

## Square 4 Inch 480x480 Industrial TFT Display 40 Pins With PCAP Touch

### Basic Information



### Product Specification

- Active Area: 71.86×70.18mm
- Connectivity: Plugging ( Can Be Customized )
- Light Source: White LED
- Size: 4 Inches
- Surface Luminance: 420 Cd/m2(nits)
- Product Type: TFT LCD Screen
- Overall Dimensions: 84.0 X 84.0 X 3.05 (mm)
- Backlight Technology: LED
- Highlight: **4 inch industrial TFT display ,  
480x480 TFT LCD screen,  
PCAP touch TFT display**



## Product Description

### Square 4 Inch 480x480 Industrial TFT Display 40 Pins With PCAP Touch

#### Description

Product:	4 Inch TFT Square Display	Resolution:	480*480
Touch Screen:	With CTP	Cover Glass Dimension:	Customizable
Viewing Direction:	All Viewing Angle, IPS	Outline Dimension:	84.0 X 84.0 X 3.05 (mm)
Active Area:	70.18x71.86 (mm)	Interface:	RGB+SPI ( MIPI Interface Optional)
Pin Number:	40 Pins ( Customizable )	Connection:	Plugging ( Can Be Customized )
Surface Luminance:	420 Cd/m2(nits) Typical	LED Lifetime:	40,000 Hours
Touch Interface:	IIC	Compliance:	RoHS Compliant

This is a 4-inch square industrial-grade TFT LCD display module, integrating an IPS wide-angle panel, 40-pin SPI + RGB dual interface, and projected capacitive touch (PCAP). It is specifically designed for industrial and intelligent terminals, balancing high image quality, strong stability and ease of use.

#### Core display features

Size and resolution: 4-inch 1:1 square, 480×480 pixels, dot pitch 0.5×0.5mm, detailed picture, flexible layout.

Panel technology: IPS full-view, viewing angles of 80° each up, down, left, and right, no color bias, no blind spots, suitable for multi-angle viewing scenarios.

Brightness and contrast: typical 400–450 cd/m<sup>2</sup>, contrast 800:1–900:1, suitable for outdoor / strong light conditions; some high-brightness versions can reach 1000 cd/m<sup>2</sup>.

Color and backlight: 16.7M colors (24-bit), vivid colors; WLED backlight, approximately 40,000 hours lifespan, low power consumption, long battery life.

Physical specifications: dimensions 84×84×3.1mm, effective display area 71.86×70.18mm, compact and lightweight, suitable for small devices.

Interfaces and touch

40-pin FPC interface: SPI + RGB dual interface - SPI for low-speed configuration / initialization, fewer pins, easy wiring; RGB (18/24 bits) high-speed parallel, ensuring picture quality and refresh rate at high resolution.

Driver IC: mainstream ST7701S, stable compatibility with STM32, ESP32, etc. embedded main controllers.

PCAP capacitive touch: 5-point touch, supports fingers / capacitive pens, fast response, high precision; IIC interface, common driver ICs are GT911/FT6336U.

Industrial-grade reliability

Operating temperature: -20°C to +70°C, wide temperature range suitable for harsh conditions; storage -30°C to +80°C.

Surface hardness: up to 6H, scratch-resistant, anti-fingerprint, suitable for high-frequency touch scenarios.

Certifications: ISO9001/ISO14000, industrial-grade quality assurance.

#### Main applications

Industrial control: PLC human-machine interface, equipment control panel, data collector, frequency converter / temperature controller display, suitable for harsh environments such as factory workshops, outdoor cabinets, etc.

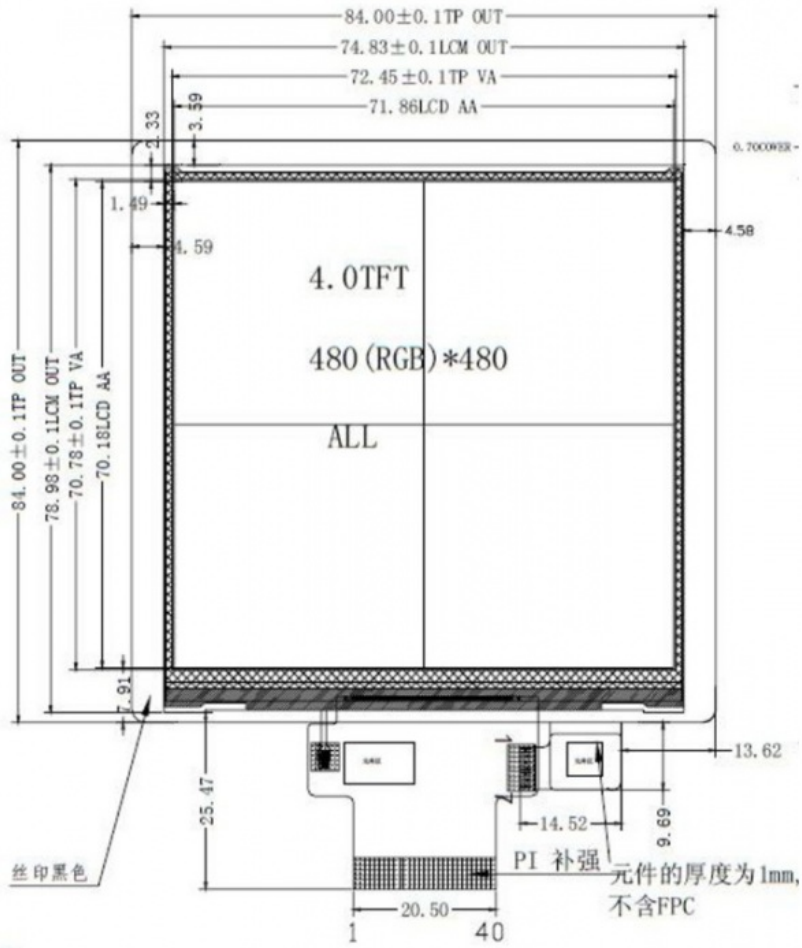
Smart home: central control panel, smart switches, visible doorbell, temperature controller, square screen suitable for 86-box wall installation, intuitive interaction.

Smart handheld devices: portable detector, medical monitor, IoT terminal, handheld barcode scanner, 兼 high-definition display, low power consumption and long battery life.

Vehicle and security: reverse camera, driving record device, access terminal, elevator display, wide viewing angle suitable for multi-angle viewing in vehicle interiors / public areas.

Embedded development: STM32/Arduino/ESP32 prototype development, DIY projects, educational equipment, SPI + RGB compatible with most controllers, 40-pin interface easy to integrate.

#### Drawing





## Our service

1. Free repair within one year after the shipment of products from us.
2. Replacement within 30 days after the shipment of products from us due to products' problems.
3. We can print your logo and stick your model No.on the cameras.
4. We have long cooperation with many shipping companies and our export volume is large. The shipping companies can offer us good discounts.
5. Professional technician supports. We have a good after-sales service team. They can solve your problems in time.
- 6.All goods will be inspected and tested by our engineers and QC/QA before packing and shipment.
- 7.Customers satisfactory is most important to us.If you have any problem or questions regarding our transaction.Please contact us by Email or online. It will be responded within 24 hours.
- 8.Products pictures only for your reference. please kindly refer to the specification. we can provide the products basic on the specification. or you can offer your own specification or drawing , we can customize all kinds of LCD displays for you. thanks for your kind support always.

## FAQ:

**1. I want the LCD display 8 digits and the outline size is 65x30x2.8mm.....?**

Answer: No problem. Firstly, please kindly send us your specification/ drawing paper  
If you have not the specification, you can also provide your samples; we will recommend the suitable one if it is standard products. Or we can customize for you based on your own requirement.

**2.This LCD is just what we want, but it is big size, do you have any smaller size? And the display content need to be changed a little.**

Answer: For the segment type LCD module, if you need modify the outline size or display content, a new LCD glass module is need. We have to open new tooling for you.

**3. This LCD display is HTN type, but I want STN type,can you make?**

Answer: That's all right . we can change for you as per you request.

**4. I want customize a new LCD module. Can you do?**

Answer: Yes, we can. Please send your drawing paper. If you have not, please advise me the outline size of the LCD display, display information( Glass thickness, Polarizer, Display Type, Connector mode, Storage Temp. Operating Temp. Supply Voltage, Viewing direction, drive condition), we can customize for you.

**5. What is leading time for tooling?**

Answer: General speaking, it will cost 15 to 25 days after drawing paper confirmation and tooling charge payment, we can report you the exact time when you confirm the drawing paper.

**6. Can you send us samples for checking?**

Answer: Yes,. Samples order is available.

**7. What is the Leading Time?**

Answer: If we have stock for the standard ones, the leading time is one day after payment. If it is the mass production for special ones, the leading time is about 15-30 days. suppose we can finish earlier, we will report the information in advanced.



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