



2.8 Inch 240x320 SPI TFT LCD Display Module With Wide Temperature Range

Our Product Introduction

for more products please visit us on chenghaolcd.com

Basic Information

- Brand Name: Chenghao Optoelectronic
- Certification: RoHS CE、FCC
- Model Number: CH400WV22C-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

- Module Type: 2.8 TFT LCD Display
- Display Mode: Transmissive / Positive
- Viewing Direction: 6 O'clock
- Resolution: 240(RGB) X 320 Dots
- LCD Interface: SPI
- Brightness: 300 Cd/m² (typ.)
- Touch Type: None (RTP Optional)
- Touch Interface: N/A
- Operating Temperature: -20°C ~ +70°C
- Storage Temperature: -30°C ~ +80°C
- Highlight: **2.8 Inch SPI TFT LCD Display ,
240x320 TFT LCD Module,
Wide Temperature TFT Display**



More Images



Product Description

Product Description

The CH280QV39F is a 2.8-inch TFT LCD display module featuring 240(RGB)x320 dot resolution, delivering sharp and vivid images for a wide range of embedded and industrial applications. Built around the widely adopted ***** driver IC, this module supports standard 4-wire SPI interface, ensuring seamless integration with MCU-based systems. The transmissive display mode with LED backlight provides consistent brightness and excellent color reproduction in various lighting environments.

Designed for reliability in demanding conditions, the CH280QV39F operates stably across a wide temperature range from -20 degrees C to +70 degrees C, making it suitable for industrial equipment, handheld devices, and outdoor instrumentation. The compact module form factor with a flexible FPC enables easy installation in space-constrained designs. As a professional TFT LCD display module manufacturer, Chenghao Optoelectronics ensures strict quality control and RoHS compliance for every unit produced.

Features

240x320 Resolution

QCIF resolution with RGB stripe pixel arrangement, providing clear and detailed visual output for small-format display needs.

6 O'Clock Viewing Direction

Optimized viewing from the bottom side, ideal for handheld and vertical mounting configurations.

300 cd/m2 Brightness

Standard brightness with LED backlight, ensuring good visibility in indoor and ambient-lit environments.

4-Wire SPI Interface

Compact SPI communication reduces pin count and simplifies PCB layout, perfect for embedded system integration.

Wide Operating Temperature

Operating range from -20 degrees C to +70 degrees C supports deployment in industrial and outdoor environments.

18-Pin Flexible FPC

Compact FPC enables easy connection and mechanical integration in space-constrained device designs.

RoHS Compliant

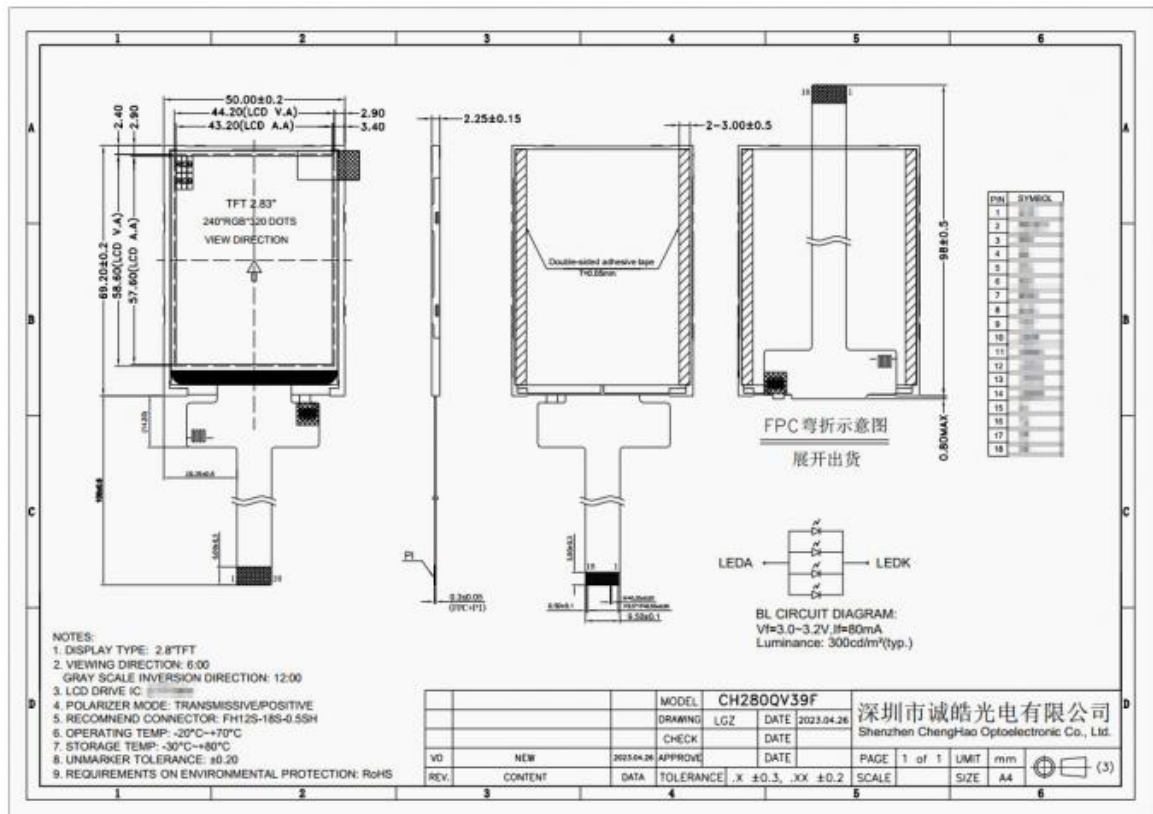
Environmentally friendly production with full RoHS compliance, ensuring safe use across global markets.

Optional Touch Panel

Supports optional RTP or CTP integration, enabling touch interaction while maintaining a slim module profile.

Technical Parameters

Parameter	Specification
Module No	CH280QV39F
Module Type	2.8 TFT LCD Display
Display Mode	Transmissive / Positive
Viewing Direction	6 o'clock
Resolution	240(RGB) x 320 Dots
LCD Interface	SPI
Brightness	300 cd/m2 (typ.)
Touch Type	None (RTP Optional)
Touch Interface	N/A
Operating Temperature	-20C ~ +70C
Storage Temperature	-30C ~ +80C
Module Size	50.0 x 20.25 x 2.0 mm
Active Area Size	14.20 x 43.20 mm
FPC Pin Number	18 Pins
Polarizer Mode	Transmissive / Positive
Recommended Connector	FH12S-18S-0.5SH
Backlight Circuit	Vf=3.0~3.2V, If=80mA



Modification and Customization

As a large-scale display module manufacturer, Chenghao Optoelectronics can provide modification and customization services based on its existing mass-produced module model CH280QV39F. Supported modifications include, but are not limited to: display brightness enhancement, FPC shape and structure customization, interface type conversion (SPI, MCU, RGB, etc.), touch screen integration (CTP or RTP), screen anti-glare coating, and electromagnetic interference resistance optimization.

Of course, if CH280QV39F is completely incompatible with your requirements, we can also provide entirely new customization services directly based on your project needs. All parameters of the display module can be determined 100% according to your project specifications. This means that you only need to state your requirements, and our engineers will develop a solution unique to your project needs within their capabilities (production process).

Support and Services

Customized Services

We are a professional display module manufacturer with a dedicated engineering team, capable of providing customized display module services entirely according to customer project requirements.

Highly Competitive Pricing

As a professional source factory for display modules, partnering with us eliminates middlemen and provides you with first-hand factory pricing.

24/7 Online Technical Assistance

We maintain a responsive customer service team that works efficiently with our engineering team to provide efficient communication channels based on your needs.

Long-Term Stable Supply

With years of deep expertise in the display module industry and our own raw material supply chain, we ensure long-term stable production and safeguard your project continuity.

FAQ

Q: Can the brightness and FPC of the CH280QV39F be modified according to customer requirements?

A: Of course, as a large display module manufacturer, Chenghao Optoelectronics can provide customers with modification and customization services based on existing display modules, including modifications of display brightness, ribbon cables, interfaces, and other aspects.

Q: Are you a genuine LCD manufacturer?

A: Yes, we are a genuine TFT LCD display module manufacturer with our own production facility. Our company has been operating since 2015 and is certified with ISO 9001, ISO 14001, CE, RoHS, and other quality standards.

Q: What is the minimum order quantity for the CH280QV39F?

A: The minimum order quantity is 100 pieces. Sample delivery takes 3-7 days. Large-quantity orders are shipped according to the production schedule agreed upon with the customer.

Q: Does the CH280QV39F support touch functionality?

A: The CH280QV39F base module does not include a touch panel. However, we can provide optional resistive touch panel (RTP) integration or capacitive touch panel (CTP) customization upon request.

Q: What is the typical delivery time for bulk orders?

A: Delivery time for bulk orders depends on the order quantity and current production schedule. Our standard production capacity is 300,000 pieces per month, ensuring timely delivery for most order volumes.



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