

TFT DISPLAY SPECIFICATION



RAYSTAR

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RFF700B8-AWH-DNB

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 12.95(D) mm
- Active area: 152.40 x 91.44 mm
- Pixel pitch: 0.1905 x 0.1905 mm
- LCD type: TFT, Normally Black, Transmissive
- View Direction: 80/80/80/80 (IPS)
- Interface: 18-bit RGB
- Driver IC: HX8249-A + HX8678-C
- Aspect Ratio: 15:9
- Backlight Type: LED, Normally White
- PCAP IC: ILI2511
- PCAP Interface: USB (I2C available)
- PCAP FW Version: 6.0.0.0.0.0.1
- Touch Screen: Projected Capacitive Touch Screen, PCAP
- Surface: Glare

Interface

LCM PIN Definition

Pin	Symbol	Function
1	GND	Power ground
2	GND	Power ground
3	NC	No connection
4	VCC	Power voltage
5	VCC	Power voltage
6	VCC	Power voltage
7	VCC	Power voltage
8	NC	No connection
9	DE	Data enable signal for TTL mode.
10	GND	Power ground
11	GND	Power ground
12	GND	Power ground
13	B5	Blue data
14	B4	Blue data
15	B3	Blue data
16	GND	Power ground
17	B2	Blue data
18	B1	Blue data
19	B0	Blue data(LSB)
20	GND	Power ground
21	G5	Green data
22	G4	Green data
23	G3	Green data
24	GND	Power ground
25	G2	Green data
26	G1	Green data
27	G0	Green data(LSB)
28	GND	Power ground
29	R5	Red data
30	R4	Red data
31	R3	Red data
32	GND	Power ground

33	R2	Red data
34	R1	Red data
35	R0	Red data (LSB)
36	GND	Power ground
37	GND	Power ground
38	DCLK	Sample clock
39	GND	Power ground
40	GND	Power ground

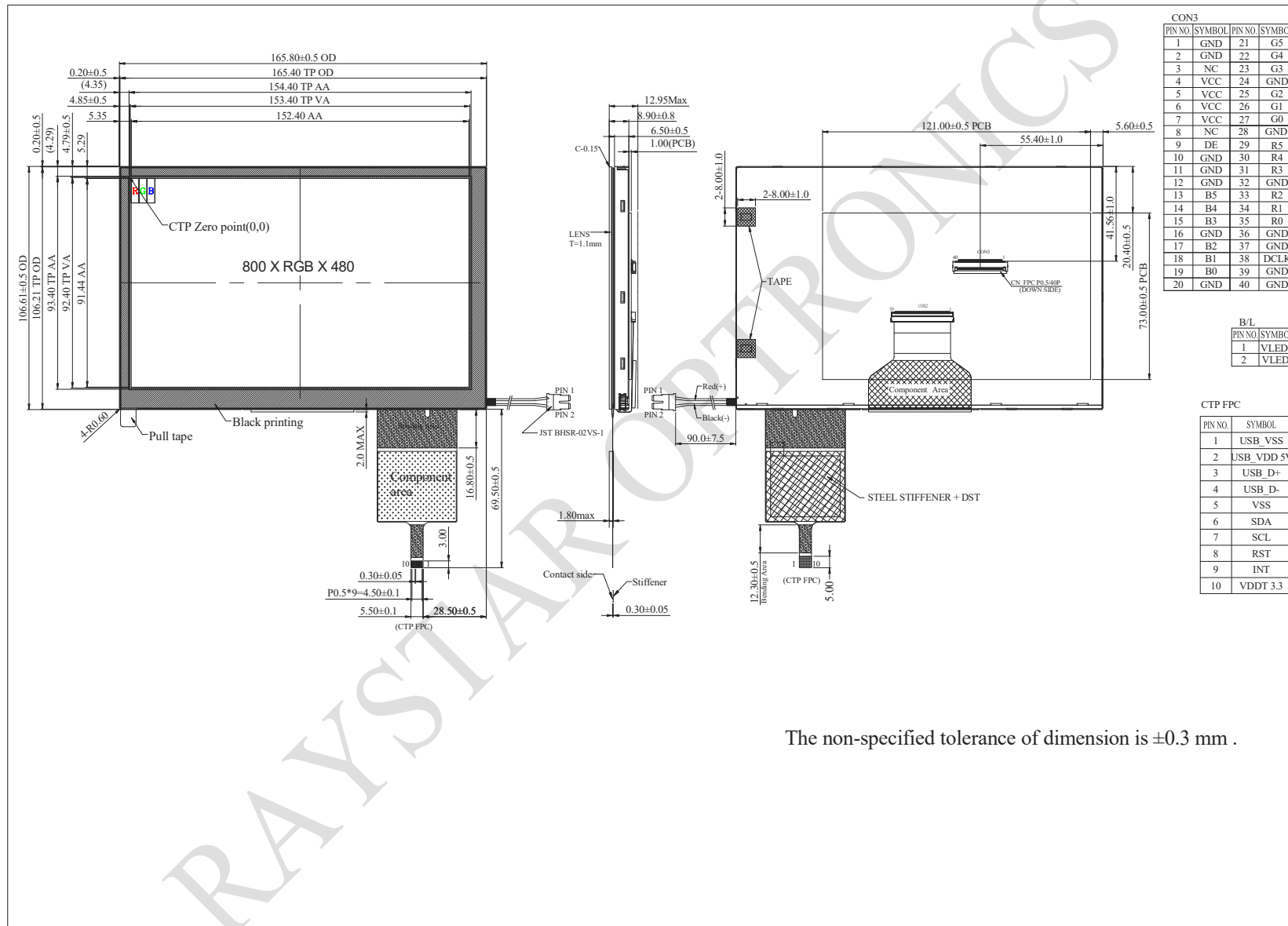
Backlight Driving Part

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

PCAP PIN Definition

Pin	Symbol	Function
1	USB_VSS	System ground
2	USB_VDD 5V	Power supply
3	USB_D+	Data +
4	USB_D-	Data -
5	VSS	System ground
6	SDA	I2C data input and output
7	SCL	I2C clock input
8	RST	External Reset, Low is active
9	INT	External interrupt to the host
10	VDDT 3.3	Power supply

Contour Drawing



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

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	V _{cc}	2.7	3.3	3.6	V
Current of power supply	I _{cc}	—	22	33	mA
Supply PCAP	USB_VDD 5V	4.4	5.0	5.5	V
	I _{VDD 5V}	—	83.6	126	mA

LED driving conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED current	—	—	450	—	mA
LED voltage	V _{LED+}	8.1	9.3	10.2	V
LED Life Time	—	40000	—	—	Hr