3.6 inch 544x506 High Brightness 1000 cd/ Round TFT LCD Display with IPS-TFT Color Module

Our Product Introduction

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

- Commodity: 3.6 Inch TFT LCD Display
- Outline Dimension: 107.13(W)×107.13(H)×9.76(T) Mm
- Interface Definition: RGB 24 Bits
- Backlight Technology: LED
- Driver Ic: ST72566
- Fpc Connect: 40 Pins
- Screen Type: TFT
- Viewing Direction: Free
- Highlight: **3.6 inch Round TFT LCD Display**, **544x506 Resolution Circular TFT Display**, **High Brightness 1000 cd/ IPS-TFT Color Display Module**

Product Description

3.6 inch 544x506 High Brightness TFT RGB Circular LCD Display

This circular IPS-TFT color display module is engineered for embedded systems and demanding automotive/industrial applications.

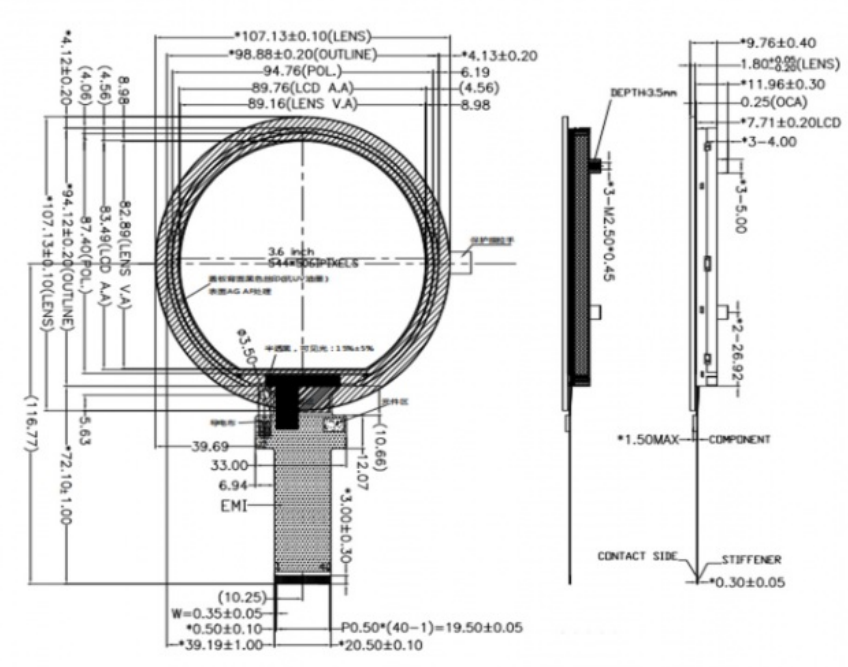
Key Features

- 3.6-inch circular display with 544×506 pixel resolution
- High brightness up to 1000 cd/ for outdoor visibility
- IPS full-view technology with minimal color deviation
- 24-bit RGB parallel interface
- Wide operating temperature: -30 to +85
- Compact module thickness from 2.3mm to 7.7mm
- RoHS compliant for environmental safety

Technical Specifications

Specification	Unit
Main Panel	
Display area (AA)	89.76(H) × 83.49(V) (3.6 inch)
Driver element	a-Si TFT active matrix
Display colors	16.7M colors
Number of pixels	544(RGB) × 506 dots
Pixel arrangement	RGB vertical stripe
Pixel pitch	0.165(H) × 0.165(V) mm
Viewing angle	ALL o'clock
Drive IC	ST72566
Display mode	Transmissive/Normally Black
Operating temperature	-30 to +85
Storage temperature	-30 to +85

Module Drawing



PIN Description

PIN NO.	SYMBOL	LEVEL	DESCRIPTION
1	LEDK	L	Backlight-
2	LEDA	H	Backlight+
3	GND	H	Power ground
4	VCC	H	Power supply (2.7-3.6V)
5-12	R0-R7	H/L	Red data bus
13-20	G0-G7	H/L	Green data bus
21-28	B0-B7	H/L	Blue data bus
29	GND	L	Power ground
30	DCLK	H/L	Pixel clock signal pin
31	DISP	H/L	Connected to VDD in normal operation mode. Connected to GND, the IC is in standby mode.
32	HSYNC	H/L	Horizontal sync
33	VSYNC	H/L	Vertical sync
34	DE	H/L	Data enable signal
35	AUTODL	H/L	OPT function control pin
36	CS	H/L	Chip select input pin
37	SCL	H/L	Serial clock input
38	SDA	H/L	Serial data input pin
39	NTC1	/	Connect thermistor
40	NTC2	/	Connect thermistor

Product Core Details

This circular IPS-TFT color display module is designed for embedded systems and automotive/industrial scenarios. The diagonal size is 3.6 inches, with a resolution of 544×506 pixels. It uses a 24-bit RGB parallel interface and the driving IC is mostly ST7266. It supports standard RGB timing input and is compatible with mainstream MCUs and embedded platforms such as STM32 and NXP.

The panel employs IPS full-view technology, ensuring almost no color deviation or brightness attenuation at any viewing angle. The high-brightness version typically reaches 1000 cd/ , paired with multiple LED backlights, making it clearly readable even in strong outdoor light, far exceeding ordinary indoor screens (300-500 cd/). The operating temperature ranges from -30 to 80 , meeting the requirements of industrial and automotive environments.

The module thickness is mostly controlled at around 7.7mm, with some ultra-thin models reaching 2.3mm. It supports the selection of capacitive touch screens. The overall RoHS compliance ensures strong long-term stability.

The advantage of the RGB interface lies in its sufficient transmission bandwidth and precise color reproduction, making it suitable for displaying dynamic gauges, data curves, and color interfaces. The accompanying initialization code, timing parameters, and driver routines are complete, and it can also be compatible with various embedded development frameworks, shortening the project cycle.

Typical Applications

Two-wheeled vehicles / **vehicle-mounted instruments:** Speed, battery level, gear position, mileage meters for electric bicycles, motorcycles, and off-road vehicles; Condition display for agricultural vehicles and construction machinery

Industrial measurement and instruments: Pressure gauges, flow meters, temperature/humidity/gas detectors, small PLC panels

Smart home and appliances: Circular status screens for air purifiers, humidifiers, smart water meters/electric meters

Medical portable devices: Parameter displays for handheld pulse oximeters, blood pressure monitors, and portable monitors

Maker and customized projects: Retro clocks, weather stations, nautical/aeronautical model instruments

Frequently Asked Questions

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

No problem. Firstly, please kindly send us your specification/drawing paper. If you don't have 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.

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

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

That's all right. We can change for you as per your request.

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

Yes, we can. Please send your drawing paper. If you don't have one, 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.

What is leading time for tooling?

Generally 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.

Can you send us samples for checking?

Yes. Samples order is available.

What is the Leading Time?

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. If we can finish earlier, we will report the information in advance.

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