

TFT DISPLAY SPECIFICATION



RAYSTAR

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RFF700A6-AIW-DNS

SPECIFICATION

General Specifications

- Size: 7.0 inch
- Dot Matrix: 800 x RGB x 480(TFT) dots
- Module dimension: 165.05(W) x 104.87(H) x 8.13(D)mm
- Active area: 152.4 x 91.44 mm
- Pixel pitch: 0.1905 x 0.1905 mm
- LCD type: TFT, Normally White, Transmissive
- View Direction: 12 o'clock
- Gray Scale Inversion Direction: 6 o'clock
- TFT Drive IC: HX8262+HX8678 or Equivalent
- TFT Interface: 18-bit RGB
- Aspect Ratio: 16:9
- Backlight Type: LED, Normally White
- Touch Panel: With RTP
- Surface: Anti-Glare

*Color tone slight changed by temperature and driving voltage.

Interface

1. LCM PIN Definition

Pin	Symbol	Function
1	GND	Power Ground
2	GND	Power Ground
3	NC	Not Connect
4	Vcc	Power Supply for Digital Circuit
5	Vcc	Power Supply for Digital Circuit
6	Vcc	Power Supply for Digital Circuit
7	Vcc	Power Supply for Digital Circuit
8	NC	Not Connect
9	DE	Data Enable
10	GND	Power Ground
11	GND	Power Ground
12	GND	Power Ground
13	B5	Blue Data 5 (MSB)
14	B4	Blue Data 4
15	B3	Blue Data 3
16	GND	Power Ground
17	B2	Blue Data 2
18	B1	Blue Data 1
19	B0	Blue Data 0 (LSB)
20	GND	Power Ground
21	G5	Green Data 5 (MSB)
22	G4	Green Data 4
23	G3	Green Data 3
24	GND	Power Ground
25	G2	Green Data 2
26	G1	Green Data 1
27	G0	Green Data 0(LSB)
28	GND	Power Ground
29	R5	Red Data 5 (MSB)
30	R4	Red Data 4
31	R3	Red Data 3

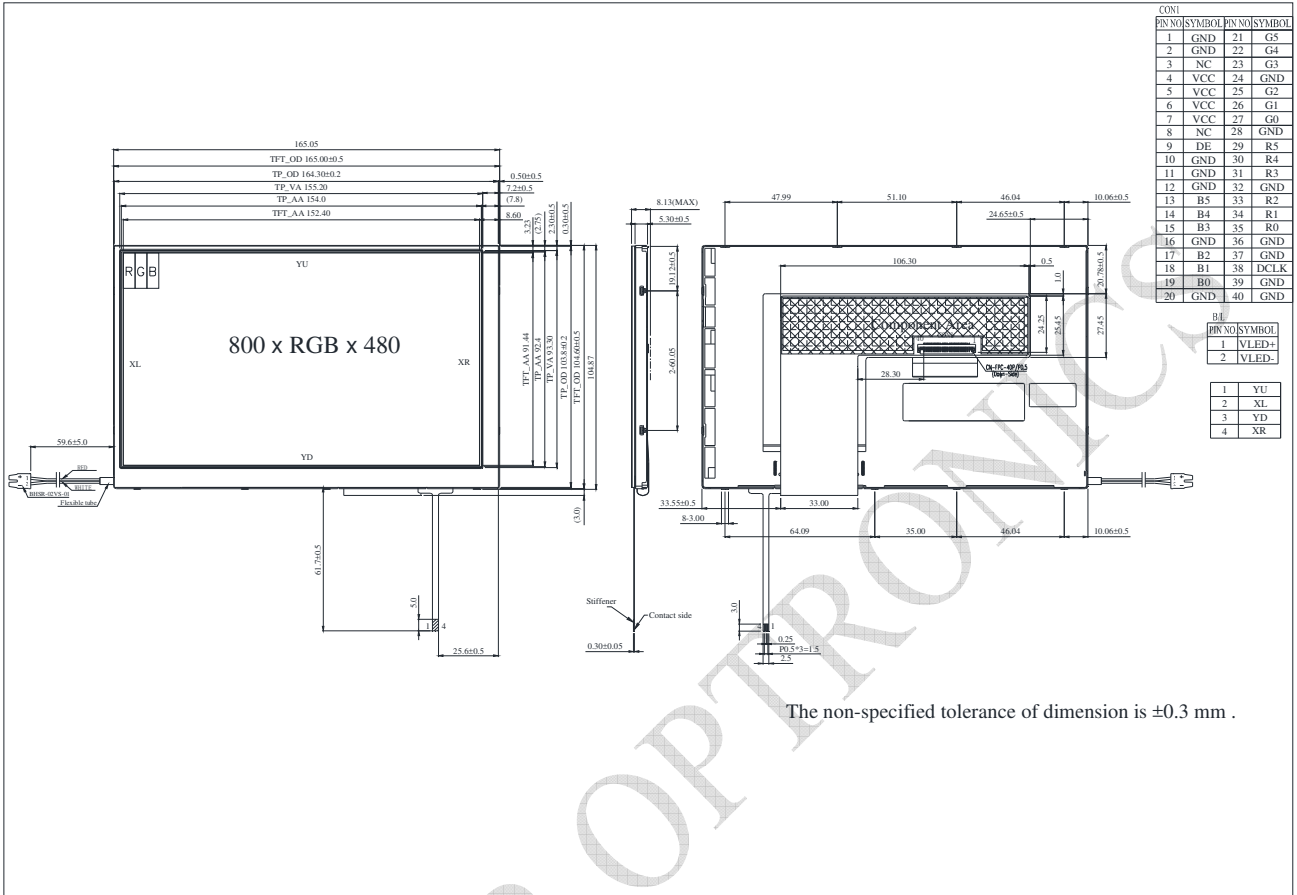
32	GND	Power Ground
33	R2	Red Data 2
34	R1	Red Data 1
35	R0	Red Data 0(LSB)
36	GND	Power Ground
37	GND	Power Ground
38	DCLK	Clock Signals ; Latch Data at the Falling Edge (CLK)
39	GND	Power Ground
40	GND	Power Ground

2. Backlight Driving Part

Pin No.	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	White, LED_ Cathode

Note: The backlight interface connector is a model SM02B-BHSS-1-TB manufactured by JST or equivalent. The matching connector part number is BHSR-20VS-1 manufactured by JST or equivalent.

Contour Drawing



The non-specified tolerance of dimension is ± 0.3 mm .

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:

Recommended Operation condition (GND=0V, Ta=25°C)

Item	Symbol	Min	Typ	Max	Unit
Power Supply Voltage	Vcc	3.0	3.3	3.6	V
Power Supply Current	Icc		200	260	mA
Input logic Voltage	High Level	VIH	0.7Vcc	Vcc	V
	Low Level	VIL	0	0.3Vcc	

2. LED driving conditions

Item	Symbol	Min	Typ	Max	Unit
LED current	-	-	160	-	mA
Power Consumption	VBL+=9.8V		1568	-	mW
LED voltage	VBL+	8.4	-	11	V
LED Life Time	-	-	50,000	-	Hr