

TFT DISPLAY SPECIFICATION



RAYSTAR

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RFI350U-AYW-MNG

General Specification

- Size: 3.5 inch
- Dot Matrix: 320 x RGBx 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 (IPS)
- Aspect Ratio: Portrait
- Driver IC: ILI9488
- Interface: 1-Lane MIPI
- Backlight Type: LED, Normally White
- PCAP IC: GT911
- PCAP Interface: I2C
- PCAP FW Version: 0x95
- PCAP Resolution: 320*480
- Touch Panel: Projected Capacitive Touch Panel, PCAP
- Surface: Glare

Interface

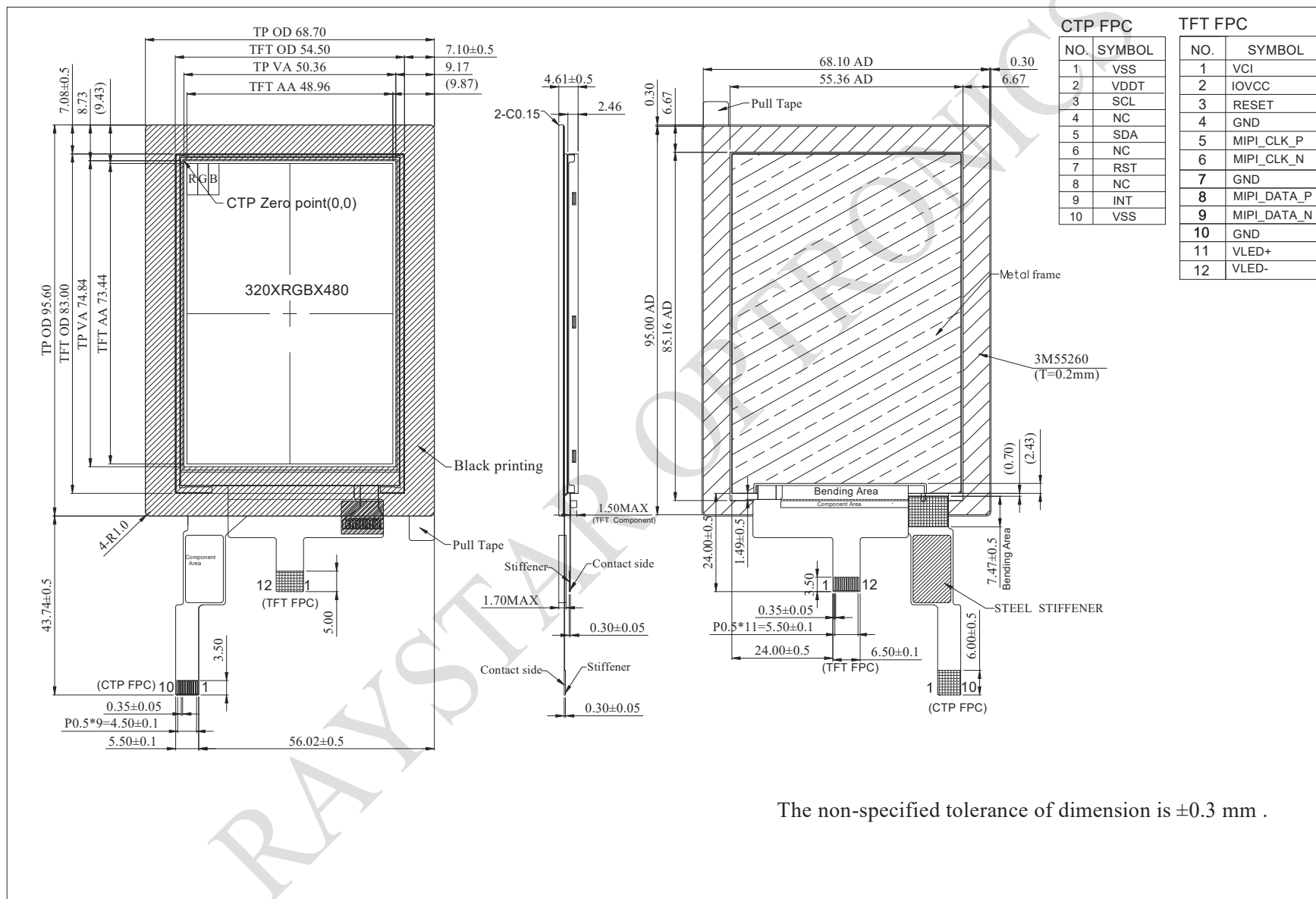
LCM PIN Definition

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	

PCAP PIN Definition

Pin	Symbol	Function
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