2.8 Inch Capacitive TFT LCD Touch Screen 240*320 For Industrial Applications

Basic Information

- Brand Name:
- Certification: RoHS CE FCC
- Model Number:
- Minimum Order Quantity:
- 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

Chenghao Optoelectronic

CH280QV22H-CTB

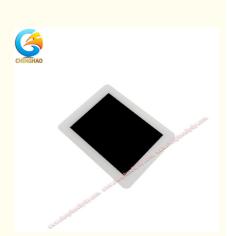
100 Pcs

- Delivery Time: 3~7 Days
 Payment Terms: TT
- a ayment renns.
- Supply Ability: 300K Pcs/month

Product Specification

• Touch Type:	Capacitive
Brightness:	300 Cd/m2 Luminance
Module Size:	56 * 74 * 3.74 Mm
Lcd Type:	2.8" TFT+ CTP
Contrast:	800:1
Lcd Interface:	SPI
Display Mode:	IPS/Transmissive/Normally Black
Operating Temperature:	-20 ~ +70 °C
• Highlight:	2.8 Inch LCD Touch Screen, 240*320 LCD Touch Screen,

Industrial Applications LCD Touch Screen



More Images







Product Description:

for more products please visit us on chenghaolcd.com

CH po re Ev dis

CH280QV22H-CTB is a 2.8-inch color TFT LCD module designed for embedded systems and portable terminals with capacitive touch function. The module adopts IPS technology with a resolution of 320x240, ensuring that the picture color is full and not affected by the viewing angle. Even in the side view state, the image clarity and color consistency are still maintained, meeting the display requirements of multi-directional interactive devices.

This product combines the SPI display interface with the I2C touch communication method, effectively reducing the motherboard resource usage and improving the integration and flexibility of the whole machine design. The outer layer of the panel adopts a cover glass with high light transmittance, and the surface hardness reaches 6H, which not only enhances the wear resistance, but also improves the overall texture and service life of the product.

The overall structure of the module is compact and has excellent size control, which is easy to integrate into various small devices with limited space. At the same time, its backlight system adopts an energy-saving LED solution, which provides stable brightness while taking into account low power consumption performance, which is very suitable for equipment scenarios with high battery life requirements.



In terms of adaptability, CH280QV22H-CTB supports stable operation in the temperature range of -20°C to +70°C, and is suitable for industrial, power, agricultural, medical and outdoor terminal equipment. In addition, the module provides a number of customized services from interface definition, display brightness to structural matching, which greatly improves its adaptability in different industries.

With high-definition display, responsive touch, and excellent stability, CH280QV22H-CTB has become an ideal human-machine interface solution for various intelligent terminal systems. Whether it is industrial automation, intelligent control or portable device development, this module can provide an excellent display interaction experience.

Features:

2.8-inch TFT full-color LCD display

Adopts high-brightness color TFT panel, presents delicate picture quality and bright colors, and is suitable for a variety of visual demand scenarios.

IPS full-viewing angle technology

With excellent viewing angle performance, content can be clearly read from multiple directions, suitable for multi-angle operation environment.

320×240 resolution

Provides standard QVGA clarity to meet the daily display needs of images, icons and text.

Integrated capacitive touch screen

Built-in capacitive touch function, supports light touch operation, fast response, suitable for modern human-computer interaction applications.

SPI + I2C dual communication interface

The display part uses SPI interface, and the touch part communicates through I2C, which greatly improves the system connection flexibility and expansion capabilities.

Anti-reflective surface design

The screen surface has an anti-glare effect to ensure strong readability in a strong light environment.

6H hardness cover glass

The panel is made of high-strength glass material, with good scratch and impact resistance, extending the service life of the module. Ultra-thin module structure

The overall thickness is well controlled, suitable for embedding in compact equipment, saving valuable space for the whole machine. Low-power LED backlight system

The backlight adopts energy-saving LED design, which prolongs the service life while taking into account power consumption management, suitable for long-term operation scenarios.

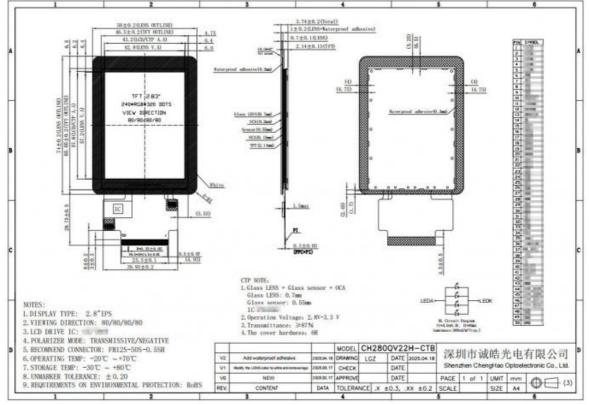
Wide operating temperature adaptation range

Supports operation in -20°C to +70°C environments, and can maintain stable performance under a variety of industrial and outdoor conditions.

Supports customized design

Whether it is interface definition, size structure or LOGO printing, the module supports multiple customization options to meet the needs of personalized project development.

Technical Parameter	Value
Module Size	56 * 74 * 3.74 mm
LCD Type	2.8" TFT+ CTP
Active Area Size	43.2 * 57.6 mm
LCD Interface	SPI
Brightness	300 Cd/m2 Luminance
Touch Interface	lic
Storage Temperature	-30 ~ +80 °C
Display Mode	IPS/Transmissive/Normally Black
Viewing Area Size	42.8 * 57.2 mm
Operating Temperature	-20 ~ +70 °C



Technical Parameters:

Applications:

As a 2.8-inch full-color TFT display module with integrated capacitive touch function, CH280QV22H-CTB has a wide range of adaptability in multiple industries and systems with its good display performance and flexible interface combination. The following are typical application areas of this module:

(1) Portable smart terminal

Due to its small size and low power consumption, the module is suitable for integration in various handheld devices, such as portable data collectors, handheld scanners, outdoor navigators, etc., supporting touch operation and improving the human-computer interaction experience.

(2) Smart home control panel

CH280QV22H-CTB has good image display effect and sensitive touch response. It is often used in home scenes such as smart switches, thermostats, and lighting control terminals, providing an intuitive graphical operation interface.

(3) Agricultural and greenhouse automation equipment

Its stable operation capability in a wide temperature environment makes it a reliable display and control module in agricultural environment monitoring, irrigation controllers and other equipment, allowing users to view sensor data in real time and execute operation instructions.

(4) Wearable and health devices

In smart health instruments such as blood pressure monitors and portable ECG devices, CH280QV22H-CTB provides a clear display interface and is compatible with low-power embedded control platforms, making it easy to develop highly integrated products.

(5) Transportation information system

This module is suitable for scenarios such as electric scooters, central control vehicle accessories, and shared electric motorcycle instruments. It serves as an information interface to display real-time data such as speed, power, and Bluetooth status to enhance the user's driving experience.

(6) Industrial portable test instruments

In field test equipment such as voltage detectors, water quality analyzers, and laser rangefinders, this module can not only be used as a data display window, but also can be used to set parameters and switch modes through touch operations.

(7) Consumer electronics embedded devices

In systems including ordering terminals, entertainment controllers, and small POS devices, CH280QV22H-CTB can be used as the main display module to provide efficient visual and operational support.

(8) Charging pile and energy terminal display screen

The module's anti-interference ability and environmental adaptability make it suitable for new energy charging piles, battery management systems and other environments, serving as an information interaction interface between users and the system.

Packaging and delivery:

In order to ensure the safety and integrity of the CH280QV22H-CTB display module during transportation, we have developed a professional and standardized packaging and logistics plan to ensure that the product is not damaged before it reaches the hands of customers, improving the receiving experience and subsequent assembly efficiency.

In the packaging process, we use a multi-layer protective structure for packaging. Each module is placed in an anti-static bag to prevent electrostatic discharge from damaging the TFT LCD screen or touch circuit. The product label is posted at the seal of the anti-static bag, indicating the model, batch and serial number for easy traceability and management.

Subsequently, a single product or several modules are classified according to the specifications and sizes, and loaded into a customized high-strength EVA foam middle partition box to achieve physical isolation between each module to prevent vibration and friction from scratching the screen or FPC cable. In addition, to prevent moisture, desiccant and humidity indicator cards are placed in the packaging box to ensure that the product is dry during the entire transportation process.

The whole box of modules is then placed in a five-layer reinforced corrugated carton, and clearly marked "fragile", "moisture-proof" and "pressure-proof" labels are affixed to the outside, indicating the product information and the customer's delivery address. Each carton comes with a packing list, which records the quantity and material number in the box in detail.

In terms of delivery methods, customers can choose air, sea or express delivery services according to actual needs. For overseas customers, we cooperate with experienced international logistics service providers and support DDP (Delivered Duty Paid) delivery terms to facilitate customers to receive goods seamlessly. All goods are subject to secondary inspection before leaving the factory, and detailed shipping records and invoices are provided.

In addition, for urgent orders and small batch orders, we support customized batch shipments to meet customers' project progress and delivery arrangements to the greatest extent.

Through scientific and rigorous packaging technology and diversified logistics options, CH280QV22H-CTB has been highly recognized for its transportation efficiency and product safety worldwide, helping customers to efficiently promote the mass production and deployment of terminal products.

FAQ:

Q: What is the brand name of this Small TFT Lcd Display?

- A: The brand name is Chenghao Optoelectronic.
- Q: What is the model number of this Small LCD Screen?
- A: The model number is CH280QV22H-CTB.
- Q: What certifications does this Small LCD Touch Screen have?
- A: This product is certified with RoHS, CE, and FCC.
- 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.
- Q: What is the delivery time for this Small LCD Touch Screen?
- A: The delivery time is 3 to 7 days.
- Q: What are the payment terms for this Small LCD Touch Screen?

A: The payment terms are TT (Tele Q: What is the supply ability of t A: The supply ability is 300,000 pie	his Small LCD Touch Screen?
Shenzhen ChengHao Optoelectronic Co., Ltd.	
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