

TFT DISPLAY SPECIFICATION



RAYSTAR

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RFG570A4-ALW-DNS

General Specifications

- Size: 5.7 inch
- Dot Matrix: 640 x RGB x 480(TFT) dots
- Module dimension: 125.0 x 98.8 x 9.0 mm
- Active area: 115.2 x 86.4 mm
- Pixel pitch: 0.18 x 0.18 mm
- LCD type: TFT, Normally White, Transmissive
- View Direction: 6 o'clock
- Gray Scale Inversion Direction: 12 o'clock
- Aspect Ratio: 4:3
- Drive IC: HX8250+HX8678
- TFT interface: 18-bit RGB
- Backlight Type: LED ,Normally White
- Touch Panel: Resistive Touch Panel, RTP
- Surface: Anti-Glare

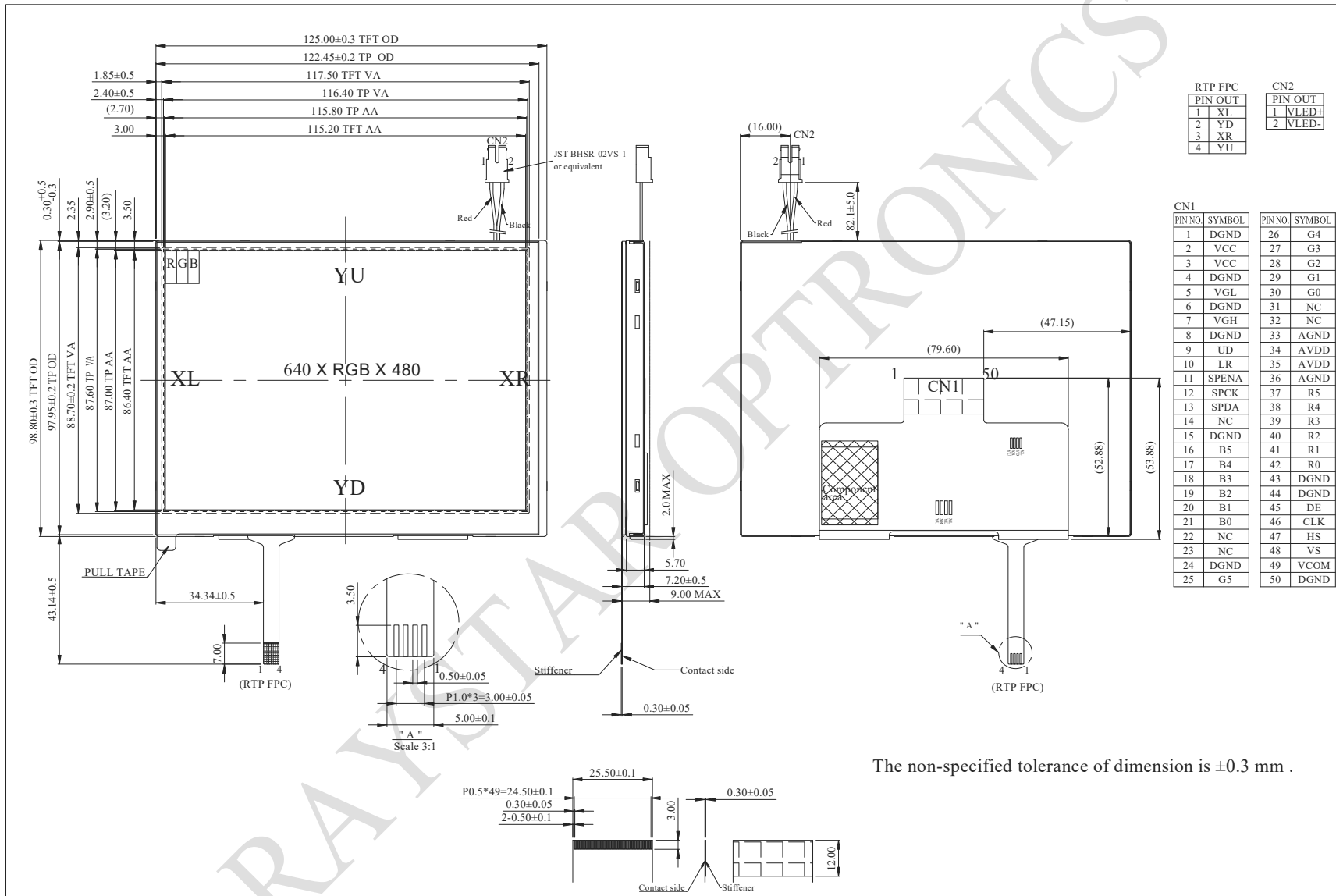
Interface

LCM PIN Definition

Pin No.	Symbol	Function
1	DGND	Ground for digital circuit
2	VCC	Power Supply : +3.3V
3	VCC	Power Supply : +3.3V
4	DGND	Ground for digital circuit
5	VGL	Gate off power
6	DGND	Ground for digital circuit
7	VGH	Gate on power
8	DGND	Ground for digital circuit
9	UD	Up/down selection
10	LR	Left /right selection
11	SPENA	Chip select
12	SPCK	Serial Clock
13	SPDA	Serial Data
14	NC	No connect
15	DGND	Ground for digital circuit
16	B5	Blue Data bus
17	B4	Blue Data bus
18	B3	Blue Data bus
19	B2	Blue Data bus
20	B1	Blue Data bus
21	B0	Blue Data bus
22	NC	No connection
23	NC	No connection
24	DGND	Ground for digital circuit
25	G5	Green Data bit
26	G4	Green Data bit
27	G3	Green Data bit
28	G2	Green Data bit
29	G1	Green Data bit
30	G0	Green Data bit

31	NC	No connection
32	NC	No connection
33	AGND	Ground
34	AVDD	Analog power: 10V
35	AVDD	Analog power: 10V
36	AGND	Ground
37	R5	Red Data bit
38	R4	Red Data bit
39	R3	Red Data bit
40	R2	Red Data bit
41	R1	Red Data bit
42	R0	Red Data bit
43	DGND	Ground for digital circuit
44	DGND	Ground for digital circuit
45	DE	Data Enable input
46	CLK	Data Clock
47	HS	Horizontal sync input
48	VS	Vertical sync input
49	VCOM	VCOM driving input
50	DGND	Ground for digital circuit

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

Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VCC	—	3.0	3.3	3.6	V
Supply Current For LCM	ICC	-	—	9	—	mA
Power Consumption	-	-	—	29.7	—	mW
Power Supply for Analog	AVDD	AVDD-AGND	—	9.6	—	V
Input Voltage	VIH	H Level	0.7VCC	—	VCC	V
	VIL	L Level	0	—	0.3VCC	V
Recommended LC Driving Voltage for 25°C	VGH	(Note)	15.5	16	16.5	V
	VGL		-5.5	-6	-6.5	V
	VCOM		—	3.8	—	V

LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	-	-	60	-	mA
Power Consumption	-	-	1386	1470	mW
LED voltage	VBL+	18.9	23.1	24.5	V
LED Life Time	-	-	50,000	-	Hr