

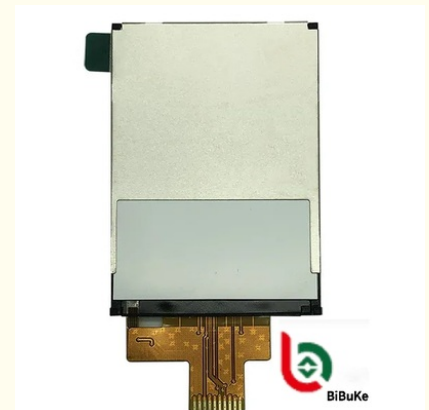
2.4 Inch TFT LCD Display with 240x320 Resolution QVGA and SPI Interface

Basic Information



Product Specification

- Interface: 4 SPI (MCU Interface Optional)
- Viewing Direction: 12:00
- Screentype: LCD TFT
- Displaysize: 2.4 Inches
- Backlight: LED Backlight
- Connect: Plugging (customizable)
- Screen Type: LCD TFT
- Surface Luminance: 300 Cd/m2(nits)



Product Description

240x320 2.4 inch, QVGA SPI MCU 2.4 Inch TFT LCD Display

2.4" TN type TFT LCD Display with QVGA 240x320 pixels resolution. A highly cost-effective LCD module in its category.

Product Specifications

Product	2.4 Inch TFT Screen	Resolution	240x320
Touch Screen	Without Touch Screen (Optional)	Cover Glass Dimension	To Be Customized
Viewing Direction	12:00	Driver IC	ST7789V Compatible With ILI9341V
Interface	4 SPI (MCU interface optional)	Connection	Plugging (customizable)
Pin Number	40 Pins	Surface Luminance	300 Cd/m ² (nits)

This 2.4-inch QVGA SPI MCU TFT liquid crystal display is a high-integration, compact and low-power color display module featuring 240×320 pixels (QVGA), 2.4-inch diagonal, and TFT display technology. It supports SPI/MCU dual interfaces and is widely used in embedded systems and intelligent devices.

Core Features

Display Specifications

- Resolution: 240×320 (QVGA)
- Size: 2.4 inches (approximately 6.1 cm)
- Display area: Approximately 36.72×48.96 mm
- Color support: 65K/262K colors
- Brightness: 200-1200 cd/m² (optional high brightness)
- Contrast: 300:1-500:1
- Response time: 10-30 ms

Interfaces and Drivers

- Standard 4-wire SPI (high-speed serial) and MCU parallel port (8/16 bits)
- Compatible with 3.3V single-chip microcontrollers
- Common driver ICs: ST7789V/ILI9341
- Strong compatibility with abundant open-source code

Structure and Appearance

- Module thickness: Approximately 2.2-2.5 mm
- FPC wiring connection
- Some models integrate resistors/capacitors touch screens
- ESD anti-static protection (8KV)
- Operating temperature: -20°C to +70°C (wide temperature version -30°C to +80°C)

Power Consumption and Power Supply

- 3.3V single power supply
- Backlight full-on current: Approximately 80-150 mA
- Low sleep power consumption
- Suitable for battery-powered devices

Main Applications

Embedded development: Compatible with Arduino, ESP32, STM32, Raspberry Pi and other development boards for project debugging, data visualization, and UI interface development

Handheld devices: Walkie-talkies, thermometers, blood glucose meters, POS terminals, portable printers, smart home remote controllers

Industrial control: PLC control panels, sensor terminals, data collectors, equipment status displays with wide temperature and anti-interference requirements

Vehicle and transportation: Electric vehicle dashboards, rearview mirror secondary screens, in-vehicle navigation small screens, ride-hailing terminals with sunlight visibility (high-brightness version)

Consumer electronics: Smart speakers, children's toys, e-book readers, small game consoles for low-cost color graphic display

Internet of Things devices: WiFi/BLE smart modules, environmental monitors, wireless sensor nodes for real-time data display

Product Advantages

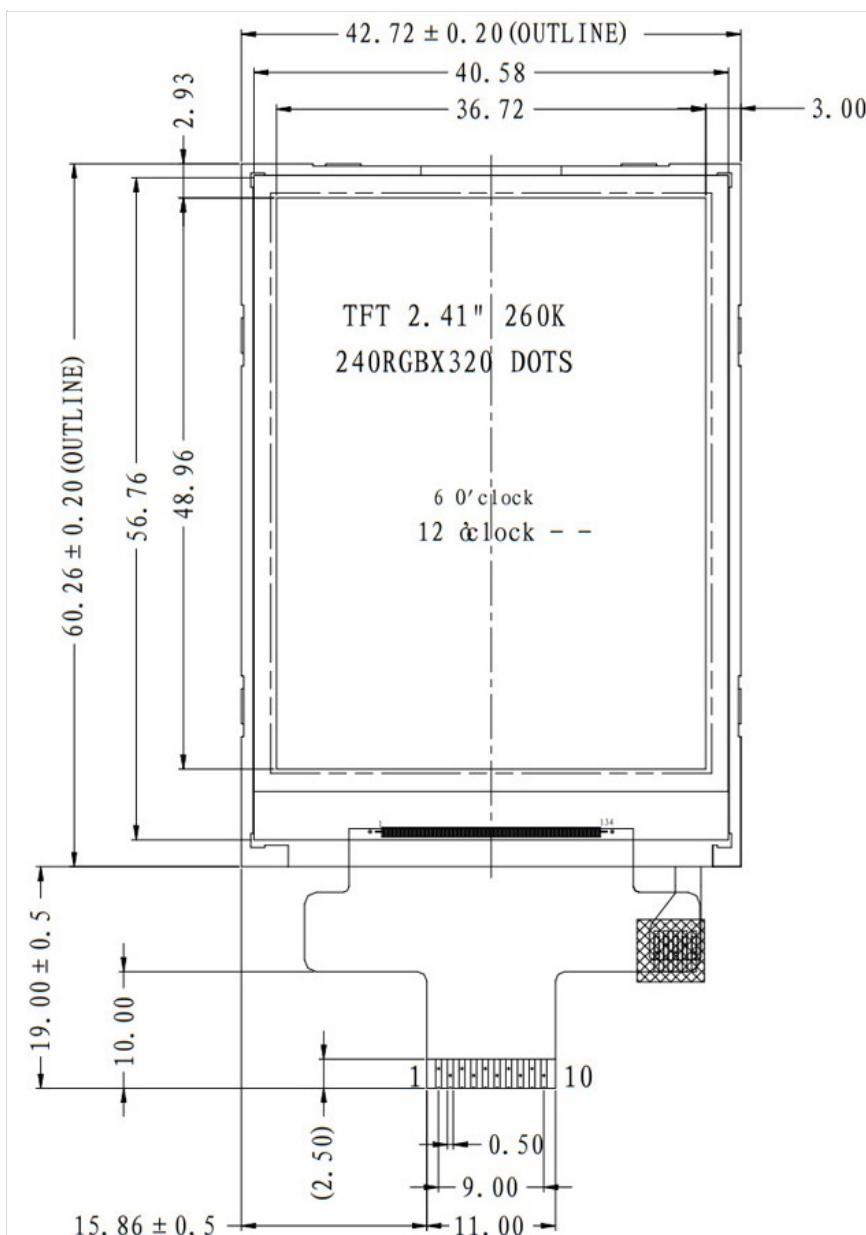
Compact and lightweight: 2.4-inch size is small and flexible, suitable for space-limited scenarios

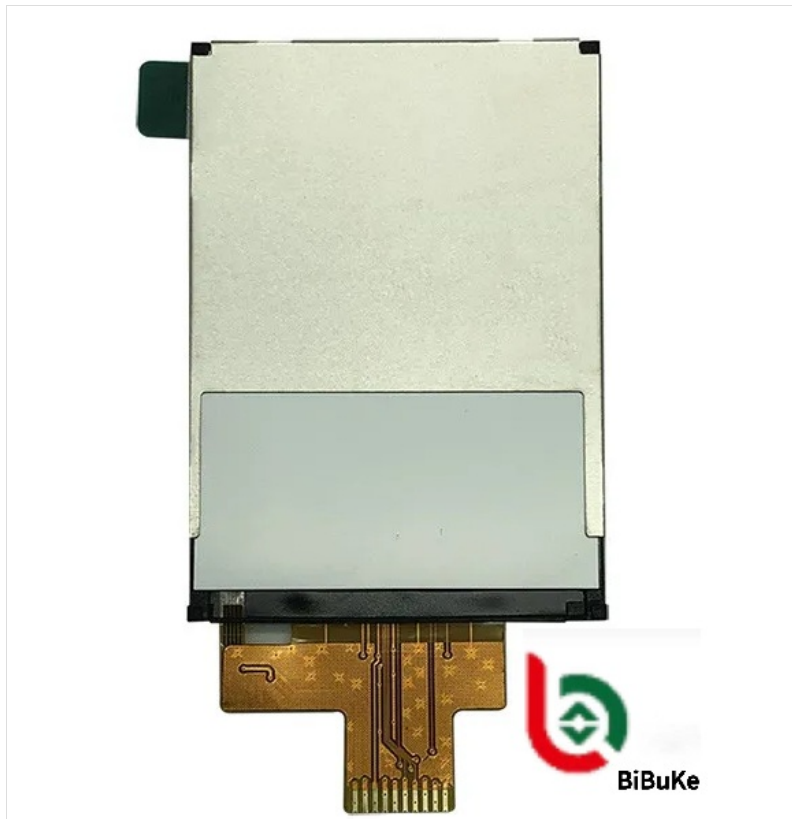
Low power consumption: SPI interface reduces pin usage, 3.3V power supply ideal for battery-powered devices

High compatibility: Mainstream driver ICs with open source code for easy implementation and reduced development costs

High reliability: TFT technology offers excellent color quality and fast response with wide temperature range and anti-static design for complex environments

Product Drawing





Frequently Asked Questions

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

No problem. Please send us your specification or drawing. If you don't have specifications, you can provide samples and we will recommend suitable products or customize based on your requirements.

This LCD is just what we want, but it is too big. Do you have smaller sizes? The display content needs minor changes.

For segment type LCD modules, modifying outline size or display content requires a new LCD glass module with new tooling.

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

Yes, we can change the display type according to your request.

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

Yes, we can. Please send your drawing. If you don't have one, provide the outline size, display information (glass thickness, polarizer, display type, connector mode, storage temperature, operating temperature, supply voltage, viewing direction, drive condition), and we can customize for you.

What is the lead time for tooling?

Typically 15 to 25 days after drawing confirmation and tooling charge payment. We will provide exact timing upon drawing confirmation.

Can you send us samples for checking?

Yes, sample orders are available.

What is the lead time?

For standard products in stock: 1 day after payment. For mass production of special orders: approximately 15-30 days. We will inform you if we can finish earlier.

Our Services

- Free repair within one year after product shipment
- Replacement within 30 days after shipment for product-related issues
- Custom logo printing and model number application
- Competitive shipping rates through established partnerships
- Professional technical support with responsive after-sales service
- Comprehensive quality inspection and testing before shipment
- 24-hour response time for customer inquiries and issues
- Full customization services based on your specifications or drawings



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