7.6-Inch 800x800 Resolution MIPI Interface IPS Square TFT LCD Display with 1000 Nits Brightness

Our Product Introduction

Basic Information

Product Specification

- Touchscreen: Optional Capacitive Or Resistive
- Fpc Connect: 30 Pins
- Product Type: TFT LCD Screen
- Screen Size: 7.6 Inches
- Backlight: LED Backlight
- Lcd Type: TFT
- Connector: ZIF FPC
- Active Area: 135.36×135.36mm
- Highlight: **800x800 Resolution TFT LCD Display**, **MIPI Interface IPS TFT Screen**, **1000 Nits Brightness Square LCD Module**

Product Description

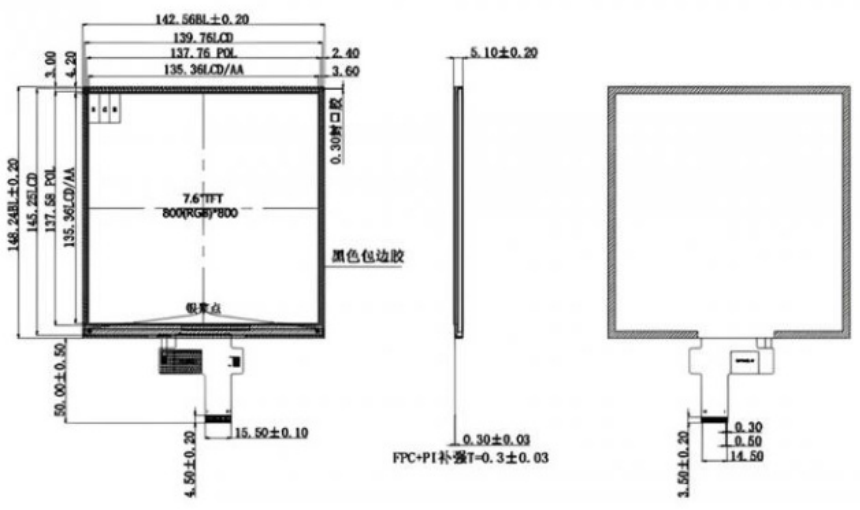
7.6-Inch 800x800 Resolution, MIPI Interface IPS Square TFT LCD Display

High-performance square TFT LCD display with IPS technology and MIPI interface, designed for industrial and commercial applications.

Product Specifications

Product	7.6 Inch Square LCD Display
Resolution	800×800 Dots
Surface Luminance	1000 Cd/m² (nits)
Interface	MIPI
Touch Screen	Customizable
Cover Glass Dimension	Customizable
Viewing Direction	IPS, All Viewing Angle (85/85/85/85)
LCD Controller	ILI9881C
Operating Temperature	-20°C to +70°C
Storage Temperature	-25°C to +75°C
Brightness	1000 Nits
LED Lifetime	40,000 Hours
Connection	ZIF FPC
Compliance	REACH & RoHS Compliant

Product Drawing



Pin Definition

Pin No.	Symbol	Description
1	LEDA	LED backlight anode
2	LEDK	LED backlight cathode
3	LEDK	LED backlight cathode
4	VCI	Power supply for the analog power

5	IOVCC	Power supply for the logic power and I/O circuit
6	RESET	Reset signal (low active)
7	TE	Tearing effect output
8	PWM	The PWM frequency output for LCD driver control
9	GND	Power ground
10	MIPI_DP0	MIPI-DSI data lane 0 positive input pin
11	MIPI_DN0	MIPI-DSI data lane 0 negative input pin
12	GND	Power ground
13	MIPI_DP1	MIPI-DSI data lane 1 positive input pin
14	MIPI_DN1	MIPI-DSI data lane 1 negative input pin
15	GND	Power ground
16	MIPI_CLKP	MIPI-DSI data lane positive input pin
17	MIPI_CLKN	MIPI-DSI data lane negative input pin
18	GND	Power ground
19	MIPI_DP2	MIPI-DSI data lane 2 positive input pin
20	MIPI_DN2	MIPI-DSI data lane 2 negative input pin
21	GND	Power ground
22	MIPI_DP3	MIPI-DSI data lane 3 positive input pin
23	MIPI_DN3	MIPI-DSI data lane 3 negative input pin
24	GND	Power ground
25	TP_INT	INT pin for CTP (NC)
26	TP_SDA	SDA pin for CTP (NC)
27	TP_SCL	SCL pin for CTP (NC)
28	TP_RESET	Reset pin for TP (NC)
29	TP_VCI	VCI pin for CTP (NC)
30	TP_IOVCC	IOVCC pin for CTP (NC)

Product Core Features

This square full-view display module is designed for both industrial and commercial applications. It features a transmissive IPS panel with a 1:1 800×800 pixel resolution. The display area measures 135.36×135.36mm, providing a balanced square shape ideal for text, charts, and UI layouts without distortion.

The display supports 16.7 million colors with a 4-way full-view angle of 85° (left/right/top/bottom), ensuring minimal color deviation when viewed from any angle. The high-brightness model reaches 1000 cd/m² for clear outdoor visibility, while a standard 400 cd/m² option is also available. The white LED backlight offers adjustable brightness and extended lifespan.

The MIPI DSI interface (30-pin FPC flexible cable) provides a high-speed display solution for mobile and embedded devices, offering lower power consumption and superior anti-interference compared to parallel RGB interfaces. Compatible with controllers including RK3568, ESP32-S3, Jetson Nano, and Raspberry Pi. Capacitive multi-touch options (FT6336U touch IC, I2C communication) are available.

Electrical specifications include 3.3V operating voltage with a working temperature range of -20°C to +70°C and storage temperature of -25°C to +75°C, ensuring reliable performance in industrial and outdoor environments.

Core Application Scenarios

Industrial Control & IoT Terminals: HMI panels, intelligent gateways, PLC interfaces, warehouse scanning terminals. Square format ideal for data sets, status icons, and operation buttons.

Portable Medical Equipment: Handheld ultrasound, ECG monitors, blood analyzers. IPS viewing angles facilitate data reading from different positions.

Vehicle & Navigation Systems: Passenger information screens, instrument panels, monitoring displays. Wide temperature range withstands vehicle environmental conditions.

Smart Retail & Home Automation: Self-checkout displays, control panels, smart home interfaces. Square layout optimizes information organization.

Embedded Development: Raspberry Pi, Jetson Nano displays, robotics feedback screens, simulation instrument panels with comprehensive open-source drivers.

Frequently Asked Questions

I want the LCD display 8 digits and the outline size is 65x30x2.8mm. Is this possible?

Yes, we can accommodate custom specifications. Please provide your detailed specifications or drawing. If you don't have specifications, we can recommend suitable options based on your samples or requirements.

This LCD is what we want, but it's too large. Do you have smaller sizes? Can the display content be modified?

For segment-type LCD modules requiring size or content modifications, new LCD glass modules with custom tooling are required.

This LCD display is HTN type, but I want STN type. Can you make this change?

Yes, we can modify the display type according to your requirements.

Can you customize a new LCD module?

Yes, we offer full customization services. Please provide your drawing or specifications including outline size, glass thickness, polarizer type, display type, connector mode, temperature ranges, supply voltage, viewing direction, and drive conditions.

What is the lead time for tooling?

Typically 15-25 days after drawing confirmation and tooling payment. Exact timing will be confirmed upon drawing approval.

Can you send samples for evaluation?

Yes, sample orders are available for product evaluation.

What is the production lead time?

Standard products in stock ship within one day after payment. Mass production for custom orders typically requires 15-30 days, with earlier completion communicated in advance.

+8613711912723 Jack@smartwinlcd.cn lcdtftscreen.com

Shangyu Commercial Centre Chang'an, Dongguan, Guangdong, China 523881