

# TFT DISPLAY SPECIFICATION



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



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### SPECIFICATION

**MODULE NO.: WF101NTYA4LNG0#**

### General Specifications

| Item             | Dimension                         | Unit |
|------------------|-----------------------------------|------|
| Size             | 10.1                              | inch |
| Dot Matrix       | 1920(H) x RGB x 1200(V)           | dots |
| Module dimension | 257.96 x 168.6 x 12.33 Max        | mm   |
| Active area      | 216.8064(H) x 135.504(V)          | mm   |
| Pixel pitch      | 0.11292(H) x 0.11292(V)           | mm   |
| LCD type         | TFT, Normally Black, Transmissive |      |
| Interface        | 2ch-LVDS                          |      |
| Driver IC        | FL5893DA or equivalent            |      |
| Viewing Angle    | 80/80/80/80                       |      |
| Aspect Ratio     | 16:10                             |      |
| PCAP IC          | GT928 or Equivalent               |      |
| PCAP Interface   | I2C                               |      |
| PCAP FW Version  | 82                                |      |
| PCAP Resolution  | 1920 * 1200                       |      |
| Backlight Type   | LED, Normally White               |      |
| Touch Panel      | With 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

Typical Operation Conditions (At Ta = 25 °C,)

| Item                 | Symbol | Min | Typ. | Max. | Unit |
|----------------------|--------|-----|------|------|------|
| Power Supply Voltage | VDDIN  | 3.0 | 3.3  | 3.6  | V    |
|                      | VRP    | -   | -    | 300  | mV   |
| Power Supply Current | IDD    | -   | 300  | 360  | mA   |
| Power Consumption    | PLCD   | -   | 1    | 1.2  | W    |
| Rush current         | IRUSH  | -   | -    | 3.0  | A    |
| Supply CTP           | VDDT   | 3.1 | 3.3  | 3.5  | V    |
|                      | IVDDT  | —   | 73   | 110  | mA   |

# Interface

## 1. TFT LCD MODULE

| Pin No. | Symbol  | Description                        |
|---------|---------|------------------------------------|
| 1-5     | NC      | No connection                      |
| 6       | GND     | Ground                             |
| 7       | ELV3P   | EVEN LVDS Positive data signal (+) |
| 8       | ELV3N   | EVEN LVDS Negative data signal (-) |
| 9       | GND     | Ground                             |
| 10      | ELV2P   | EVEN LVDS Positive data signal (+) |
| 11      | ELV2N   | EVEN LVDS Negative data signal (-) |
| 12      | GND     | Ground                             |
| 13      | ELVCLKP | EVEN LVDS Positive CLK signal (+)  |
| 14      | ELVCLKN | EVEN LVDS Negative CLK signal (-)  |
| 15      | GND     | Ground                             |
| 16      | ELV1P   | EVEN LVDS Positive data signal (+) |
| 17      | ELV1N   | EVEN LVDS Negative data signal (-) |
| 18      | GND     | Ground                             |
| 19      | ELV0P   | EVEN LVDS Positive data signal (+) |
| 20      | ELV0N   | EVEN LVDS Negative data signal (-) |
| 21      | GND     | Ground                             |
| 22      | OLV3P   | Odd LVDS Positive data signal (+)  |
| 23      | OLV3N   | Odd LVDS Negative data signal (-)  |
| 24      | GND     | Ground                             |
| 25      | OLV2P   | Odd LVDS Positive data signal (+)  |
| 26      | OLV2N   | Odd LVDS Negative data signal (-)  |
| 27      | GND     | Ground                             |
| 28      | OLVCLKP | Odd LVDS Positive CLK signal (+)   |
| 29      | OLVCLKN | Odd LVDS Negative CLK signal (-)   |
| 30      | GND     | Ground                             |
| 31      | OLV1P   | Odd LVDS Positive data signal (+)  |
| 32      | OLV1N   | Odd LVDS Negative data signal (-)  |
| 33      | GND     | Ground                             |
| 34      | OLV0P   | Odd LVDS Positive data signal (+)  |

|        |       |  |
|--------|-------|--|
| 35     | OLV0N | Odd LVDS Negative data signal (-)                                  |
| 36     | GND   | Ground   |
| 37 -39 | NC    | No connection (PIN39 and PIN40 cannot be short-circuited together) |
| 40     | NC    | No connection alone  |
| 41-45  | VDDIN | Power supply VDDIN=3.3V (Typ.)                                     |

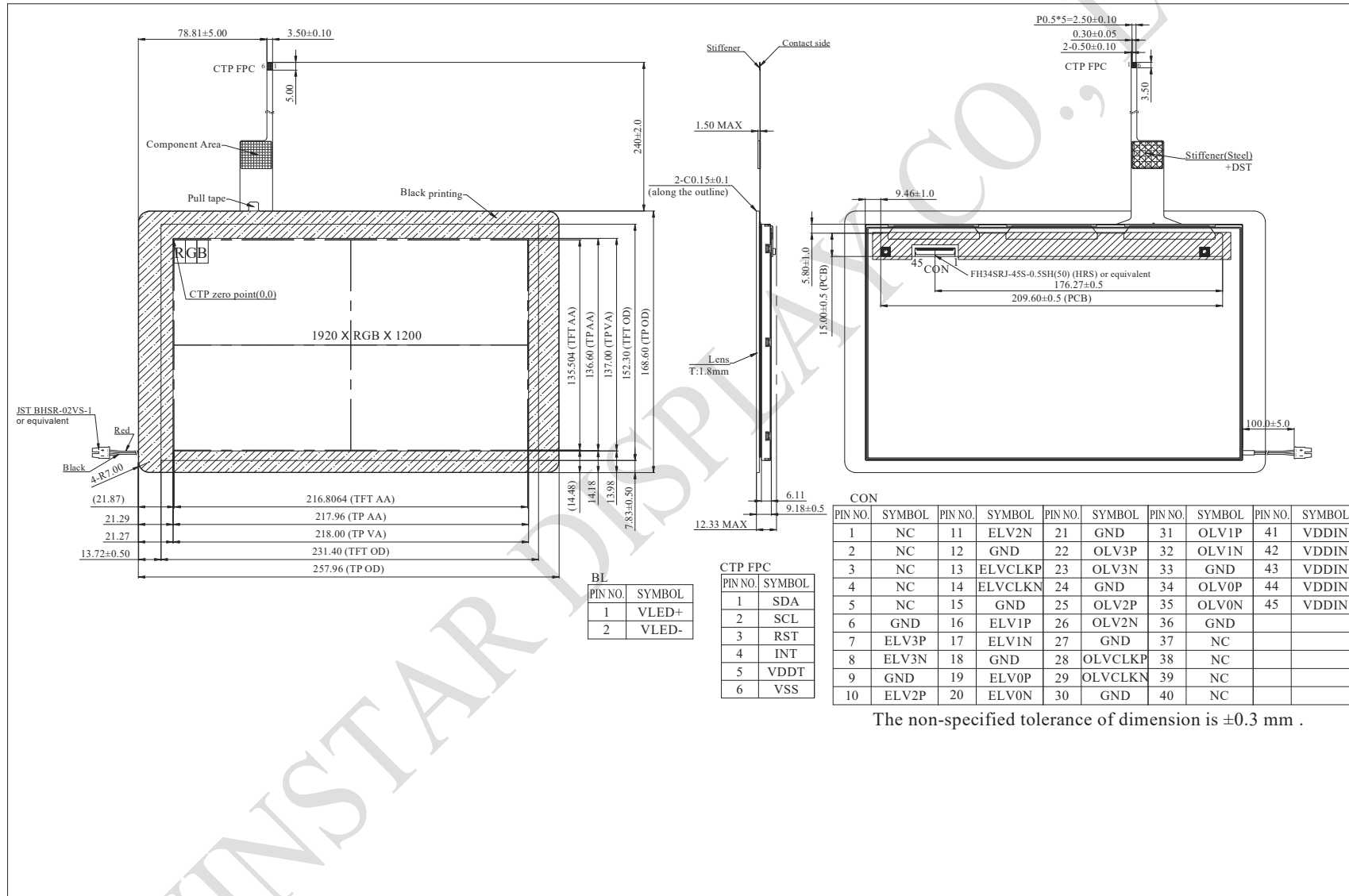
## 2. Backlight PIN Definition

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

## 3. PCPA PIN Definition

| Pin | Symbol | Function                       |
|-----|--------|--------------------------------|
| 1   | SDA    | I2C data input and output      |
| 2   | SCL    | I2C clock input                |
| 3   | RST    | External Reset, Low is active  |
| 4   | INT    | External interrupt to the host |
| 5   | VDDT   | Power Supply : +3.3V           |
| 6   | VSS    | Ground for analog circuit      |

# Contour Drawing



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