

24 Pins Touchscreen Display Module 4.3 Inch IPS TFT Lcd For Wide Temperature

Basic Information

Brand Name: Chenghao Optoelectronic

Certification: CE \ RoHS \ FCCModel Number: CH430WQ22A-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 DaysPayment Terms: TT Or Others

• Supply Ability: 50000000 Pcs/month





Product Specification

Viewing Direction: 80/80/80/80Resolution: 800x480 Dots

Color: 16M
Lcd Type: 5.0" TFT
Operating Temperature: -20 ~ +70

Display Mode: IPS/Transmissive/Normally Black

Touch Type: Capacitive Touch

• Storage Temperature: -30 ~ +80

• Highlight: 4.3 inch IPS TFT LCD,

24 pins touchscreen display module, wide temperature LCD display module





More Images





Product Description

Product Description:



The CH430WQ22A-CT is a high-performance 4.3-inch TFT LCD module engineered for demanding industrial, automotive, and consumer applications. It features a landscape-oriented IPS panel with a sharp 800x480 resolution, delivering vibrant 16M-color visuals. The wide 80/80/80 viewing angles ensure consistent image quality from almost any direction. Integrated capacitive touch technology (IIC interface) offers a smooth and responsive user experience. Built to withstand challenging environments, it operates reliably from -20°C to +70°C. For versatile system integration, the module utilizes a 24-pin FPC and primarily supports an SPI interface, with options for MCU, RGB, LVDS, and others upon customization. Its compact dimensions (105.5x67.2x4.75mm) and high brightness (standard 800 cd/m²) make it an ideal solution for spaceconstrained, high-visibility applications.

Features:

The CH430WQ22A-CT distinguishes itself through a combination of robust specifications and adaptable design:

Optimized Compact Form Factor: With a module size of 105.5x67.2mm and a slim 4.75mm profile, it maximizes display area (95.04x53.86mm active area) within a minimal footprint, perfect for portable and embedded devices.

Clarity and Color Performance: The 800x480 WVGA resolution provides sufficient detail for complex interfaces, while the 16M-color depth and 800:1 contrast ratio ensure rich, true-to-life imagery.

Superior Visibility: The IPS technology guarantees consistent color and clarity across an ultra-wide 80-degree viewing cone in all directions. A high-brightness 800 cd/m² backlight (customizable up to 1500 cd/m²) ensures readability even in direct sunlight.

Versatile Connectivity: While default configured with an SPI interface on a 24-pin FPC, its architecture supports easy adaptation to MCU, RGB, or LVDS protocols, offering significant flexibility for diverse hardware platforms.

Environmental Resilience: Engineered for reliability, it supports an extended operating temperature range (-20°C to +70°C) and storage conditions down to -30°C, making it suitable for both indoor and outdoor applications.

Modern Touch Interface: The inclusion of a projected capacitive touch panel (PCAP) with IIC communication provides a durable, multitouch capable solution resistant to surface wear, outperforming traditional resistive touchscreens.

Technical Parameters:

Screen Brightness	800 Cd/m ²	
Storage Temperature	-30 ~ +80	
Touch Type	Capacitive Touch	
Touch Interface	IIC	
Color	16M	
Display Mode	IPS / Transmissive / Normally Black	
Contrast	800	

Operating Temperature	-20 ~ +70	-20 ~ +70 5.0" TFT 80/80/80/80			
LCD Type	5.0" TFT				
Viewing Direction	80/80/80/80				
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	AAA A VLED-	1. Glass Lens*ITO Glass* Glass Lens:0, 7mm Glass sensor:0, 55mm IC:	+FPC+Foam	20 21 22	

Customization:

2. VIEWING DIRECTION: 80/80/80/80 3. LCD DRIVE IC: LT

5. OPERATING TEMP: -20° C~+70° 6. STORAGE TEMP: -30° C~+80° C

4. POLARIZER MODE: TRANSMISSIVE/NEGATIVE

7. UNMARKER TOLERANCE: ±0,20 8. REQUIREMENTS ON ENVIRONMENTAL PROTECTION: RoHS

At Chenghao Optoelectronic, we understand that standard modules may not fit every unique application. The CH430WQ22A-CT serves as an excellent platform for extensive customization to meet your exact specifications. Our flexible customization process includes:

V2 Modify FPC structure and interface

V1 Modify FPC and interface de

MODEL CH430WQ22A-CT

DATE DATA TOLERANCE X ±0.3, XX ±0.2 SCALE

2034.08.13 DRAWING LGZ DATE 2024.06.13 2034.03.01 CHECK DATE

深圳市诚皓光电有限公司

Shenzhen ChengHao Optoelectronic Co.,Ltd.

SIZE A4

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- (1) Interface & FPC Tailoring: Choose the optimal interface (SPI, MCU, RGB, MIPI, LVDS, EDP, HDMI) for your system's mainboard. We can customize the FPC's shape, length, stiffness, and pinout (beyond the standard 24-pin) to fit your mechanical design and connection needs.
- (2) Optical & Environmental Tuning: Adjust the backlight brightness from a standard range (300-1000 cd/m²) up to 2800 cd/m² for sunlight readability. We can apply anti-glare (AG) or anti-reflection (AR) coatings. Operating temperature can be tailored for commercial (0~50°C), industrial (-20~70°C), or extreme environments (-45~90°C).
- (3) Mechanical & Touch Modifications: Customize the cover glass shape, thickness, and add openings or silk-screen printing (logos, icons). You can opt for different touch solutions: keep the capacitive touch, switch to resistive touch for stylus input, or order a display-only version without a touch panel.
- (4) Enhanced Reliability Features: Add EMI shielding or strengthened bonding to ensure stable operation in electrically noisy environments

Our engineering team collaborates with you from concept to production, ensuring your customized CH430WQ22A-CT variant integrates seamlessly and performs reliably.

Support and Services:

Chenghao Optoelectronic is committed to providing outstanding support and services for the CH430WQ22A-CT module. Our dedicated customer service team is available to assist you with any inquiries related to the module's specifications, installation, and customization

We offer detailed documentation, including assembly guides, technical specifications, and customization processes, ensuring that you can maximize the module's capabilities. In addition, our technical support team is equipped to help troubleshoot any problems that may arise post-installation, offering guidance to ensure smooth operation.

We also maintain a robust warranty policy, reinforcing our commitment to quality and customer satisfaction. Trust Chenghao Optoelectronic as your reliable partner in achieving custom display solutions tailored to your specific needs.

FAQ:

Q1: What is the model number of the LCD Display Module?

A1: The model number of the LCD Display Module is CH430WQ22A-CT.

Q2: What certifications does this LCD Display Module have?

- A2: This product is certified with CE, RoHS, and FCC certifications.
- Q3: What is the minimum order quantity for the Chenghao Optoelectronic LCD Display Module?
- A3: The minimum order quantity is 100 pieces.
- Q4: How is the product packaged to ensure safety during shipping?
- A4: All products are packed appropriately to keep them safe. Small size products are packed using tray plus carton, while bigger size products use foam slot plus carton. Packaging can also be customized according to customers' requirements.
- Q5: What are the typical delivery times and payment terms?
- A5: The delivery time is typically 3 to 7 days. Payment terms include TT (Telegraphic Transfer) or other agreed methods.
- Q6: What is the supply capacity of this LCD Display Module?
- A6: Chenghao Optoelectronic can supply up to 50,000,000 pieces per month.



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