

SPI TFT Lcd Displlay 2.8 Inch 320*240 Pixels With Capacitive Touch

Basic Information

Brand Name: Chenghao Optoelectronic

Certification: RoHS CE FCCModel Number: CH280QV22H-CTB

 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

• Touch Type: Capacitive

• Touch Interface: IIC

• Number Of Dots: 240x320

Brightness: 300 Cd/m2 Luminance
Module Size: 56 * 74 * 3.74 Mm
Storage Temperature: -30 ~ +80 °C

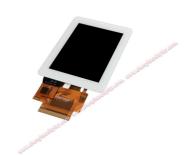
• Lcd Type: 2.8" TFT+ CTP

Display Mode: IPS/Transmissive/Normally Black

• Highlight: 2.8 Inch TFT Lcd Displlay,

Capacitive Touch TFT Lcd Displlay, 320*240 Pixels TFT Lcd Displlay





More Images







Product Description

Product Description:

CH280QV22H-CTB is a high-performance 2.8-inch TFT LCD touch screen module launched by Shenzhen Chenghao Optoelectronics Technology Co., Ltd., designed for various small and medium-sized display needs. The module combines advanced display technology and humanized touch functions and is widely used in industrial control, smart home, medical equipment and other fields.

The module has an outer dimension of $56 \times 74 \times 3.74$ mm and a visible area of 42.8×57.2 mm, providing a clear display effect. CH280QV22H-CTB adopts IPS (In-Plane Switching) technology to ensure a wide viewing angle and true color performance. The resolution is up to 320x240 pixels and can display 262K colors, providing users with a vivid visual experience.

In terms of touch function, the module is equipped with a capacitive touch panel, supports I2C interface, and has an operating voltage range of 2.8V to 3.3V. Its touch glass thickness is 0.7 mm, and the transmittance reaches more than 87%. Combined with the surface hardness of 6H, it ensures good wear resistance and touch sensitivity.





The operating temperature range of CH280QV22H-CTB is -20°C to +70°C, and the storage temperature can reach -30°C to +80°C, enabling it to operate stably in various complex environments. In addition, the module also supports customized services. Customers can adjust the FPC shape, backlight brightness and LCD interface according to specific needs to meet the requirements of different application scenarios. Overall, CH280QV22H-CTB has become an ideal choice for many industry customers with its superior technical performance and flexible customization options, helping the development and application of various innovative products. Chenghao Optoelectronics is committed to providing customers with high-quality display solutions and promoting the development of the industry.

Features:

1. High-resolution display

With a resolution of 320x240 pixels, it provides clear and delicate image effects.

2. IPS technology

 $\label{prop:local_prop} \mbox{Adopts IPS (In-Plane Switching) technology to ensure wide-angle visibility and true color reproduction.}$

3. Rich color support

Supports 262K color display, which can present vivid visual effects and is suitable for a variety of applications.

4. Capacitive touch panel

Equipped with a capacitive touch panel, it is responsive and supports I2C interface to enhance user interaction experience.

5. Strong durability

The touch glass is 0.7 mm thick and has a hardness of 6H, with good wear resistance and impact resistance.

6. Wide operating temperature range

The operating temperature range is -20°C to +70°C, which is suitable for various working environments and has high reliability.

7. Customization options

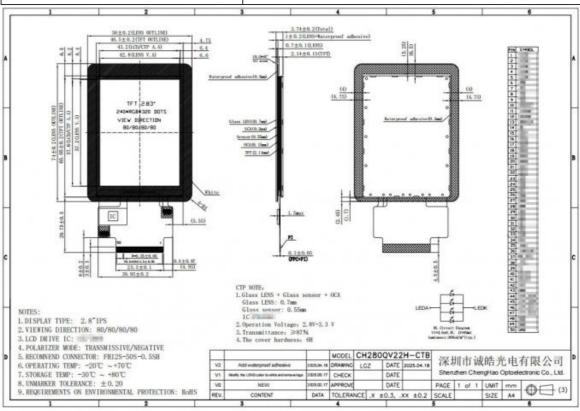
Provide a number of customized services such as FPC shape, backlight brightness and LCD interface to meet customer specific needs.

8. Compact design

The module size is 56 x 74 x 3.74 mm, which is suitable for equipment installation with limited space.

Technical Parameters:

Lcd Type	2.8" TFT+ CTP
Contrast	800:1
Storage Temperature	-30 ~ +80 °C
Viewing Area Size	42.8 * 57.2 Mm
Display Mode	IPS/Transmissive/Normally Black
Lcd Interface	SPI
Module Size	56 * 74 * 3.74 Mm
Operating Temperature	-20 ~ +70 °C
Touch Interface	IIC
Number of dots	240x320



Applications:

CH280QV22H-CTB is a feature-rich 2.8-inch TFT LCD touch screen module that is widely used in multiple industries due to its superior performance and flexible applications. The following are the main application areas of this product:

1. Industrial Automation

In the field of industrial automation, CH280QV22H-CTB is often used in human-machine interfaces (HMIs) and control panels. Its high resolution and wide viewing angle characteristics allow operators to easily monitor the status of equipment, perform real-time data input and operations, thereby improving production efficiency.

2. Smart Home System

This module plays an important role in smart home devices. Users can control various devices in their homes, such as lighting, temperature control, and security systems through a touch screen interface. Its intuitive operating interface enhances the user experience and makes home management more convenient.

3. Medical Instruments

In the medical industry, CH280QV22H-CTB is widely used in various portable medical devices and monitoring instruments. Its superior display effect and good touch performance ensure that medical personnel can quickly obtain important vital signs information and improve diagnosis and treatment efficiency.

4. Portable devices

This module is suitable for various portable consumer electronic products, such as smart watches, palm-sized devices, etc. Its compact size and lightweight design make it very suitable for applications in limited spaces while maintaining excellent display quality.

5. In-vehicle information system

CH280QV22H-CTB is also widely used in in-vehicle infotainment systems. Its high brightness and clear display effect allow drivers to easily obtain navigation and information under various lighting conditions, improving driving safety.

Among various instruments, CH280QV22H-CTB can provide real-time data visualization, which is suitable for environmental monitoring, laboratory equipment and other occasions. Its high reliability and accurate display capabilities help users make scientific analysis and decision-making.

7. Internet of Things (IoT) devices

This module also plays an important role in IoT devices, and can seamlessly connect with other smart devices to provide data interaction and user interface. Its flexibility and customization options make it suitable for a variety of IoT application scenarios.

Customization:

CH280QV22H-CTB is a highly flexible 2.8-inch TFT LCD touch screen module that provides a variety of customization options to meet the needs of different customers. The following are the main customization contents of this product:

1. FPC design adjustment

CH280QV22H-CTB supports the design of flexible printed circuit (FPC) customized according to customer needs. Customers can choose different shapes, lengths and connection methods to better adapt to the internal structure and layout of specific devices.

2. Backlight brightness adjustment

Customers can customize the backlight brightness of the module according to the lighting conditions of the application environment. Chenghao Optoelectronics can provide backlight options with different brightness levels to ensure the best display effect under various lighting conditions.

3. Interface type selection

The LCD interface of CH280QV22H-CTB can be adjusted according to the customer's system requirements. Whether it is SPI or other types of interfaces, customers can choose the interface method that best suits their devices to ensure good compatibility and connection stability.

4. Touch panel characteristics

The design of the touch panel can also be customized. Customers can choose different touch technologies (such as capacitive or resistive), glass thickness, surface treatment, and touch sensitivity to meet the needs of specific applications and user experience.

5. Appearance color and logo

The module allows customers to personalize the appearance, including color schemes and brand logo printing. Customers can choose colors that match their brand image to make the product more prominent in the market.

6. Packaging solutions

Chenghao Optoelectronics also provides customized packaging services to meet the needs of customers in marketing. Whether it is packaging design, material selection or accessory configuration, customers can adjust it according to their sales strategy.

7. Functional expansion

Customers can propose specific functional expansion requirements, such as adding additional interfaces or special functional modules. Chenghao Optoelectronics' engineering team will conduct technical evaluations based on customer requirements and provide feasible solutions.

FAQ:

Q: What is the brand name of this Small LCD Touch Screen product?

- A: The brand name is Chenghao Optoelectronic
- Q: What is the model number of this Small LCD Touch Screen?
- A: The model number is CH280QV22H-CTB.
- Q: What certifications does this Small LCD Touch Screen product have?
- A: This product is certified with BoHS CF and ECC Q: What is the minimum order quantity for this Small LCD Touch Screen?
- A: The minimum order quantity is 100 pieces.
- Q: What are the packaging details for this Small LCD Touch Screen?

A: All the products are packed in the right way to keep them safe. For small sizes of products, we use tray + carton, and for bigger sizes, we use foam slot + carton. We also design packages according to customers' requirements.











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