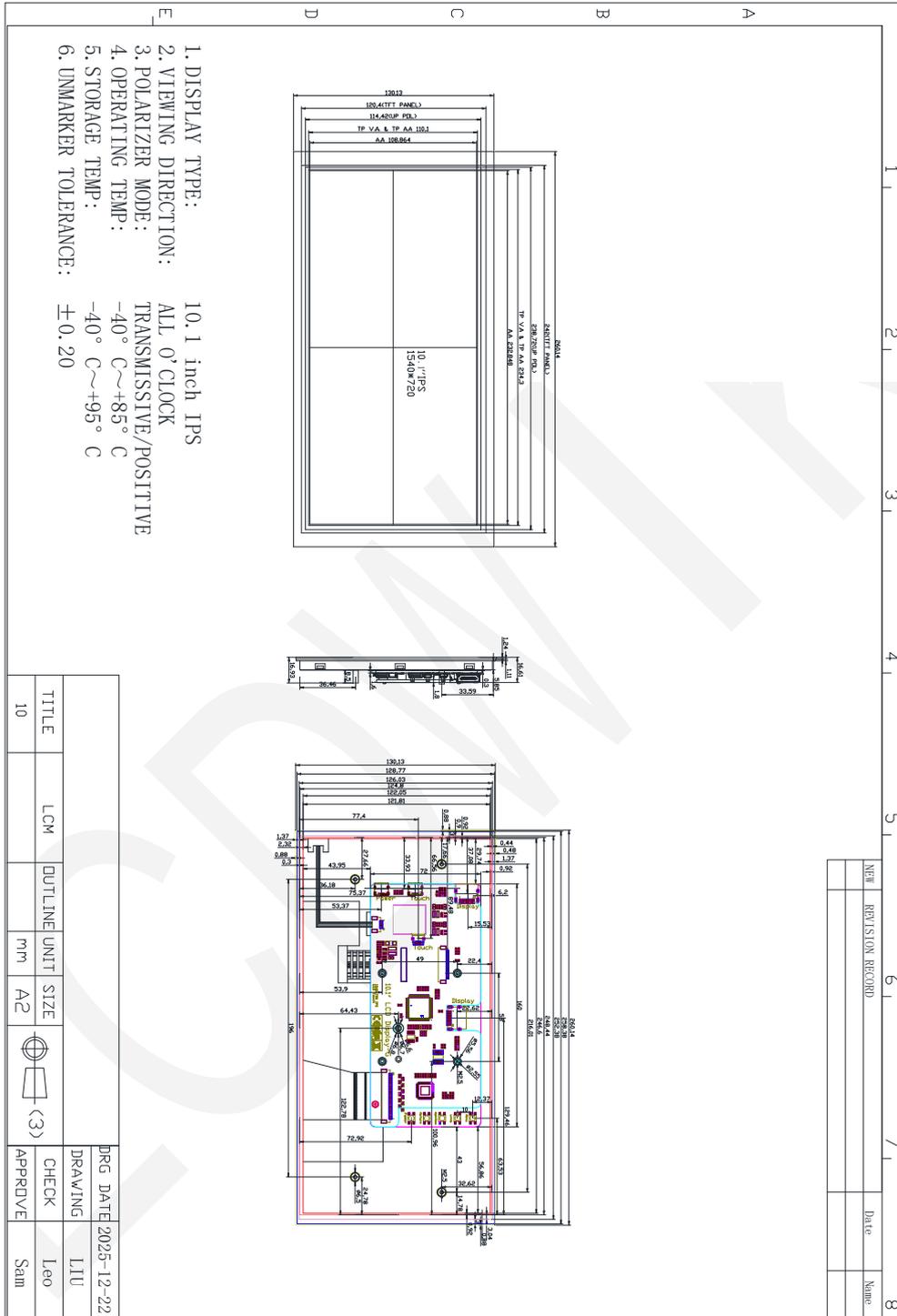


Figure 10.1 MPI1010 product interface diagram

6. PRECAUTIONS

6.1. Safe Use of Products

- Do not press or hit the screen violently to avoid damaging the screen
- Do not scrape the screen with hard objects to avoid scratching the screenDo not place heavy objects on the product to avoid crushing the screen
- Please keep the product clean, do not drop water or oil on the screen
- Please use a clean, soft dry cloth to wipe the screen, do not spray water or cleaning agent directly on the screen
- Do not disassemble the product at will to avoid damaging the screen or the F
- Do not place the product in a high temperature and high humidity environment
- Please place the product face up on a flat surface to avoid falling and breaking the product
- Please use the voltage to connect the product to avoid damage to the product due to excessive voltage
- When using the product, do not touch the components or pins with wet hands to avoid causing a short and damaging the product
- When not using the product for a long time, please unplug the power supply
- When charging the battery, pay attention to ventilation and heat dissipation to avoid damage the product due to high temperature

6.2. Frequently asked questions FAQ

- **Question 1: The product does not respond upon power-on and the screen does not light up.**

Analysis:

First, make sure that the HDMI interface is correctly connected. This product requires that the backlight control pin be pulled high to activate the backlight. Therefore, ensure that the main controller has been programmed with a program that enables the backlight to light up. If the relevant program has been burned in and there is still no backlight,

check the voltage at the power supply interface and the contact condition of the power supply line. If the backlight still does not respond after following the above operations, it is presumed that there may be a fault in the hardware circuit.

- **Question 2: The backlight of the product lights up upon power-on, but there is no display screen.**

Analysis:

The backlight being on indicates that the module has powered on normally. Check if it is due to insufficient power supply voltage. If necessary, use necessary tools such as multimeters, oscilloscopes, or logic analyzers to analyze and test the signals, and contact our technical staff for assistance.

- **Question 3: The product can display normally, but there is no response when touching it. In this case, the following possible reasons may exist:**

Analysis:

- The burned-in test program does not have touch functionality;
- The signal lines were not properly connected.;
- Hardware is damaged, including damage to the touch control IC, broken or disconnected touch screen cables, etc.

- **Question 4: The product can display, but the backlight brightness fluctuates erratically and is unstable.**

Analysis:

The backlight circuit of this product is driven by a field-effect transistor. The backlight control pin inputs a high level to turn on the backlight and a low level to turn it off. The PWM signal can also be input through the backlight control pin to achieve the purpose of dimming. If the voltage at the backlight control pin changes, the backlight brightness will also change, which may lead to instability of the backlight. Additionally, unstable power supply voltage can also cause this phenomenon.