

## Industrial 2.8-Inch Touch Screen Display Module, Wide Temp (-20~+70°C), 50-pin FPC

### Our Product Introduction

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#### Basic Information

- Brand Name: Chenghao Optoelectronic
- Certification: CE、RoHS、FCC
- Model Number: CH280QV22F-T
- Minimum Order Quantity: No Moq
- Packaging Details: All The Products Are Packed In Right Way To Keep It Safe. For Small Sizes Of Products We Use Tray + Carton, For Bigger Sizes We Use Foam Slot + Carton. We Also Design Packages According To Customers' Requirements
- Delivery Time: 3~7 Days
- Payment Terms: TT Or Others
- Supply Ability: 20000000 Pcs/month



#### Product Specification

- Lcd Interface: SPI、MCU、RGB
- Contrast: 800
- Screen Brightness: 500 Cd/m2
- Module Type: 2.8" TFT+RTP
- Display Mode: IPS/Transmissive/Normally Black
- Touch Type: Resistive Touch
- Storage Temperature: -30 ~ +80
- Viewing Direction: 80/80/80/80
- Highlight: **2.8-inch industrial touch screen display, wide temperature TFT LCD module, 50-pin FPC capacitive touchscreen**



#### More Images





## Product Description

### Product Description:

The CH280QV22F-T is a high-performance 2.8-inch TFT LCD display module designed for versatile applications. With a resolution of 240x320 dots, it ensures clear and vibrant visuals ideal for various projects and devices. The display operates on an IPS mode, offering a brightness of up to 500 cd/m<sup>2</sup>, customizable up to 1000 cd/m<sup>2</sup>, ensuring exceptional visibility even in bright environments.

This module features a viewing angle of 80 degrees in all directions, enhancing user interaction by maintaining image quality without distortion. The resistive touch technology allows for accurate input through pressure, but it can be easily upgraded to a capacitive touch option if preferred.



The CH280QV22F-T supports multiple interfaces including SPI, MCU, and RGB, providing flexibility for integration into different systems. Its compact dimensions of 50x69.2x3.4 mm and viewing area of 44.8x63.1 mm make it suitable for tight spaces, while the operating temperature range of -20 to 70 degrees Celsius guarantees reliability in diverse environmental conditions.

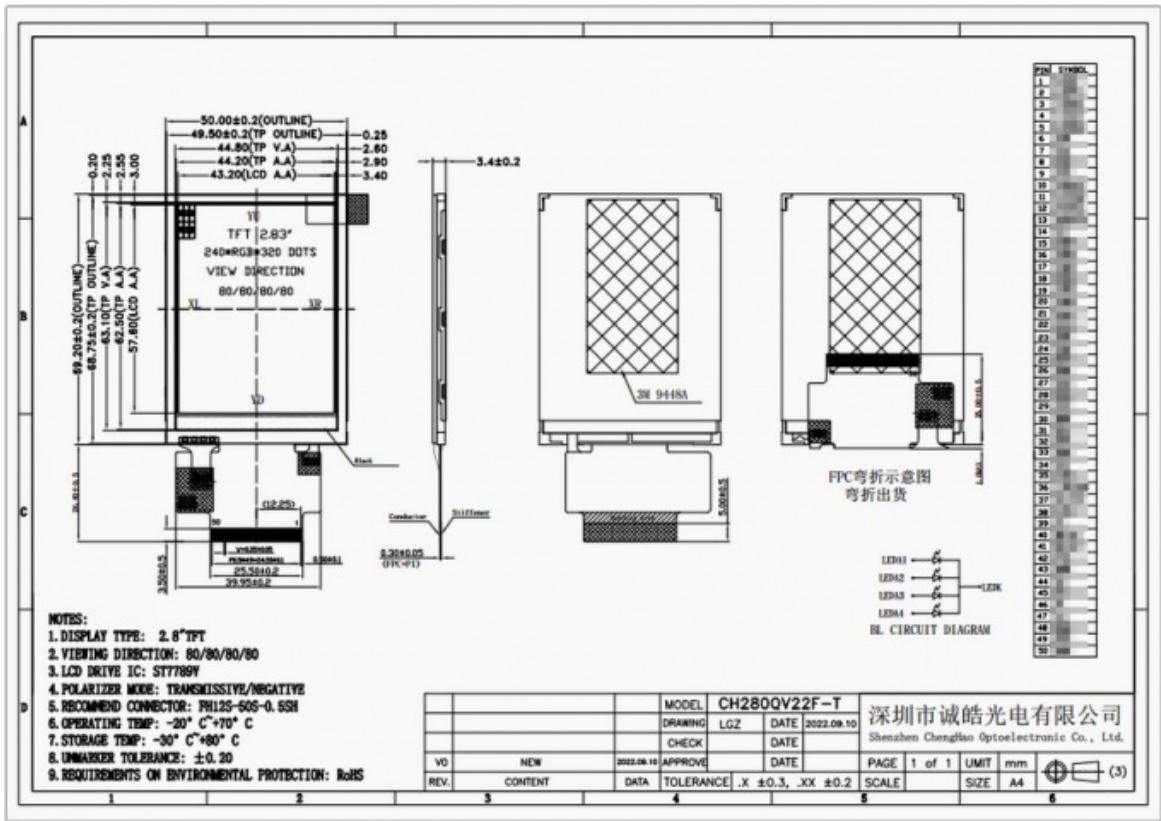
In summary, the CH280QV22F-T combines impressive specifications with customizable features, making it an ideal choice for projects requiring a compact, high-quality display solution.

### Features:

The CH280QV22F-T LCD module sets a new standard in compact display technology, characterized by its significant features. With a modest size of 50x69.2x3.4 mm and a resolution of 240x320, it provides sharp imagery without compromising on space. The IPS technology and a brightness of up to 500 cd/m<sup>2</sup>, adjustable between 300 to 1000 cd/m<sup>2</sup>, ensure that images remain vibrant under various lighting conditions. Notably, the module's viewing angles of 80 degrees in all directions guarantee that the display is easily legible from multiple positions.

Flexibility is a key feature, with an interface supporting SPI, MCU, and RGB, allowing seamless integration into various systems. Additionally, the broad operating temperature range from -20 to 70 degrees Celsius makes this module suitable for diverse applications, from outdoor displays to indoor devices.

In essence, the CH280QV22F-T is an adaptable solution aimed at meeting the high demands of modern display technology, maximizing both functionality and performance.



### Technical Parameters:

Viewing Area Size	44.8*63.1 mm
Display Mode	IPS / Transmissive / Normally Black
Screen Brightness	500 Cd/m <sup>2</sup>
FPC Pin Numbers	50 Pins
Viewing Direction	80/80/80/80
Active Area Size	43.2*57.6 mm
Operating Temperature	-20 ~ +70
Module Size	50*69.2*3.4 mm
Color	65K
Storage Temperature	-30 ~ +80

### Customization:

The CH280QV22F-T module stands out in the industry due to its extensive customization options, allowing businesses to tailor the display to their specific needs. This process starts with an in-depth consultation to identify client requirements, ensuring every modification meets operational goals.

One of the primary customization options available is the **flexible FPC (Flexible Printed Circuit) design**. Clients can specify the shape, thickness, and number of pins, which simplifies integration with existing systems or custom hardware. This adaptability ensures that the display can fit seamlessly into various applications.

Moreover, the CH280QV22F-T provides **multiple interface choices**, supporting not only standard connections like SPI and MCU but also advanced protocols such as MIPI, LVDS, and HDMI. This flexibility allows the display to be utilized in both simple embedded systems and more complex high-definition scenarios.

**Brightness customization** is another significant feature. The display typically offers brightness levels ranging from 300 cd/m<sup>2</sup> to 1000 cd/m<sup>2</sup>, with the capability to reach up to 2800 cd/m<sup>2</sup> for applications needing enhanced visibility in bright conditions. This ensures that the module can be optimized for indoor and outdoor environments, depending on the customer's specifications.

Temperature tolerances can also be adjusted to fit specific use cases. The standard **operating range** is between -20°C and 70°C, but through customization, this can be expanded to cater to extreme environments, making the CH280QV22F-T suitable for outdoor applications or industrial environments where temperature fluctuations occur.

In addition to the aforementioned features, clients can choose from different glass cover options, ensuring the display meets aesthetic and functional needs. Customizations can include **anti-glare finishes** or varying **thicknesses** to enhance durability.

Overall, the customization options for the CH280QV22F-T empower clients to design a display module that not only meets their current

requirements but is also adaptable for future applications.

## Support and Services:

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At Chenghao Optoelectronic, we pride ourselves on offering exceptional support and services tailored to our clients' needs. Our dedicated technical support team is readily available to assist with any inquiries about the CH280QV22F-T LCD module, ensuring seamless integration into your projects.

We provide comprehensive documentation, including technical specifications and guides, to facilitate understanding of the module's features and capabilities. Additionally, our customization specialists work closely with customers to develop a display solution that meets specific requirements, from modifications in interface type to adjustments in brightness and temperature range.

We also offer a warranty on our products, reinforcing our commitment to quality and reliability. Our customer service team is always on hand to address concerns or assist with any post-purchase support, ensuring that your experience with our products is smooth and satisfactory.

## FAQ:

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**Q1: What is the model number of this TFT LCD Capacitive Touchscreen?**

A1: The model number is CH280QV22F-T from Chenghao Optoelectronic.

**Q2: Does this product have any certifications?**

A2: Yes, the CH280QV22F-T touchscreen is certified with CE, RoHS, and FCC.

**Q3: Is there a minimum order quantity (MOQ) for this product?**

A3: No, there is no minimum order quantity; you can order any quantity you need.

**Q4: How is the product packaged for shipping?**

A4: All products are carefully packed to ensure safety. Small sizes are packed using tray plus carton, while bigger sizes use foam slot plus carton. Packaging can also be customized according to customer requirements.

**Q5: What is the typical delivery time and payment terms?**

A5: The delivery time is usually between 3 to 7 days. Payment terms accepted include TT and other methods.



**Shenzhen ChengHao Optoelectronic Co., Ltd.**



+86 755-27806536



add@chenghaolcm.com



chenghaolcd.com

7th floor, building C5, Hengfeng Industrial City, Hangcheng street, Bao'an District, Shenzhen