

# TFT DISPLAY SPECIFICATION



RAYSTAR

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## RFE43AV-AIW-DNG SPECIFICATION

### General Specifications

- Size: 4.3 inch
- Dot Matrix: 480 x RGB x 272(TFT) dots
- Module dimension: 105.5(W) x 67.2(H) x 4.6(D) mm
- Active area: 95.04 x 53.856 mm
- Dot pitch: 0.066 x 0.198 mm
- LCD type: TFT, Normally White, Transmissive
- View Direction: 12 o'clock
- Gray Scale Inversion Direction: 6 o'clock
- Aspect Ratio: 16:9
- TFT Driver IC: ST7282 or equivalent
- TFT Interface: 24-bit RGB
- Backlight Type: LED, Normally White
- PCAP FW Version: 0x07.0x00.0x00.0x00.0x01.0x0C.0x11.0x43
- PCAP IC: ILI2130 or equivalent
- PCAP Interface: I2C
- Touch Panel: Projected capacitive touch screen (PCAP)
- Surface: Glare

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

# Interface

## 1. LCM PIN Definition

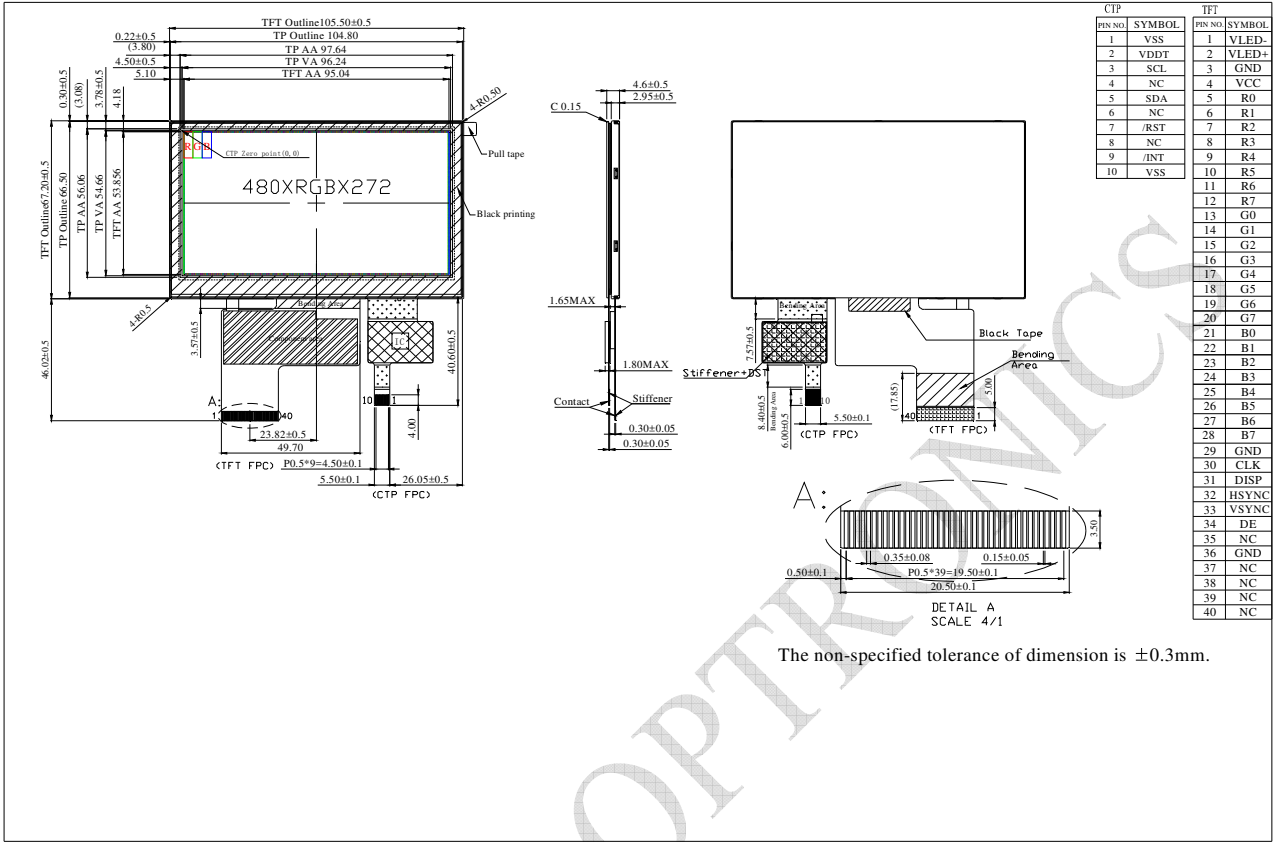
Pin	Symbol	Function
1	VLED-	Power for LED backlight cathode
2	VLED+	Power for LED backlight anode
3	GND	Power ground
4	VCC	Power voltage
5	R0	Red data (LSB)
6	R1	Red data
7	R2	Red data
8	R3	Red data
9	R4	Red data
10	R5	Red data
11	R6	Red data
12	R7	Red data (MSB)
13	G0	Green data (LSB)
14	G1	Green data
15	G2	Green data
16	G3	Green data
17	G4	Green data
18	G5	Green data
19	G6	Green data
20	G7	Green data (MSB)
21	B0	Blue data (LSB)
22	B1	Blue data
23	B2	Blue data
24	B3	Blue data
25	B4	Blue data
26	B5	Blue data
27	B6	Blue data
28	B7	Blue data (MSB)
29	GND	Power ground
30	CLK	Pixel clock (DCLK)

31	DISP	Display on/off
32	HSYNC	Horizontal sync signal; negative polarity
33	VSYNC	Vertical sync signal; negative polarity
34	DE	Data Enable
35	NC	No connection
36	GND	Power ground
37	NC	No connection
38	NC	No connection
39	NC	No connection
40	NC	No connection

## 2.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



The non-specified tolerance of dimension is  $\pm 0.3\text{mm}$ .

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## Absolute Maximum Ratings

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

## Electrical Characteristics

### 1. Operating conditions:

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For Logic	V <sub>CC</sub>	3.1	3.3	3.5	V
Digital operation current	I <sub>CC</sub>		22	33	mA
Supply CTP	V <sub>DDT</sub>	3.0	3.3	3.6	V
	I <sub>CTP</sub>	—	52	78	mA

### 2. LED driving conditions

Item	Symbol	Min	Typ	Max	Unit
LED current	—	—	20	—	mA
Power Consumption	—	—	640	680	mW
LED voltage	LED+	29	32	35	V
LED Life Time	—	—	50,000	—	Hr