

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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WEB: <https://www.winstar.com.tw> E-mail: sales@winstar.com.tw

SPECIFICATION

MODULE NO.: **WF70C9SYAB4MNC10**

General Specification

| Item | Dimension | Unit |
|------------------|------------------------------------------|------|
| Size | 7.0 | inch |
| Dot Matrix | 280 x RGBx1424(TFT) | dots |
| Module dimension | 43.3(H) x 201.0(V) x 5.76(D) | mm |
| Active area | 33.60 (H) x 170.88(V) | mm |
| Pixel pitch | 0.12(H) x 0.12(V) | mm |
| LCD type | TFT, Normally Black, Transmissive | |
| Viewing Angle | 80/80/80/80 | |
| Aspect Ratio | 1:5 | |
| TFT Driver IC | OTA7290N-C or equivalent | |
| TFT Interface | 4-Lanes MIPI | |
| PCAP Driver IC | GT911 or equivalent | |
| PCAP Interface | I2C | |
| PCAP FW Version | 71 | |
| PCAP Resolution | X:1424 , Y:280 | |
| Backlight Type | LED, Normally White | |
| Touch Panel | Projected Capacitive Touch Screen (PCAP) | |
| Surface | Glare | |

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

| Item | Symbol | Min | Typ | Max | Unit |
|-----------------------|--------|-----|-----|-----|------|
| Operating Temperature | TOP | -20 | — | +70 | °C |
| Storage Temperature | TST | -30 | — | +80 | °C |

Electrical Characteristics

TFT LCD Module

| Item | Symbol | Min. | Typ. | Max. | Unit |
|-----------------------|-----------------|---------|------|---------|------|
| Analog Supply voltage | VCC | 3.0 | 3.3 | 3.6 | V |
| Analog supply current | I _{cc} | - | 115 | 175 | mA |
| Logic input voltage | V _{IH} | 0.7*VCC | - | VCC | V |
| | V _{IL} | GND | - | 0.3*VCC | V |
| Supply CTP | VDDT | 2.8 | 3.3 | 3.6 | V |
| | IDDT | - | 12.2 | 20 | mA |

Backlight Driving Conditions

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---------------|--------|------|--------|------|------|
| LED current | - | - | 240 | - | mA |
| LED voltage | VLED+ | 5.5 | 6.0 | 6.8 | V |
| LED Life Time | - | - | 50,000 | - | Hr |

Interface

LCM PIN Definition

| Pin No. | Symbol | Description |
|---------|--------|------------------------------------------------------------------------------------------|
| 1 | GND | Ground. |
| 2 | D3N | MIPI data input pins |
| 3 | D3P | |
| 4 | GND | Ground. |
| 5 | D2N | MIPI data input pins |
| 6 | D2P | |
| 7 | GND | Ground. |
| 8 | CLKN | MIPI clock input pins. |
| 9 | CLKP | |
| 10 | GND | Ground. |
| 11 | D1N | MIPI data input pins |
| 12 | D1P | |
| 13 | GND | Ground. |
| 14 | D0N | MIPI data input pins |
| 15 | D0P | |
| 16 | GND | Ground. |
| 17 | GND | Ground. |
| 18 | TE | Tearing effect output pin to synchronize to frame writing. If not used, open this pin |
| 19 | RESET | Reset signal pin |
| 20 | GND | Ground. |
| 21-23 | VCC | Power supply |
| 24 | GND | Ground. |
| 25-26 | NC | Not connect |
| 27-28 | VLED- | LED cathode |
| 29-30 | VLED+ | LED anode |

Touch FPC Pin Assignment

| Pin No. | Symbol | Description |
|---------|--------|-------------------------------|
| 1 | VSS | Ground |
| 2 | INT | Interrupt request to the host |
| 3 | RST | Wakeup request from the host |
| 4 | SDA | I2C data input and output |
| 5 | SCL | I2C clock input |
| 6 | VDDT | Power supply |

Contour Drawing

