# 2.8-inch IPS LCD Display Module , Small TFT LCD Touch Screen with Enhanced Brightness and Clarity

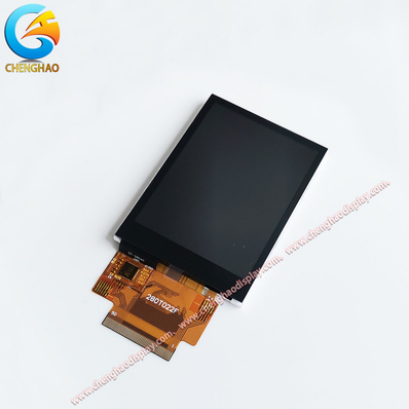
Our Product Introduction

## Basic Information

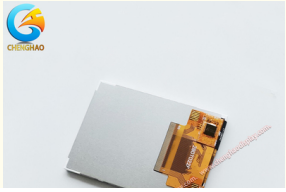
- Place of Origin: China Shenzhen
- Brand Name: Chenghao Optoelectronic
- Certification: RoHS CE FCC
- Model Number: CH280QV22F-CT
- Minimum Order Quantity: 100 pcs
- Packaging Details: All the products are packed in right way to keep it safe. For small sizes of products we use tray + carton, For bigger sizes we use foam slot + carton. we also design packages according to customers' requirements
- Delivery Time: 3~7 Days
- Payment Terms: TT
- Supply Ability: 300K pcs/month

## Product Specification

- Product Name: IPS LCD Display Module
- Display Mode: IPS /transmissive/ Normally Black
- Viewing Direction: 80/80/80/80
- Storage Temperature: -30 ~ +80 °C
- Brightness: 300 Cd/m2
- Touch Panel Interface: I2C
- LCD Interface: SPI+RGB+MCU
- Resolution: 240*320 Dots
- Operating Temperature: -20 ~ +70 °C
- Highlight: **2.8-inch IPS LCD Display Module**, **Small TFT LCD Touch Screen**, **IPS LCD Display Module**



## More Images



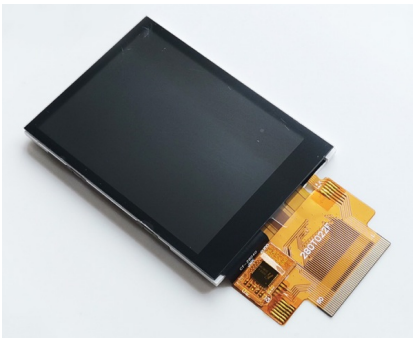
Our Product Introduction

for more products please visit us on chenghaolcd.com

## Product Description

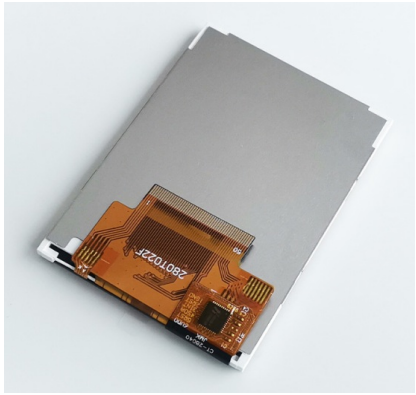
### Product Description:

The CH280QV22F-CT is a high-performance 2.8-inch TFT LCD display module with a resolution of 240x320. It uses IPS display technology to ensure excellent color performance and wide viewing angle. With a brightness of 300 cd/m², this module has good readability in low-light environments and is suitable for use in indoor environments. Its operating temperature range is -20℃ to +70℃, and its storage temperature can reach -30℃ to +80℃, with excellent ability to operate in harsh environments.



The CH280QV22F-CT is equipped with a capacitive touch panel and supports multi-touch, which enhances the human-computer interaction experience. The module has flexible and diverse interface types, including SPI, MCU and RGB, to meet the needs of different applications. In addition, customers can customize the module according to project requirements, such as adjusting the FPC shape, modifying the backlight brightness and selecting different interface types.

The display module is widely used in many fields such as industrial control, smart home, medical equipment and the Internet of Things. It is highly adaptable and can meet the needs of various industries. Whether in embedded systems or consumer electronics, the CH280QV22F-CT can provide reliable display solutions to help customers achieve their project goals.



### Features:

**Key Features of CH280QV22F-CT**

**Display Size:** The module features a 2.8-inch display, making it suitable for various compact devices.

**Resolution:** It has a resolution of 240x320 pixels, providing clear image display.

**Display Mode:** The module utilizes an IPS/transmissive/normally black display mode, ensuring excellent color performance from different viewing angles.

**Brightness:** With a brightness level of 300 cd/m², it is effective in various lighting conditions.

**Interface Types:** The module supports SPI, RGB, and MCU interfaces, facilitating easy connections with other devices.

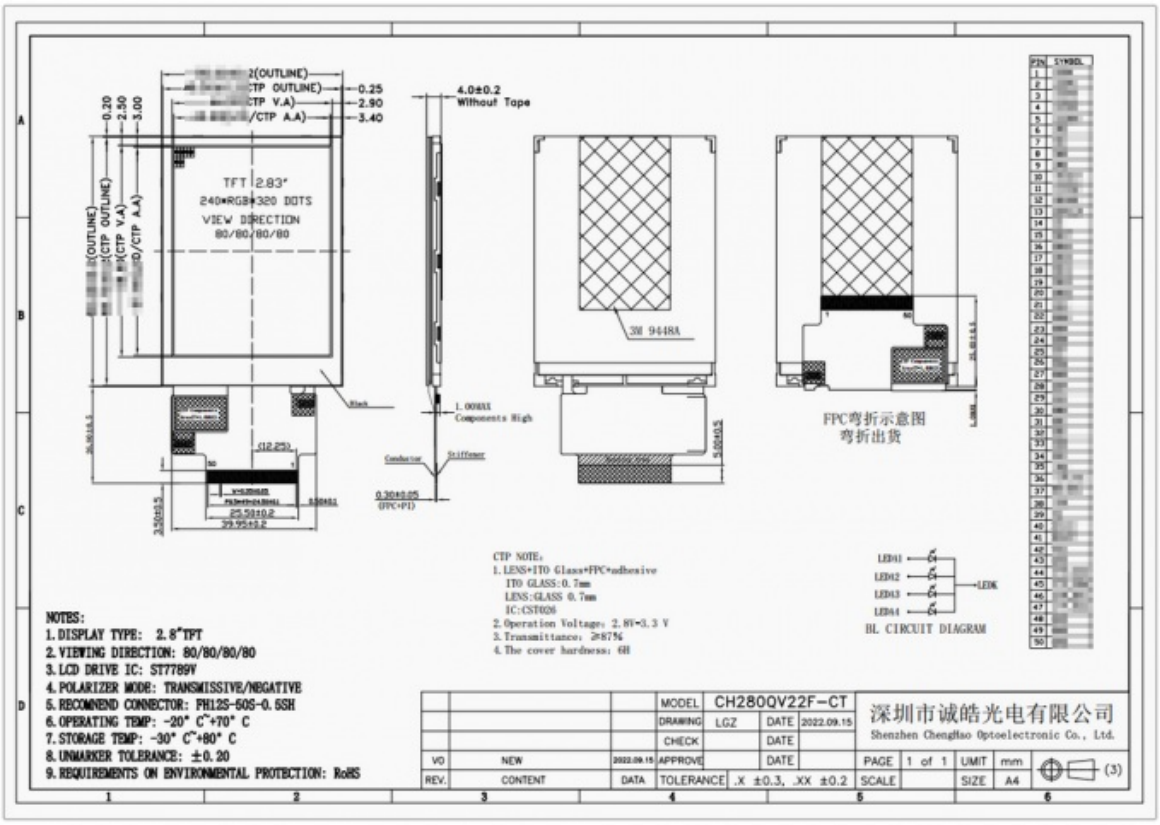
**Touch Panel:** It is equipped with a capacitive touch panel, and the touch interface is I2C, enhancing user interaction.

**Operating Temperature Range:** The module operates reliably within a temperature range of -20℃ to +70℃, suitable for

various industrial and outdoor environments.
**Storage Temperature Range:** It has a storage temperature range of -30°C to +80°C, ensuring reliability under extreme conditions.
**Customization Services:** Customization options are available based on customer requirements, including adjustments to the shape of the FPC and interface types.
**Wide Applications:** The module can be widely used in industrial control, smart home applications, medical devices, and Internet of Things equipment, meeting diverse customer needs.
These features make the CH280QV22F-CT a powerful and versatile display module, suitable for a range of application scenarios.

## Technical Parameters:

| | |
|---|---|
| Storage Temperature | -30 ~ +80 ℃ |
| Viewing Direction | 80/80/80/80 |
| Resolution | 240*320 Dots |
| Operating Temperature | -20 ~ +70 ℃ |
| Touch Panel Interface | I2C |
| Display Mode | IPS /transmissive/ Normally Black |
| Brightness | 300 Cd/m2 |
| Touch Panel Type | Capacitive |
| LCD Interface | SPI+RGB+MCU |




## Applications:

The CH280QV22F-CT display module, renowned for its exceptional performance and versatile design, is extensively utilized in diverse fields to cater to the varying needs of customers.
Primary Application Areas:
**Industrial Control:** This module is instrumental in the display interfaces of industrial equipment like monitoring systems, control panels, and data acquisition devices, enabling real-time monitoring and control of production processes.
**Smart Home:** In smart home devices, the CH280QV22F-CT functions as a control panel, displaying home status, facilitating temperature adjustments, lighting controls, and enhancing the residential user experience.
**Medical Equipment:** The display module is well-suited for medical instruments such as heart rate monitors and blood glucose meters, offering clear visibility of critical health data to aid effective health management by doctors and patients.
**Instrumentation:** In measurement and testing devices, the CH280QV22F-CT provides real-time data and graphical displays, ensuring accurate reading and analysis for users.
**Artificial Intelligence Devices:** This module can be incorporated into smart robots and other AI devices to support human-

machine interaction and enhance equipment intelligence.
**Internet of Things (IoT) Devices:** Excelling in IoT applications, the CH280QV22F-CT connects with sensors and controllers to display real-time data and status, enhancing device smart functionalities.
**Vehicle-Mounted Applications:** Ideal for vehicle display systems like navigation devices and in-car infotainment, the module offers clear visual information to enhance driving safety and convenience.
**Consumer Electronics:** In consumer electronic products, the CH280QV22F-CT can be utilized in digital photo frames and portable devices to provide superior display quality and user experience.
**Security Identification Devices:** Applied in smart access control systems and attendance machines, this module assists in identity verification and record-keeping.
Through these diverse application areas, the CH280QV22F-CT display module showcases its significance and multifunctionality in modern technology, effectively meeting the needs and challenges of various industries.

## Customization:

The CH280QV22F-CT display module offers a comprehensive range of customization options designed to meet specific customer needs across various applications. Here are the key customization features available:
**FPC Design Customization**: Customers can request modifications to the flexible printed circuit (FPC) design, allowing for adjustments in shape and structure to ensure optimal compatibility with their equipment. This customization helps facilitate seamless integration into different devices.
**Backlight Brightness Adjustment**: The brightness of the backlight can be tailored to meet the specific requirements of the application. Customers have the flexibility to select the appropriate brightness level, enhancing visibility in various lighting conditions.
**Interface Type Definition**: The CH280QV22F-CT supports multiple interface types, including SPI, MCU, and RGB. Customers can define the interface type that best suits their system requirements, which simplifies integration and communication with other components.
**Touch Panel Solutions**: For applications that require touch interaction, the module can be equipped with either capacitive or resistive touch panel solutions. This allows customers to choose the touch technology that aligns with their user interface needs, enhancing the overall user experience.
**Functionality Customization**: The display module can be tailored to include specific features based on the customer's application scenario. Enhancements may include sunlight readability, anti-glare properties, or support for a wide temperature range, ensuring that the module meets the unique demands of its intended use.
**Packaging Customization**: If required, the packaging of the CH280QV22F-CT can also be customized. This includes designing the packaging according to customer specifications and selecting appropriate transportation methods to ensure safe delivery.
**Sample Support**: To assist customers in evaluating the module's suitability for their projects, sample units are available upon request. This allows for testing and validation before placing larger orders, ensuring that the final product meets all expectations.
These customization options make the CH280QV22F-CT a versatile choice for various industries, including industrial control, smart home applications, medical devices, and IoT solutions. By offering tailored solutions, Chenghao Optoelectronic ensures that the display module can effectively meet diverse customer needs.

## Support and Services:

Chenghao Optoelectronic is dedicated to providing comprehensive support and services for the CH280QV22F-CT display module, ensuring a seamless experience for customers from the initial inquiry through to implementation.
**Customization Services**: One of the key offerings is the extensive customization available for the CH280QV22F-CT. This includes modifications to the flexible printed circuit (FPC) design, adjustments to the backlight brightness, and the ability to define the interface type according to specific project requirements. This level of customization allows customers to tailor the display module to fit their unique applications.
**Technical Support**: Chenghao provides dedicated technical support to assist customers with any questions or challenges they may encounter during the integration of the CH280QV22F-CT into their systems. This includes troubleshooting, installation guidance, and advice on optimizing the module's performance for various applications.
**Sample Availability**: To help customers evaluate the suitability of the CH280QV22F-CT for their projects, sample units are available upon request. This allows customers to test the module's functionality and compatibility before committing to larger orders, reducing risks and ensuring satisfaction.
**Quality Assurance**: Chenghao Optoelectronic adheres to strict quality management standards throughout the manufacturing process. This commitment to quality ensures that every CH280QV22F-CT module meets high performance and reliability standards, giving customers confidence in their purchase.
**Packaging and Transportation**: The company offers customized packaging solutions designed to protect the display module during transportation. All shipping boxes meet export hardness standards, and additional padding is provided to prevent damage. This attention to detail ensures that products arrive safely and in optimal condition.
**Industry Applications**: The versatility of the CH280QV22F-CT allows it to be used across various industries, including industrial control, smart home devices, medical equipment, and IoT applications. Chenghao provides industry-specific support

to help customers maximize the module's potential in their respective fields.
Through these support and service offerings, Chenghao Optoelectronic ensures that customers have a positive experience with the CH280QV22F-CT display module, reinforcing the company's reputation as a reliable partner in the display technology sector.

## FAQ:

**Q: What is the brand name of this Small LCD Touch Screen?**
A: The brand name is Chenghao Optoelectronic.
**Q: What is the model number of this Small LCD Touch Screen?**
A: The model number is CH280QV22F-CT.
**Q: Where is this Small LCD Touch Screen manufactured?**
A: It is manufactured in China, Shenzhen.
**Q: What certifications does this Small LCD Touch Screen have?**
A: It has RoHS, CE, and FCC certifications.
**Q: What is the minimum order quantity for this Small LCD Touch Screen?**
A: The minimum order quantity is 100 pcs.

**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