



2.8 Inch TFT LCD Display Small LCD Touch Screen with Advanced Capacitive Touch Panel

Our Product Introduction

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



More Images

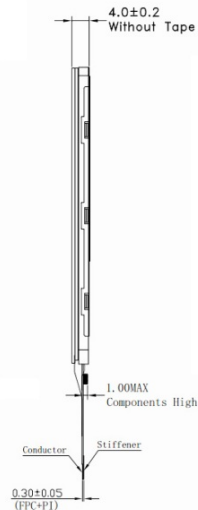
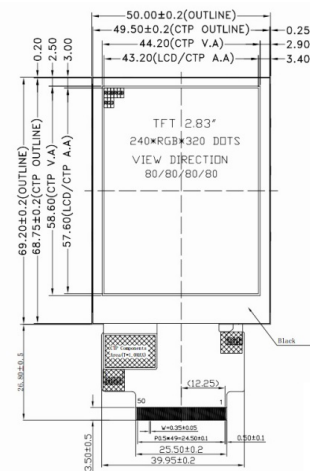




Product Description

Product Description:

CH280QV22F-CT is a high-performance 2.8-inch IPS TFT LCD touch display module designed for a variety of application scenarios. The module has a resolution of 240x320 and can provide clear and delicate image display. Its display mode is IPS/transmissive/normally black, and supports 80/80/80/80 free viewing angles, ensuring excellent color performance and viewing angle stability at different angles. The module brightness is 300 cd/m², which is suitable for use in various low-light or indoor environments.



The display module has an external size of 50*69.2*4 mm and an active area of 43.2*57.6 mm, which is suitable for integration in compact devices. CH280QV22F-CT supports SPI, RGB, and MCU interfaces for easy connection with other devices. At the same time, the module is equipped with a capacitive touch panel, and the touch interface is I2C, which enhances the user interaction experience.

In terms of environmental adaptability, the operating temperature range of CH280QV22F-CT is -20°C to +70°C, and the storage temperature range is -30°C to +80°C, ensuring its stable operation in various industrial and outdoor environments.

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°C to +70°C**, suitable for various industrial and outdoor environments.

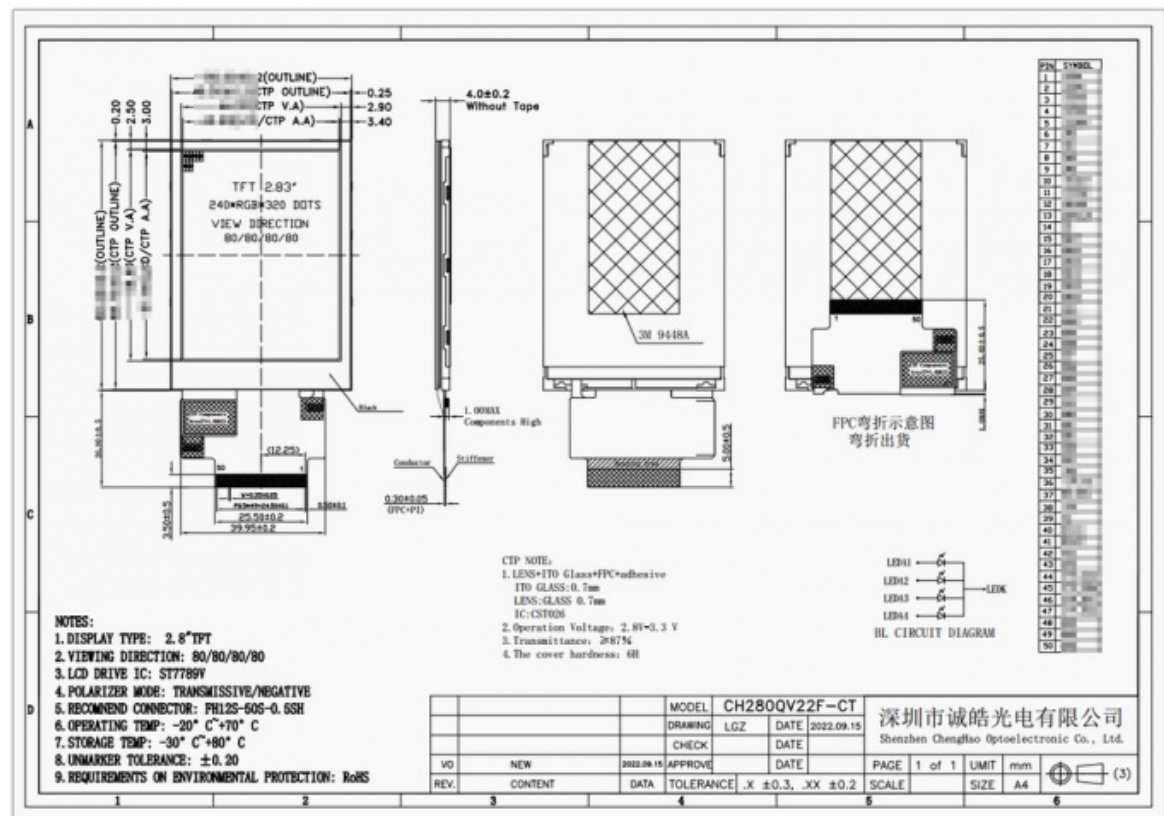
Storage Temperature Range: It has a storage temperature range of **-30°C to +80°C**, ensuring reliability under extreme conditions.

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:

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



Applications:

The CH280QV22F-CT Display Module Applications

The **CH280QV22F-CT** display module, with its exceptional performance and versatile design, is widely used across various fields to meet diverse customer needs. Here are the primary application areas for this product:

Industrial Control

This module can be utilized in the display interfaces of various industrial equipment, such as monitoring systems, control panels, and data acquisition devices, helping operators monitor and control production processes in real-time.

Smart Home

In smart home devices, the **CH280QV22F-CT** can serve as a control panel, displaying home status, temperature adjustments, lighting controls, and enhancing the user experience in residential settings.

Medical Equipment

The display module is suitable for medical instruments such as heart rate monitors and blood glucose meters, providing clear visibility of critical health data to assist both doctors and patients in effective health management.

Critical Health Data Instrumentation

In various measurement and testing devices, the **CH280QV22F-CT** can deliver real-time data and graphical displays, ensuring users can accurately read and analyze information.

Artificial Intelligence Devices

This module can be integrated into smart robots and other AI devices, supporting human-machine interaction and enhancing the

intelligence of the equipment.
Internet of Things (IoT) Devices

The **CH280QV22F-CT** excels in IoT applications, connecting with sensors and controllers to display data and status in real-time, thereby enhancing the smart functionalities of devices.

Vehicle-Mounted Applications

The module is suitable for use in vehicle display systems, such as navigation devices and in-car infotainment systems, providing clear visual information that improves driving safety and convenience.

Consumer Electronics

In consumer electronic products, the **CH280QV22F-CT** can be used in digital photo frames and portable devices, offering excellent display quality and user experience.

Security Identification Devices

This module can be applied in smart access control systems and attendance machines, assisting users in identity verification and record-keeping.

Through these extensive application areas, the **CH280QV22F-CT** display module demonstrates its significance and multifunctionality in modern technology, capable of addressing the needs and challenges of various industries.

Customization:

The CH280QV22F-CT display module offers a range of customization options to meet the diverse needs of customers and various application scenarios. Here are the main customization features available for this product:

FPC Shape and Structure Customization: We can redesign the shape and structure of the flexible printed circuit board (FPC) according to the specific project requirements of customers, ensuring a perfect fit for the installed equipment. This flexibility allows the module to be effectively utilized in a variety of devices.

Backlight Design: We provide multiple options for backlight components, allowing customers to choose the appropriate brightness based on their actual needs. The backlight brightness of the CH280QV22F-CT can reach up to 300 cd/m², making it suitable for different lighting environments.

Interface Type Customization: The display module supports customization of various interface types, including SPI, MCU, and RGB. Customers can define the required interface type according to the specifications of their devices, ensuring compatibility with other components.

Touch Solutions: For customers requiring touch interaction, we offer two touch solutions: capacitive touch and resistive touch. The core of the capacitive touch solution involves designing a touch glass cover that meets the application equipment's requirements in terms of thickness and hardness.

Environmental Adaptability Adjustments: We can adjust the operating temperature range of the module based on customer needs to ensure stable performance under specific environmental conditions. The standard operating temperature range for the CH280QV22F-CT is -20°C to +70°C, with a storage temperature range of -30°C to +80°C.

Appearance Design Customization: We also provide customization options for the module's appearance, including color, size, and shape, based on the branding and product design requirements of customers, enhancing the market competitiveness of the product. Through these customization options, the CH280QV22F-CT display module can meet specific requirements across various industries and applications, ensuring customers receive the best possible user experience and product performance. This flexibility makes the module widely applicable in fields such as industrial control, smart home applications, and medical devices.

FAQ:

What are the key features of the CH280QV22F-CT display module?

The CH280QV22F-CT is a 2.8-inch TFT LCD display module with a resolution of 240x320 pixels. It features an IPS display mode, capacitive touch panel, and supports various interface types including SPI, MCU, and RGB. The module operates within a temperature range of -20°C to +70°C, making it suitable for various applications.

What is the warranty period for the CH280QV22F-CT?

The CH280QV22F-CT display module typically comes with a standard warranty of one year from the date of purchase. This warranty covers manufacturing defects and ensures that customers receive a reliable product.

How can I access after-sales service for the CH280QV22F-CT?

Customers can reach out to our customer service team via email or phone for any after-sales inquiries. Our team is dedicated to assisting you with installation, troubleshooting, or any other concerns related to the product.

Is technical support available for the CH280QV22F-CT?

Yes, we provide comprehensive technical support for the CH280QV22F-CT display module. Customers can contact our technical support team for assistance with product integration, programming, and any technical issues that may arise during use.

Can the CH280QV22F-CT be customized?

Absolutely! The CH280QV22F-CT display module offers various customization options, including modifications to the FPC shape, backlight brightness, and interface types. Customers can also request specific touch panel designs to meet their application requirements.

What industries can the CH280QV22F-CT be used in?

The CH280QV22F-CT is versatile and can be utilized in multiple industries, including industrial control, smart home applications, medical devices, and Internet of Things (IoT) equipment. Its adaptability makes it suitable for a wide range of applications.

What is the operating temperature range for the CH280QV22F-CT?

The CH280QV22F-CT operates effectively within a temperature range of -20°C to +70°C, which allows it to function reliably in various environmental conditions.

How can I place an order for the CH280QV22F-CT?

Orders can be placed directly through our website or by contacting our sales team. We offer factory wholesale pricing and support sample requests for customers looking to evaluate the product before making a larger purchase.

What is the minimum order quantity (MOQ) for the CH280QV22F-CT?

The minimum order quantity for the CH280QV22F-CT is typically set at 100 pieces. This MOQ ensures that we can provide competitive pricing and efficient production for our customers.

Are there any specific certifications for the CH280QV22F-CT?

Yes, the CH280QV22F-CT display module complies with various industry standards and certifications, ensuring its quality and reliability for use in professional applications.



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