

# 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

sales@raystar-optronics.com | www.raystar-optronics.com

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## RFI350U-AYW-MNG

### SPECIFICATION

#### .General Specification

- Size: 3.5 inch
- Dot Matrix: 320 x RGB x 480(TFT) dots
- Module dimension: 68.7 (W) x 95.6 (H) x 4.61(D) mm
- Active area: 48.96 x 73.44 mm
- Pixel pitch: 0.153 × 0.153 mm
- LCD type: TFT, Normally Black, Transmissive
- View Direction: 80/80/80/80
- Aspect Ratio: Portrait
- TFT Driver IC: ILI9488 or Equivalent
- TFT Interface: 1-Lane MIPI
- Backlight Type: LED, Normally White
- PCAP IC: GT911 or Equivalent
- PCAP Interface: I2C
- PCAP FW Version: 0x95
- PCAP Resolution: 320\*480
- Touch Panel: With PCAP
- Surface: Glare

\*Color tone slight changed by temperature and driving voltage.

# Interface

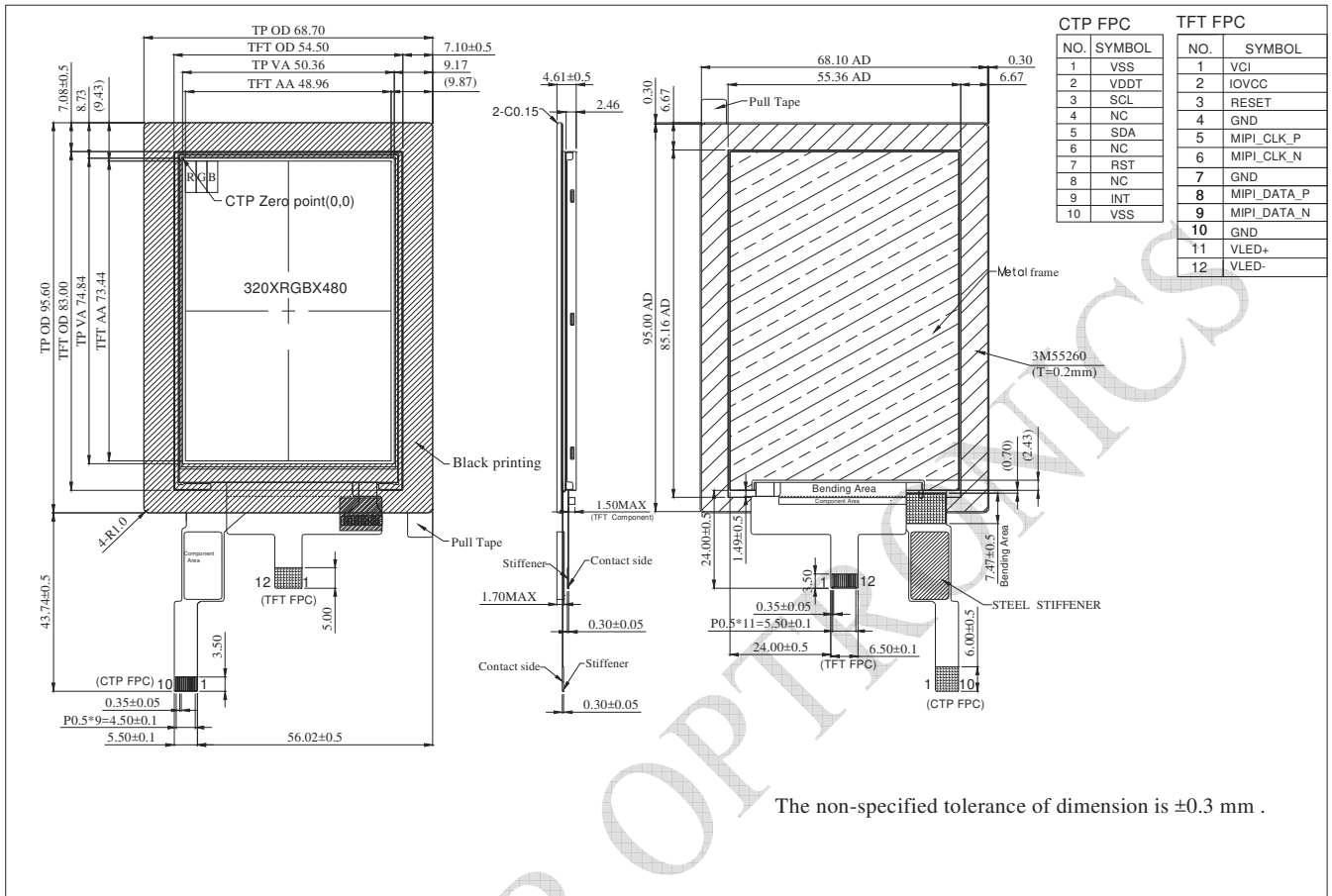
## 1. LCM PIN Definition

NO	Symbol	Function	I/O
1	VCI	A supply voltage to the analog circuit. Connect to an external power supply of 2.5 ~ 3.3V. Connect to a stabilizing capacitor between VCI and GND.	P
2	IOVCC	A supply voltage to the digital circuit. Connect to an external power supply of 1.65 ~ 3.3V.	P
3	RESET	Reset input signal Initialize the chip with a low input. Be sure to execute a power-on reset after supplying power.	I
4	GND	Ground	I
5	MIPI_CLK_P	Positive polarity of low voltage differential clock signal Leave the pin open when not in use.	I
6	MIPI_CLK_N	Negative polarity of low voltage differential clock signal Leave the pin open when not in use	I
7	GND	Ground	I
8	MIPI_DATA_P	Positive polarity of low voltage differential data signal Leave the pin open when not in use.	I
9	MIPI_DATA_N	Negative polarity of low voltage differential data signal Leave the pin open when not in use.	I
10	GND	Ground	I
11	VLED+	Anode of LED backlight.	
12	VLED-	Cathode of LED backlight	

## 2. PCAP PIN Definition

Pin	Symbol	Function	Remark
1	VSS	Connect to system ground.	
2	VDDT	Power Supply	
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	Connect to system ground.	

# Contour Drawing



## 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 digital	IOVCC	—	—	1.8/2.8	3.3	V
Supply Voltage for analog	VCI	—	—	2.8	3.3	V
Power Supply for TFT Current	ICC	IOVCC=VCI =VCC=3.3V	—	13.6	—	mA
Supply Voltage For Touch Logic	VDDT	—	2.8	—	3.3	V

LED driving conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED current	—	—	160	—	mA
LED voltage	LEDA	2.7	3.2	3.4	V
LED Life Time	—	—	50000	—	Hr