

2.48 Inch 480x480 Resolution Round TFT LCD Display with 3SPI+18RGB Interface for High-Detail Circular UI

Basic Information

- Place of Origin: China
- Brand Name: BBI
- Certification: ISO9001 RoHS
- Minimum Order Quantity: 1000
- Price: 0.7-7USD
- Packaging Details: CARTON
- Delivery Time: 3-4WEEKS
- Payment Terms: T/T
- Supply Ability: 100000/MONTH



Product Specification

- Display: TSD Round LCD Display
- Color: Normally Black
- Size: 2.48 Inch
- Colors: 262K
- Backlighttype: LED Backlight
- Commodity: 2.48 Inch Round TFT LCD Display
- Supplier Type: Manufacturer
- Resolution: 480*480 Pixels
- Highlight: **2.48 inch Round TFT LCD Display , 480x480 resolution Circular TFT Display , 3SPI+18RGB interface IPS Round Display**



Product Description

2.48 Inch 3SPI+18RGB Interface 480x480 TFT LCD IPS Circular Display

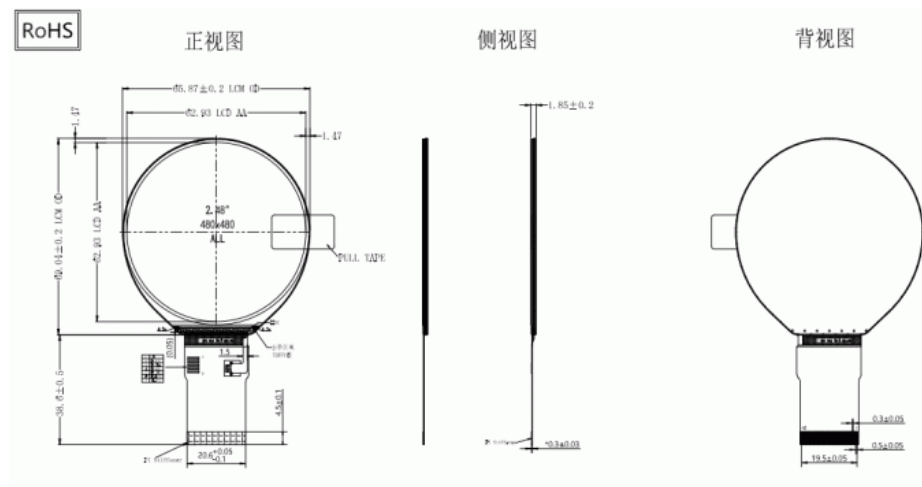
Product Overview

High-definition color display module specifically designed for circular UI scenarios with 2.48-inch diagonal size and circular effective display area.

Key Features

Feature	Specifications
Display Spec.	LCD type: 2.48 inch Resolution (H*V): 480(RGB)×480 Technology Type: a-Si TFT Pixel Configuration: R.G.B. Vertical Stripe Display Mode: Normally Black Viewing Direction: ALL Gray Scale Inversion Direction: -
Mechanical Characteristics	Outline Dimensions (W x H x T): 65.87*69.04*1.85mm Active Area: 62.93*62.93mm CTP View Area: / With/Without Touch screen: Without Connector Type: 0.5 pitch 40pin Backlight Type: LED Weight: TBD
Electrical Characteristics	Display Interface: 3SPI+18RGB Number of color: 262K Display Driver IC: ST7701S

Mechanical Drawing



Pin Assignment

Pin	Signal	Description
1	LED A	LED ANODE
2	LED K	LED CATHODE
3	LED K	LED CATHODE
4	GND	Ground
5	VCI	Power supply
6	RESET	Reset Signal, Active Low
7	NC	NC
8	NC	NC
9	SDA	SPI Data signal
10	SCK	SPI Clock signal

11	CS	SPI Chip select signal
12	PCLK	RGB dot clock signal
13	DE	RGB data enable signal
14	VSYNC	RGB frame synchronizing signal
15	HSYNC	RGB line synchronizing signal
16~33	DB0~DB17	RGB data signal (DB0:Blue LSB; DB5:Blue MSB; DB6:Green LSB; DB11:Green MSB; DB12:Red LSB; DB17:Red MSB)
34	GND	Ground
35	TP_INT	Touch Interrupt
36	TP_SDA	Touch IIC Data signal
37	TP_SCL	Touch IIC Clock signal
38	TP_RESET	Touch Reset Signal
39	TP_VCI	Touch Power supply
40	GND	Ground

Technical Details

This high-resolution circular display features 480×480 resolution with high pixel density for detailed imagery. Utilizing IPS wide-angle technology, it maintains consistent colors and brightness from all viewing angles while supporting 262K full-color display. Equipped with white LED backlighting rated at 350-400 nits for excellent outdoor visibility.

The ST7701S driver IC supports a composite interface scheme: 3-wire SPI (SCK/CS/SDA) handles initialization, brightness adjustment, and display direction control, while the 18-bit RGB parallel interface manages high-speed image data transmission. This balanced approach ensures compatibility with popular embedded platforms including STM32, ESP32, and Raspberry Pi, with comprehensive driver libraries and sample code available.

Electrical specifications include 3.3V operating voltage, -20 to 70 operating temperature range, and -30 to 80 storage temperature range, suitable for both industrial and consumer applications. The compact module design maintains thickness under 2.5mm with FPC flexible ribbon cable connection, with optional capacitive touch panel (G+FF process) and custom cover glass available.

Typical Applications

- Smart Wearable Devices: Circular smart watches and fitness trackers displaying dials, health data, and notifications
- Portable Instruments: Handheld medical testing devices, weather stations, and tire pressure monitors with circular chart displays
- Industrial Control & IoT: Small PLCs, sensor gateways, and smart home panels with multi-directional viewing capability
- Maker Projects: Arduino and ESP32 prototypes displaying environmental data and system status
- Consumer Electronics: Status display panels for smart speakers, in-car displays, and VR/AR accessories



Frequently Asked Questions

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

Yes, we can accommodate custom specifications. Please provide your detailed specifications or drawing. If you don't have specifications, you can send samples and we'll recommend suitable standard products or customize based on your requirements.

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.

For segment type LCD modules requiring size modifications or display content changes, we need to create new LCD glass modules with custom tooling.

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

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

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

Absolutely. Please provide your drawing or specify the outline size, display information (glass thickness, polarizer, display type, connector mode, storage temperature, operating temperature, supply voltage, viewing direction, drive conditions).

What is leading time for tooling?

Typically 15 to 25 days after drawing confirmation and tooling charge payment. We'll provide exact timelines upon drawing approval.

Can you send us samples for checking?

Yes, sample orders are available for evaluation.

What is the Leading Time?

Standard products in stock ship within one day after payment. Mass production for custom orders typically takes 15-30 days. We'll notify you if we can complete orders earlier than expected.



Dongguan Bibuke Electronic Technology Co., Ltd.



+8613711912723



Jack@smartwinlcd.cn



lcdtftscreen.com

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