

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.: WF70C4SIAGDNGO#

General Specifications

| Item | Dimension | Unit |
|--------------------------------|-----------------------------------------|------|
| Size | 7.0 | inch |
| Dot Matrix | 800 x RGBx480(TFT) | dots |
| Module dimension | 165.0(W) x 104.6(H) x10.2(MAX)(D) | mm |
| Active area | 152.4 x 91.44 | mm |
| Pixel pitch | 0.1905x 0.1905 | mm |
| LCD type | TFT, Normally White, Transmissive | |
| View Direction | 12 o'clock | |
| Gray Scale Inversion Direction | 6 o'clock | |
| Aspect Ratio | 16:9 | |
| Backlight Type | LED, Normally White | |
| TFT Interface | 18-bit RGB | |
| PCAP IC | ILI2130 or Equivalent | |
| PCAP Interface | I2C | |
| PCAP FW Version | 0x07.0x00.0x00.0x00.0x70.0x44.0x0A.0x02 | |
| PCAP Resolution | 16384*16384 | |
| With /Without TP | With PCAP | |
| Surface | Glare | |

Absolute Maximum Ratings

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

Electrical Characteristics

Operating conditions:

| Item | Symbol | Condition | Min | Typ | Max | Unit |
|------------------------|------------------|---------------|-----|-----|-----|------|
| Supply Voltage For LCM | Vcc | - | 3.0 | 3.3 | 3.6 | V |
| Supply Current For LCM | Icc | Black Pattern | — | 140 | 210 | mA |
| Supply PCAP | VDDT | - | 3.0 | 3.3 | 3.6 | V |
| | I _{CTP} | - | — | 62 | 93 | mA |

Interface

1. LCM PIN Definition

| Pin | Symbol | Function |
|-----|--------|----------------------------------|
| 1 | GND | Power Ground |
| 2 | GND | Power Ground |
| 3 | NC | Not Connect |
| 4 | Vcc | Power Supply for Digital Circuit |
| 5 | Vcc | Power Supply for Digital Circuit |
| 6 | Vcc | Power Supply for Digital Circuit |
| 7 | Vcc | Power Supply for Digital Circuit |
| 8 | NC | Not Connect |
| 9 | DE | Data Enable |
| 10 | GND | Power Ground |
| 11 | GND | Power Ground |
| 12 | GND | Power Ground |
| 13 | B5 | Blue Data 5 (MSB) |
| 14 | B4 | Blue Data 4 |
| 15 | B3 | Blue Data 3 |
| 16 | GND | Power Ground |
| 17 | B2 | Blue Data 2 |
| 18 | B1 | Blue Data 1 |
| 19 | B0 | Blue Data 0 (LSB) |
| 20 | GND | Power Ground |
| 21 | G5 | Green Data 5 (MSB) |
| 22 | G4 | Green Data 4 |
| 23 | G3 | Green Data 3 |
| 24 | GND | Power Ground |
| 25 | G2 | Green Data 2 |
| 26 | G1 | Green Data 1 |
| 27 | G0 | Green Data 0(LSB) |
| 28 | GND | Power Ground |

| | | |
|----|------|------------------------------------------------------|
| 29 | R5 | Red Data 5 (MSB) |
| 30 | R4 | Red Data 4 |
| 31 | R3 | Red Data 3 |
| 32 | GND | Power Ground |
| 33 | R2 | Red Data 2 |
| 34 | R1 | Red Data 1 |
| 35 | R0 | Red Data 0(LSB) |
| 36 | GND | Power Ground |
| 37 | GND | Power Ground |
| 38 | DCLK | Clock Signals ; Latch Data at the Falling Edge (CLK) |
| 39 | GND | Power Ground |
| 40 | GND | Power Ground |

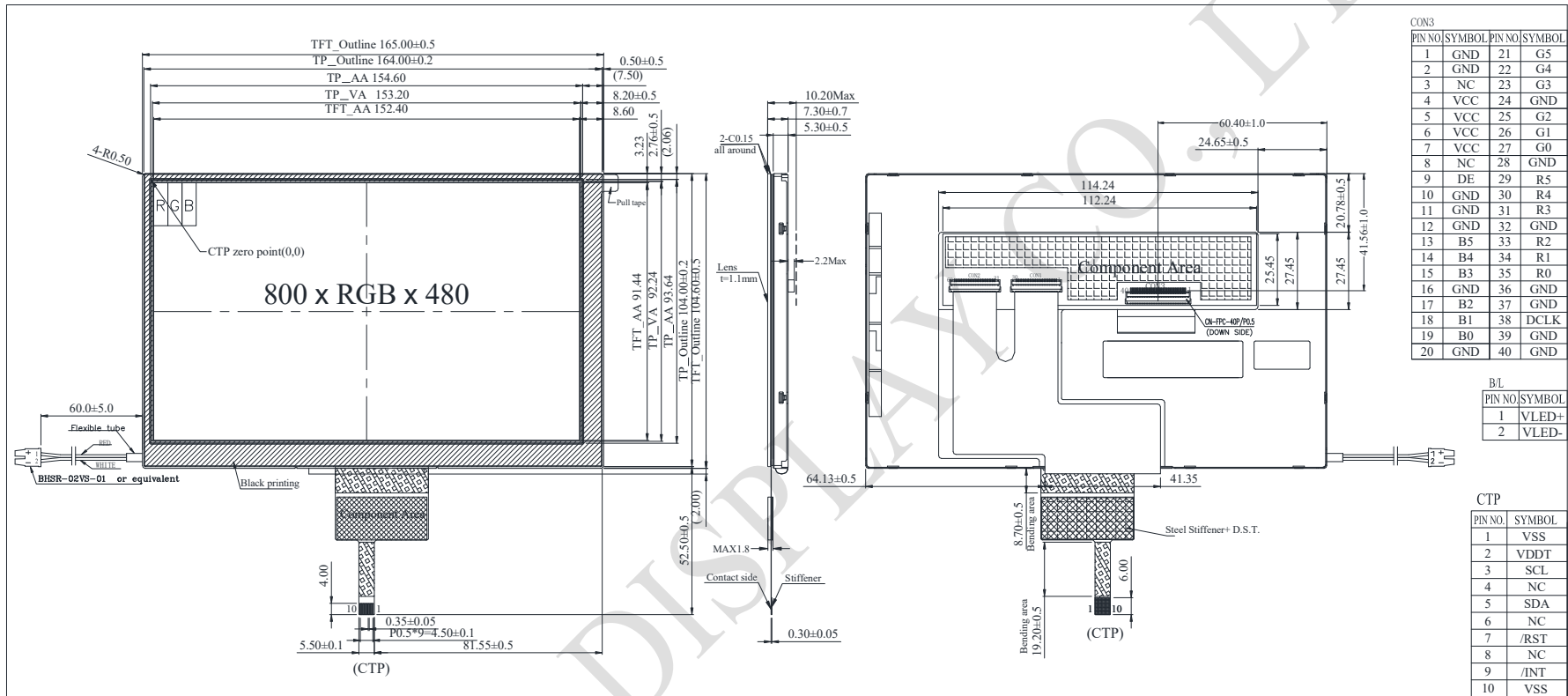
2. Backlight Driving Part

| Pin No. | Symbol | Description |
|---------|--------|---------------------|
| 1 | VLED+ | Red, LED_ Anode |
| 2 | VLED- | White, LED_ Cathode |

3. PCAP PIN Definition

| Pin | Symbol | Function |
|-----|--------|--------------------------------|
| 1 | VSS | Ground for analog circuit |
| 2 | VDDT | Power Supply : +3.3V |
| 3 | SCL | I2C clock input |
| 4 | NC | No connect |
| 5 | SDA | I2C data input and output |
| 6 | NC | No connect |
| 7 | /RST | External Reset, Low is active |
| 8 | NC | No connect |
| 9 | /INT | External interrupt to the host |
| 10 | VSS | Ground for analog circuit |

Contour Drawing



CON3

| PIN NO. | SYMBOL | PIN NO. | SYMBOL |
|---------|--------|---------|--------|
| 1 | GND | 21 | G5 |
| 2 | GND | 22 | G4 |
| 3 | NC | 23 | G3 |
| 4 | VCC | 24 | GND |
| 5 | VCC | 25 | G2 |
| 6 | VCC | 26 | G1 |
| 7 | VCC | 27 | G0 |
| 8 | NC | 28 | GND |
| 9 | DE | 29 | R5 |
| 10 | GND | 30 | R4 |
| 11 | GND | 31 | R3 |
| 12 | GND | 32 | GND |
| 13 | B5 | 33 | R2 |
| 14 | B4 | 34 | R1 |
| 15 | B3 | 35 | R0 |
| 16 | GND | 36 | GND |
| 17 | B2 | 37 | GND |
| 18 | B1 | 38 | DCLK |
| 19 | B0 | 39 | GND |
| 20 | GND | 40 | GND |

B/L

| PIN NO. | SYMBOL |
|---------|--------|
| 1 | VLED+ |
| 2 | VLED- |

CTP

| PIN NO. | SYMBOL |
|---------|--------|
| 1 | VSS |
| 2 | VDDT |
| 3 | SCL |
| 4 | NC |
| 5 | SDA |
| 6 | NC |
| 7 | /RST |
| 8 | NC |
| 9 | /INT |
| 10 | VSS |

The non-specified tolerance of dimension is ±0.3 mm .