



RAYSTAR

曜凌光電股份有限公司

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RFF700H-AIW-DNC

SPECIFICATION

General Specifications

- Size: 7.0 inch
- Dot Matrix: 800 x RGB x 480(TFT) dots
- Module dimension: 165 x 104.8 x 6.86 mm
- Active area: 152.4 x 91.44 mm
- Dot pitch: 0.0635 x 0.1905 mm
- LCD type: TFT, Normally White, Transmissive
- View Direction: 12 o'clock
- Gray Scale Inversion Direction: 6 o'clock
- Backlight Type: LED ,Normally White
- With /Without TP: With PCAP
- Surface: Glare

*Color tone slight changed by temperature and driving voltage.

Interface

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
39	GND	Power Ground
40	GND	Power Ground

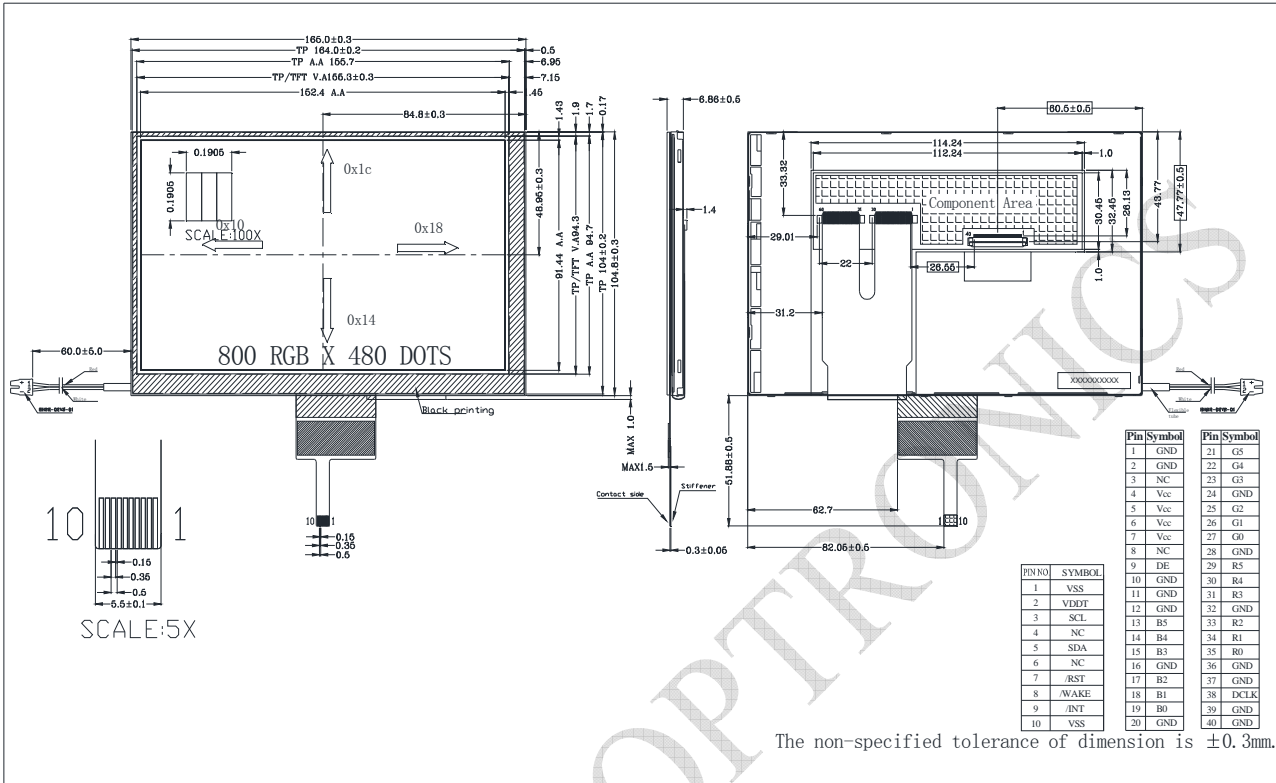
Backlight Driving Part

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

PCAP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.3V
3	SCL	SPI Slave mode, chip select, active low I2C clock input
4	NC	No connect
5	SDA	SPI Slave mode, data input I2C data input and output
6	NC	No connect
7	/RST	External Reset, Low is active
8	/WAKE	External interrupt from the host
9	/INT	External interrupt to the host
10	VSS	Ground for analog circuit

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

Operating conditions

Absolute Maximum Ratings (GND=0V)

Item	Symbol	Min	Typ	Max	Unit
Power Voltage	V _{cc}	-0.3	-	6	V
Input Signal Voltage	V _i	-0.3	-	V _{cc} +0.3	V

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

Item	Symbol	Min	Typ	Max	Unit	
Power Supply Voltage	V _{cc}	3.0	3.3	3.6	V	
Supply current For LCM	I _{cc}	-	160	270	mA	
Power Consumption	-	-	530	970	mW	
Supply Voltage For PCAP	V _{DDT}	2.8	-	3.3	V	
Input logic Voltage	High Level	V _{IH}	0.7V _{cc}	-	V _{cc}	V
	Low Level	V _{IL}	0	-	0.3V _{cc}	

LED driving conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED current	-	-	160	200	mA
Power Consumption	V _{BL+} =9.8V		1568	2200	mW
LED voltage	V _{BL+}	8.4	-	11	V
LED Life Time	-	-	50,000	-	Hr