

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF70D2SWGGDNG0#

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGB x 480(TFT)	dots
Module dimension	181.2(W) x 105.4(H) x 9.8 (MAX)(D)	mm
Active area	152.4 x 91.44	mm
Pixel pitch	0.1905 x 0.1905	mm
LCD type	TFT, Normally Black, Transmissive	
View Angle	85/85/85/85	
TFT IC	RM53052+RM57452 or Equivalent	
Aspect Ratio	16:9	
Backlight Type	LED, Normally White	
TFT Interface	18-bit RGB	
PCAP Driver IC	ILI2130 or equivalent	
PCAP Interface	I2C	
PCAP FW Version	0x07.0x00.0x00.0x00.0x70.0x44.0x0A.0x02	
PCAP Resolution	16384*16384	
Touch Panel	Projected Capacitive Touch Panel	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

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

Electrical Characteristics

1. 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	Black Pattern	—	85	130	mA
Supply CTP	VDDT		3.1	3.3	3.5	V
	I _{CTP}		—	65	100	mA

2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	—	—	110	—	mA
LED voltage	VLED+	22.4	24.0	25.6	V
LED Life Time	—	50,000	—	—	Hr

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

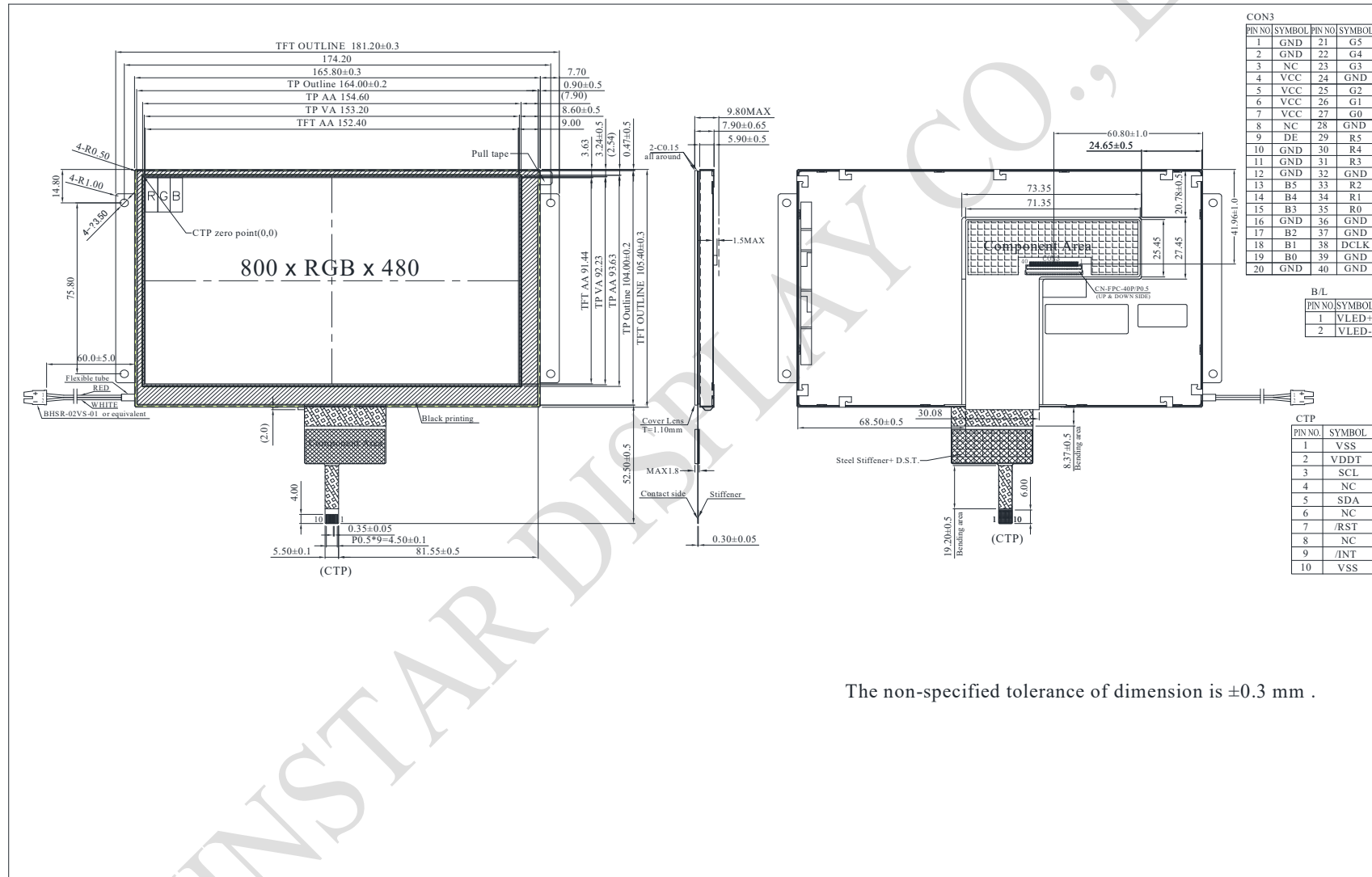
2. Backlight Driving Part

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

3. CTP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.3V
3	SCL	I2C 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

Contour Drawing



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