



RAYSTAR

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RFF50CB-AIW-DNG

SPECIFICATION

RAYSTAR OPTRONICS

General Specifications

- Size: 5.0 inch
- Dot Matrix: 800× 3(RGB) × 480 dots
- Module dimension: 120.7(W) × 75.8(H) × 4.475mm
- Active area: 108(W) × 64.8 (H) mm
- Dot pitch: 0.135(W) × 0.135(H) mm
- LCD type: TFT, Normally White, Transmissive
- View Direction: 12 o'clock
- Gray Scale Inversion Direction: 6 o'clock
- TFT Interface: 24-bit RGB
- Aspect Ratio: 16:9
- Backlight Type: LED ,Normally White
- PCAP IC: FT5426DQ8 Or Equal
- PCAP Interface: I2C
- PCAP FW Version: 2
- Touch Panel: With PCAP
- Surface: Glare

*Color tone slight changed by temperature and driving voltage.

Interface

1. LCM PIN Definition

FPC Connector is used for the module electronics interface.

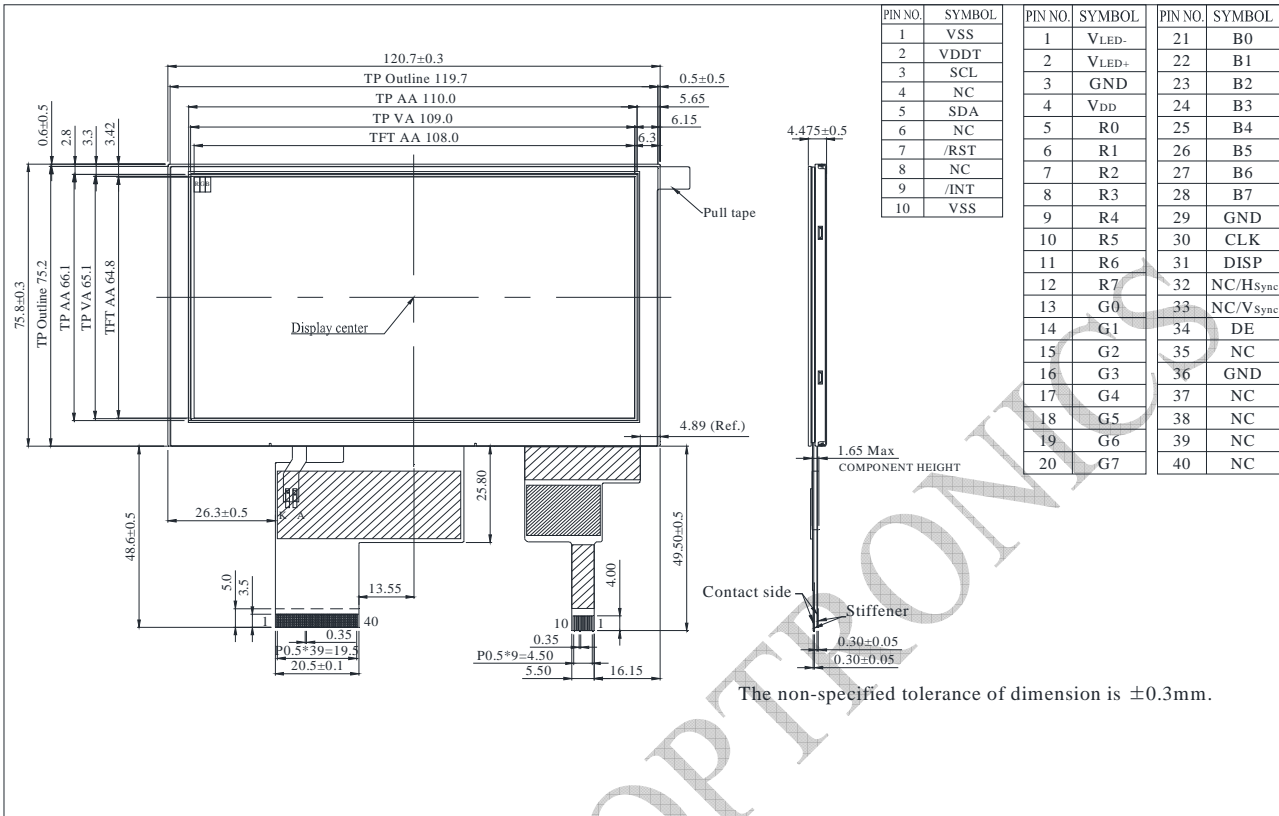
Pin	Symbol	Function
1	VLED-	Power for LED backlight (Cathode)
2	VLED+	Power for LED backlight (Anode)
3	GND	Power Ground
4	VDD	Power voltage
5	R0	Red data (LSB)
6	R1	Red data
7	R2	Red data
8	R3	Red data
9	R4	Red data
10	R5	Red data
11	R6	Red data
12	R7	Red data(MSB)
13	G0	Green data(LSB)
14	G1	Green 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	Sample clock
31	DISP	Display on/off
32	NC/HS	No connection /Horizontal sync input
33	NC/VS	No connection /Vertical sync input
34	DE	Data input 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 : +3.0V
3	SCL	I2C clock inputI2C 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

RAYSTAR OPTRONICS

Contour Drawing



Absolute Maximum Ratings

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

Electrical Characteristics

1. Typical Operation Conditions

Item	Symbol	Values			Unit
		Min	Typ	Max	
Power voltage	VDD	3.1	3.3	3.5	V
Current for Driver(Black)	I _{dd}	-	110	170	mA
Input logic high voltage	V _{IH}	0.7 VDD	-	VDD	V
Input logic low voltage	V _{IL}	0	-	0.3 VDD	

2. Backlight Driving Conditions

Item	Symbol	Values			Unit
		Min	Typ	Max	
Voltage for LED backlight	V _L	18	19.2	20	V
Current for LED backlight	I _L	--	60	--	mA
LED life time	-	--	50,000	-	Hr