

TFT DISPLAY SPECIFICATION



RAYSTAR

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RFF700A9-AWH-DNS

SPECIFICATION

General Specifications

- Size: 7.0 inch
- Dot Matrix: 800 x RGB x 480(TFT) dots
- Module dimension: 165.8 (W) x 106.61 (H) x 8.0(D) mm
- Active area: 152.40 x 91.44 mm
- Pixel pitch: 0.1905 x 0.1905 mm
- LCD type: TFT, Normally Black, Transmissive
- View Direction: 80/80/80/80
- TFT Interface: 24-bit RGB
- TFT Driver IC: HX8249-A + HX8678-C or Equivalent
- Aspect Ratio: 15:9
- Backlight Type: LED, Normally White
- Touch Panel: Resistive Touch Screen
- Surface: Anti-Glare

*Color tone slight changed by temperature and driving voltage.

Interface

1.LCM PIN Definition

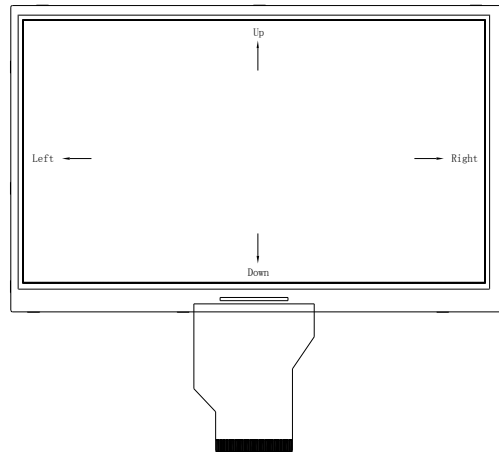
Pin	Symbol	Function	Remark
1-4	NC	No connection	
5	GND	Power Ground	
6	NC	No connection	
7	VCC	Power voltage	
8	MODE	Input timing mode selection.	
		MODE	Function
		0	DE only
		1	HS+VS
		Note	
		-	
		Default	
9	DE	Data enable signal for TTL mode.	
10	VS	Vertical sync input	
11	HS	Horizontal sync input	
12	B7	Blue data(MSB)	
13	B6	Blue data	
14	B5	Blue data	
15	B4	Blue data	
16	B3	Blue data	
17	B2	Blue data	
18	B1	Blue data	
19	B0	Blue data(LSB)	
20	G7	Green data(MSB)	
21	G6	Green data	
22	G5	Green data	
23	G4	Green data	
24	G3	Green data	
25	G2	Green data	
26	G1	Green data	
27	G0	Green data(LSB)	
28	R7	Red data(MSB)	
29	R6	Red data	
30	R5	Red data	
31	R4	Red data	
32	R3	Red data	

33	R2	Red data			
34	R1	Red data			
35	R0	Red data (LSB)			
36	GND	Power Ground			
37	DCLK	Sample clock			
38	GND	Power Ground			
39	L/R	Horizontal shift direction (source output) selection.		Note1	
		L/R	Source output sequence and data order		Note
		1	Left to right		Default
0	Right to left	-			
40	U/D	Vertical shift direction (gate output) selection.		Note2	
		U/D	Function		Note
		1	Top→bottom		Default
0	Bottom→top	-			
41	NC	No connection			
42	NC	No connection			
43	NC	No connection			
44	RESET	Reset pin. The chip is in reset state when RESETB=0.			
45	NC	No connection			
46	NC	No connection			
47	DITHB	STBYB Standby mode setting pin. The chip is in standby mode when STBYB=0.			
48	GND	Power Ground			
49	NC	No connection			
50	NC	No connection			

Note 1: Selection of scanning mode

Setting of scan control input		Scanning direction
U/D	L/R	
1	1	Top to Bottom, left to right
1	0	Top to Bottom, right to left
0	0	Bottom to Top, right to left
0	1	Bottom to Top, left to right

Note 2: Definition of scanning direction.
Refer to the figure as below:

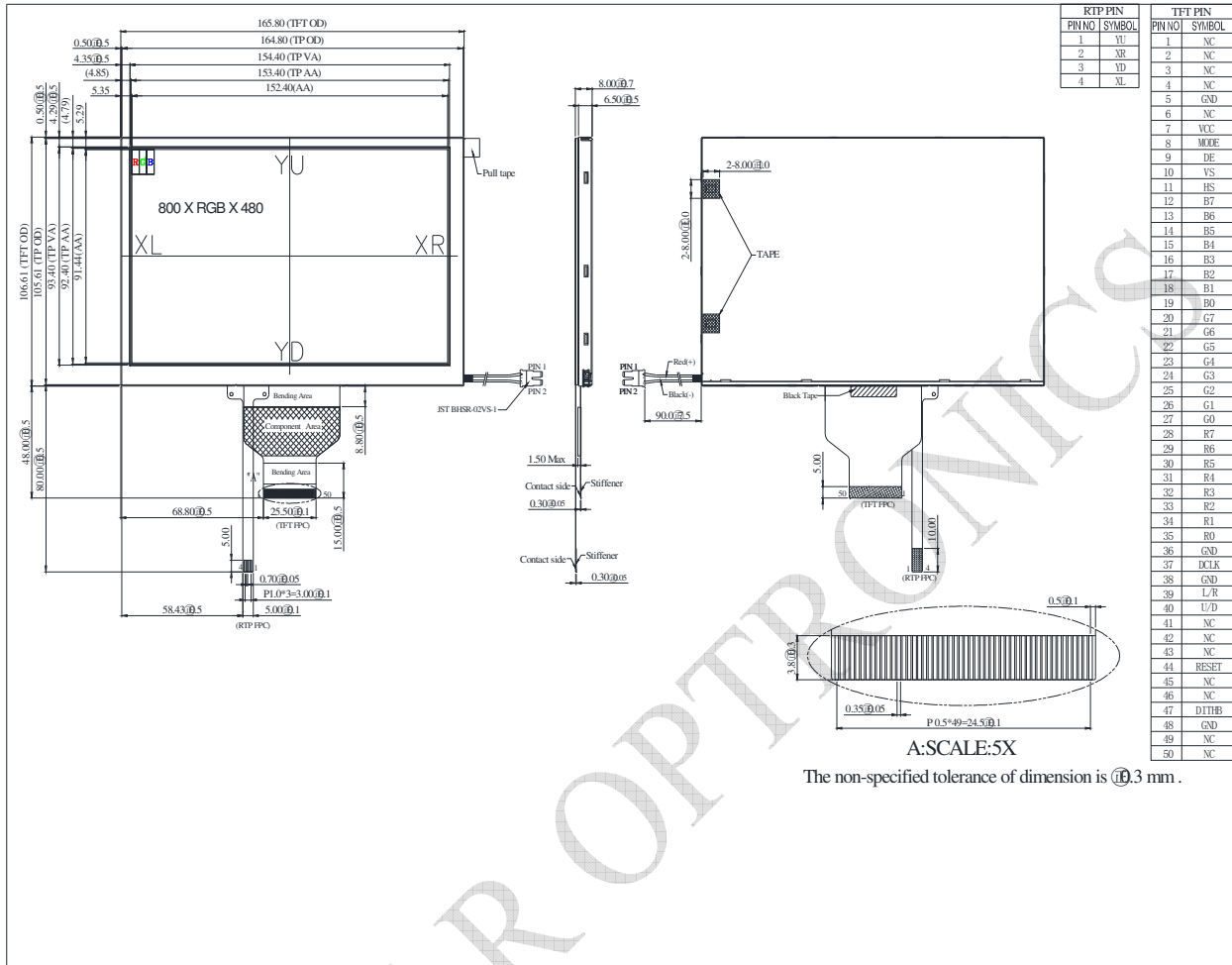


2. Backlight PIN Definition

Pin	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	Black, LED_ Cathode

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Contour Drawing



Absolute Maximum Ratings

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

Electrical Characteristics

Operating conditions

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	Vcc	2.7	3.3	3.6	V
Current of power supply	IDD	—	101	150	mA

LED driving conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED current	—	—	450	—	mA
LED voltage	VLED+	8.1	9.3	10.2	V
LED Life Time	—	40000	—	—	Hr