

# TFT DISPLAY SPECIFICATION



RAYSTAR

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## RFF700A9-AWH-DNN

### 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 6.5(D) mm
- Active area: 152.40 x 91.44 mm
- Dot pitch: 0.1905 x 0.1905 mm
- LCD type: TFT, Normally Black, Transmissive
- View Direction: 80/80/80/80 (IPS)
- Interface: 24-bit RGB
- Driver IC: HX8249-A + HX8678-C
- Aspect Ratio: 15:9
- Backlight Type: LED, Normally White
- Touch Panel: Without Touch Panel
- Surface: Anti-Glare

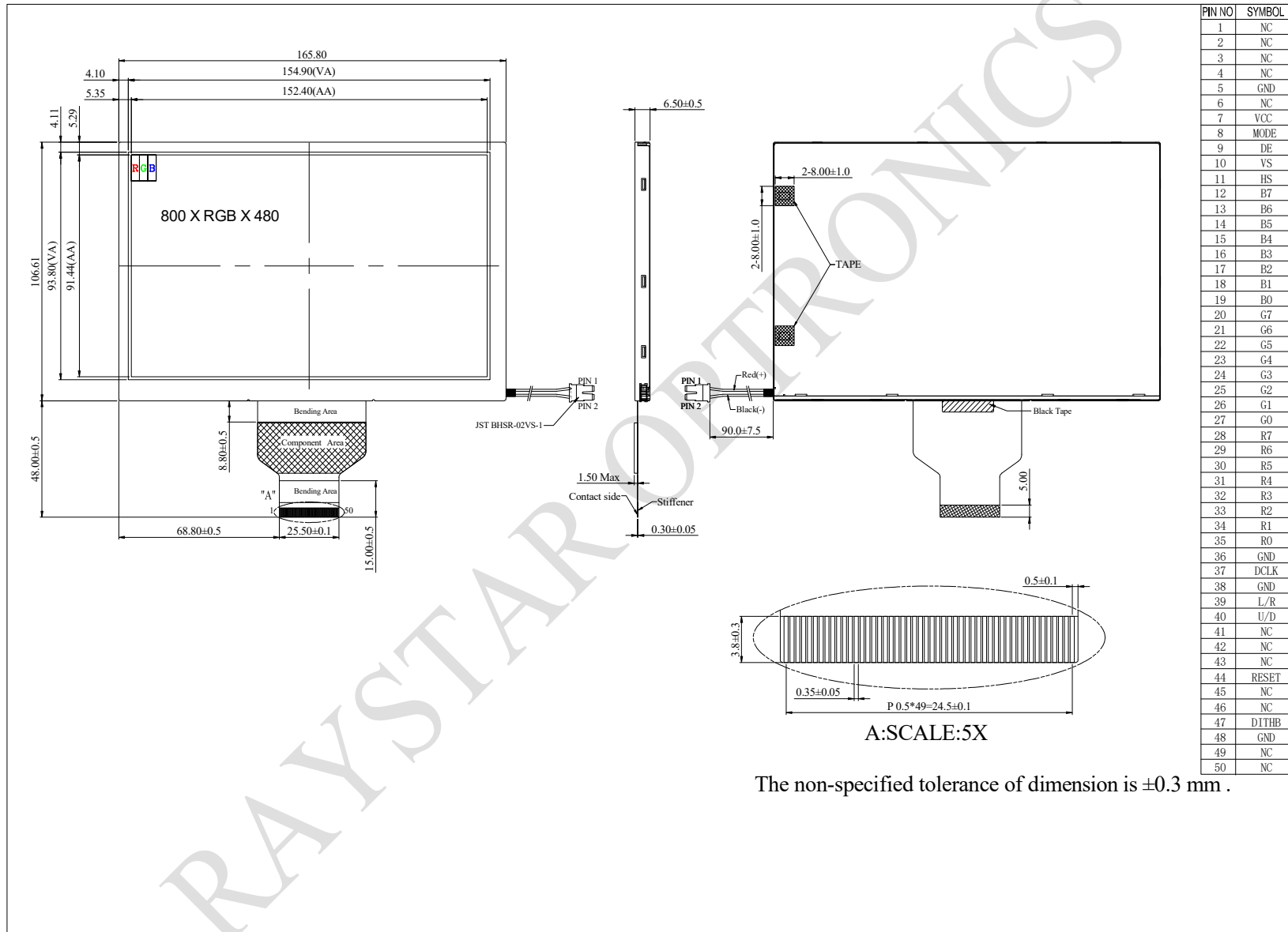
# Interface

## LCM PIN Definition

Pi n	Symbo l	Function						
1-4	NC	No connection						
5	GND	Power Ground						
6	NC	No connection						
7	VCC	Power voltage						
8	MODE	Input timing mode selection. <table border="1"> <thead> <tr> <th>MODE</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>DE only</td> </tr> <tr> <td>1</td> <td>HS+VS</td> </tr> </tbody> </table>	MODE	Function	0	DE only	1	HS+VS
MODE	Function							
0	DE only							
1	HS+VS							
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. <table border="1"> <thead> <tr> <th>L/R</th> <th>Source output sequence and data order</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Left to right</td> </tr> <tr> <td>0</td> <td>Right to left</td> </tr> </tbody> </table>	L/R	Source output sequence and data order	1	Left to right	0	Right to left
L/R	Source output sequence and data order							
1	Left to right							
0	Right to left							
40	U/D	Vertical shift direction (gate output) selection. <table border="1"> <thead> <tr> <th>U/D</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Top→bottom</td> </tr> <tr> <td>0</td> <td>Bottom→top</td> </tr> </tbody> </table>	U/D	Function	1	Top→bottom	0	Bottom→top
U/D	Function							
1	Top→bottom							
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						

# Contour Drawing



## Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+80	°C
Storage Temperature	TST	-40	—	+85	°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	Icc	—	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