

# TFT DISPLAY SPECIFICATION



RAYSTAR

RAYSTAR Optronics, Inc.  
曜凌光電股份有限公司



# 曜凌光電股份有限公司 Raystar Optronics, Inc.

T: +886-4-2565-0761 | F: +886-4-2565-0760

[salescontact@raystar-optronics.com](mailto:salescontact@raystar-optronics.com) | [www.raystar-optronics.com](http://www.raystar-optronics.com)

## RFF80BP-1IW-DBN

### General Specifications

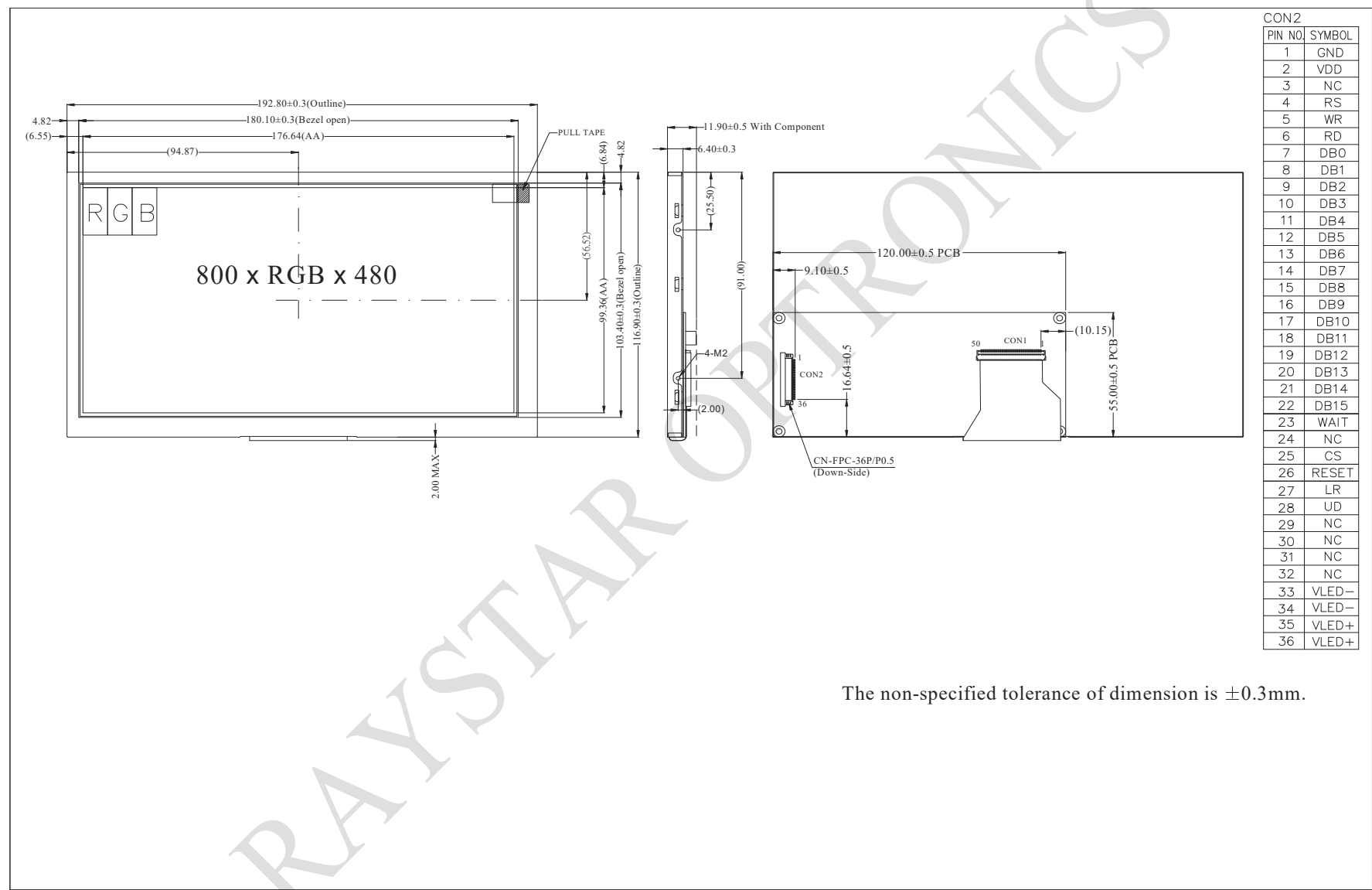
- Size: 8.0 inch
- Dot Matrix: 800 x RGBx480(TFT) dots
- Module dimension: 192.8(W) x 116.9(H) x 11.9(D) mm
- Active area: 176.64 x 99.36 mm
- Pixel pitch: 0.2208x 0.2070 mm
- LCD type: TFT, Normally White ,Transmissive
- View Direction: 12 o'clock
- Gray Scale Inversion Direction: 6 o'clock
- Aspect Ratio: 16:9
- Backlight Type: LED, Normally White
- Controller IC: RA8875
- Interface: Digital 8080 family MPU
- Touch Panel: Without Touch Panel
- Surface: Anti-Glare

## Interface

### LCM PIN Definition

| Pin | Symbol | Function                                  |
|-----|--------|-------------------------------------------|
| 1   | GND    | System ground                             |
| 2   | VDD    | Power Supply : +3.3V                      |
| 3   | BL_E   | Backlight control signal , H: On \ L: Off |
| 4   | RS     | Data/Command select                       |
| 5   | WR     | Write strobe signal                       |
| 6   | RD     | Read strobe signal                        |
| 7   | DB0    | Data bus                                  |
| 8   | DB1    | Data bus                                  |
| 9   | DB2    | Data bus                                  |
| 10  | DB3    | Data bus                                  |
| 11  | DB4    | Data bus                                  |
| 12  | DB5    | Data bus                                  |
| 13  | DB6    | Data bus                                  |
| 14  | DB7    | Data bus                                  |
| 15  | DB8    | Data bus                                  |
| 16  | DB9    | Data bus                                  |
| 17  | DB10   | Data bus                                  |
| 18  | DB11   | Data bus                                  |
| 29  | DB12   | Data bus                                  |
| 20  | DB13   | Data bus                                  |
| 21  | DB14   | Data bus                                  |
| 22  | DB15   | Data bus                                  |
| 23  | WAIT   | Wait Signal Output(H:active)              |
| 24  | NC     | No connection                             |
| 25  | CS     | Chip select                               |
| 26  | RESET  | Hardware reset                            |
| 27  | LR     | Left / right selection; Default L/R=H     |
| 28  | UD     | Up/down selection; ; Default U/D=L        |
| 29  | NC     | No connection                             |
| 30  | NC     | No connection                             |
| 31  | NC     | No connection                             |
| 32  | NC     | No connection                             |
| 33  | VLED-  | Power for LED backlight cathode(GND)      |
| 34  | VLED-  | Power for LED backlight cathode(GND)      |
| 35  | VLED+  | Power for LED backlight anode(+5V)        |
| 36  | VLED+  | Power for LED backlight anode(+5V)        |

# Contour Drawing



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

## 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: (CON2.Pin1=GND, Pin2=VDD)**

| Item                   | Symbol | Condition | Min | Typ | Max | Unit |
|------------------------|--------|-----------|-----|-----|-----|------|
| Supply Voltage For LCM | VDD    | —         | 3.0 | 3.3 | 3.6 | V    |
| Supply Current For LCM | IDD    | —         | -   | 199 | 300 | mA   |

**Backlight driving conditions (CON2.Pin33,34=VLED-, Pin35,36=VLED+)**

| Parameter                        | Symbol  | Min.   | Typ. | Max. | Unit |
|----------------------------------|---------|--------|------|------|------|
| Operation Current For LED Driver | VLED=5V | 600    | —    | 900  | mA   |
| Power Consumption                | VLED=5V | 3000   | —    | 4500 | mW   |
| Supply Voltage For LED Driver    | VLED+   | —      | 5    | —    | V    |
| LED Life Time                    | —       | 20,000 | —    | —    | Hr   |