TFT DISPLAY SPECIFICATION



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Represented by:

first FC components

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SPECIFICATION

CUSTOMER : _____

MODULE NO.: WF101-1280800LM#0SP3-FC

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APPROVED BY: **(FOR CUSTOMER USE ONLY)**	**PCB VERSION:** **DATA:**

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
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ISSUED DATE:	2026/06/17		

General Specifications

Item	Dimension	Unit
Screen Diagonal	10.1	inch
Number of Pixels	1280 x 3(R GB) x 800	dots
Module dimension	257.96 x 168.6 x 11.72	mm
Active area	216.96 (H) x 135.6(V)	mm
Pixel pitch	0.1695 × 0.1695	mm
Display Mode	Normally Black , Transmissive	
Viewing Angle	80/80/80/80	
Pixel Arrangement	R.G.B. Vertical Stripe	
TFT Drive IC	EK79202D or Equivalent	
Backlight Type	LED,Normally White	
Aspect Ratio	16:10	
TFT Interface	4-Lanes MIPI	
CTP Driver IC	GT928 or equivalent	
CTP Interface	I2C	
CTP FW Version	80	
CTP Resolution	1280*800	
With /Without TP	With CTP	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

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Absolute Maximum Ratings

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

Note: Device is subject to be damaged permanently if stresses beyond those absolute maximum ratings listed above

1. Temp. ≦ 60℃, 90% RH MAX. Temp.＞60℃, Absolute humidity shall be less than 90% RH at 60℃

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Electrical Characteristics

Typical Operation Conditions (Note 1)

Item	Symbol	Values			Unit	Remark
		Min.	Typ.	MAX.		
Power voltage	VCC	3.0	3.3	3.5	V	
	VGH	17.5	18.0	18.5	V	Note 1
	VGL	-11.5	-10.5	-10.0	V	Note 2
	VSP	—	5.5	—	V	Note 3
	VSN	—	-5.5	—	V	Note 3
Supply Voltage For Touch Logic	VDDT	2.8	—	3.3	V	

Note:
1. VGH is TFT Gate operating Voltage.
2. VGL is TFT Gate operating Voltage.
3. VSP / VSN does not require an external power supply voltage, it is provided by IC on the PCB

Current Consumption

Item	Symbol	Values			Unit	Remark
		Min.	Typ.	MAX.		
Current for Driver	IGH	—	7.7	—	mA	VGH =18V
	IGL	—	7.7	—	mA	VGL = -10.5V
	IVCC	—	79	120	mA	-
Current for TP	IDDT	-	14.0	21.0	mA	

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Optical Characteristics

Item		Symbol	Condition.	Min	Typ.	Max.	Unit	Remark
Response time		Tr+ Tf	θ=0°、Φ=0°	-	25	35	.ms	Note 3
Contrast ratio		CR	At optimized viewing angle	800	1000	-	-	Note 4
Color Chromaticity	White	Wx	θ=0°、Φ=0	0.272	0.322	0.372	-	Note 2,6,7
		Wy		0.294	0.344	0.394	-	
Viewing angle	Hor.	ΘR	CR≧10	70	80	-	Deg.	Note 1
		ΘL		70	80	-		
	Ver.	ΦT		70	80	-		
		ΦB		70	80	-		
Brightness		-	-	800	900	-	cd/m²	Center of display
Uniformity		(U)	-	70	-	-	%	Note 5

Ta=25±2℃

Note 1: Definition of viewing angle range

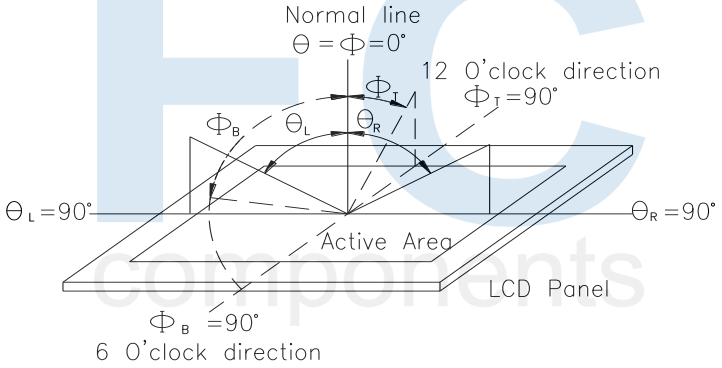


Fig. 1. Definition of viewing angle

Note 2: Test equipment setup:

After stabilizing and leaving the panel alone at a driven temperature for 10 minutes, the measurement should be executed. Measurement should be executed in a stable, windless, and dark room. Optical specifications are measured by Topcon BM-7 or BM-5 luminance meter 1.0° field of view at a distance of 50cm and normal direction.

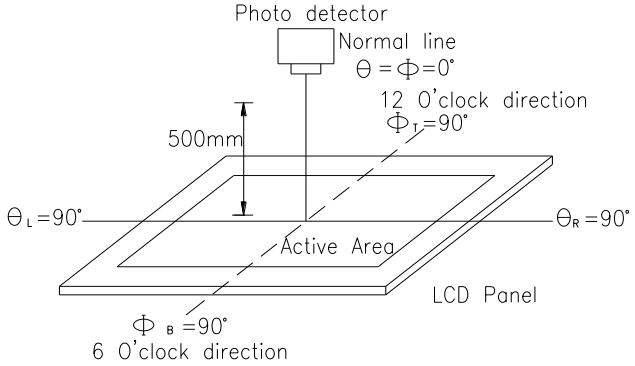


Fig. 2. Optical measurement system setup

Interface

Interface Connector

Pin No.	Symbol	I/O	Function	Remark
1	NC	-	No connection	
2	VCC	P	Power Supply	
3	VCC	P	Power Supply	
4	NC	-	No connection	
5	NC	-	No connection	
6	NC	-	No connection	
7	GND	P	Ground	
8	D0N	I	MIPI data Input.	
9	D0P	I		
10	GND	P	Ground	
11	D1N	I	MIPI data Input.	
12	D1P	I		
13	GND	P	Ground	
14	D2N	I	MIPI data Input.	
15	D2P	I		
16	GND	P	Ground	
17	CLKN	I	MIPI clock Input.	
18	CLKP	I		
19	GND	P	Ground	
20	D3N	I	MIPI data Input.	
21	D3P	I		
22	GND	P	Ground	
23	NC	-	No connection	
24	NC	-	No connection	
25	GND	P	Ground	
26	NC	-	No connection	
27	NC	-	No connection	
28	NC	-	No connection	
29	NC	-	No connection	
30	GND	P	Ground	
31	NC	-	No connection	

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32	NC	-	No connection	
33	NC	-	No connection	
34	NC	-	No connection	
35	VGL	P	Connect to stabilizing capacitor between VSSA and VGL.	
36	NC	-	No connection	
37	NC	-	No connection	
38	VGH	P	Connect to stabilizing capacitor between VSSA and VGH.	
39	NC	-	No connection	
40	NC	-	No connection	

I: input, O: output, P: Power

Backlight Driving Part

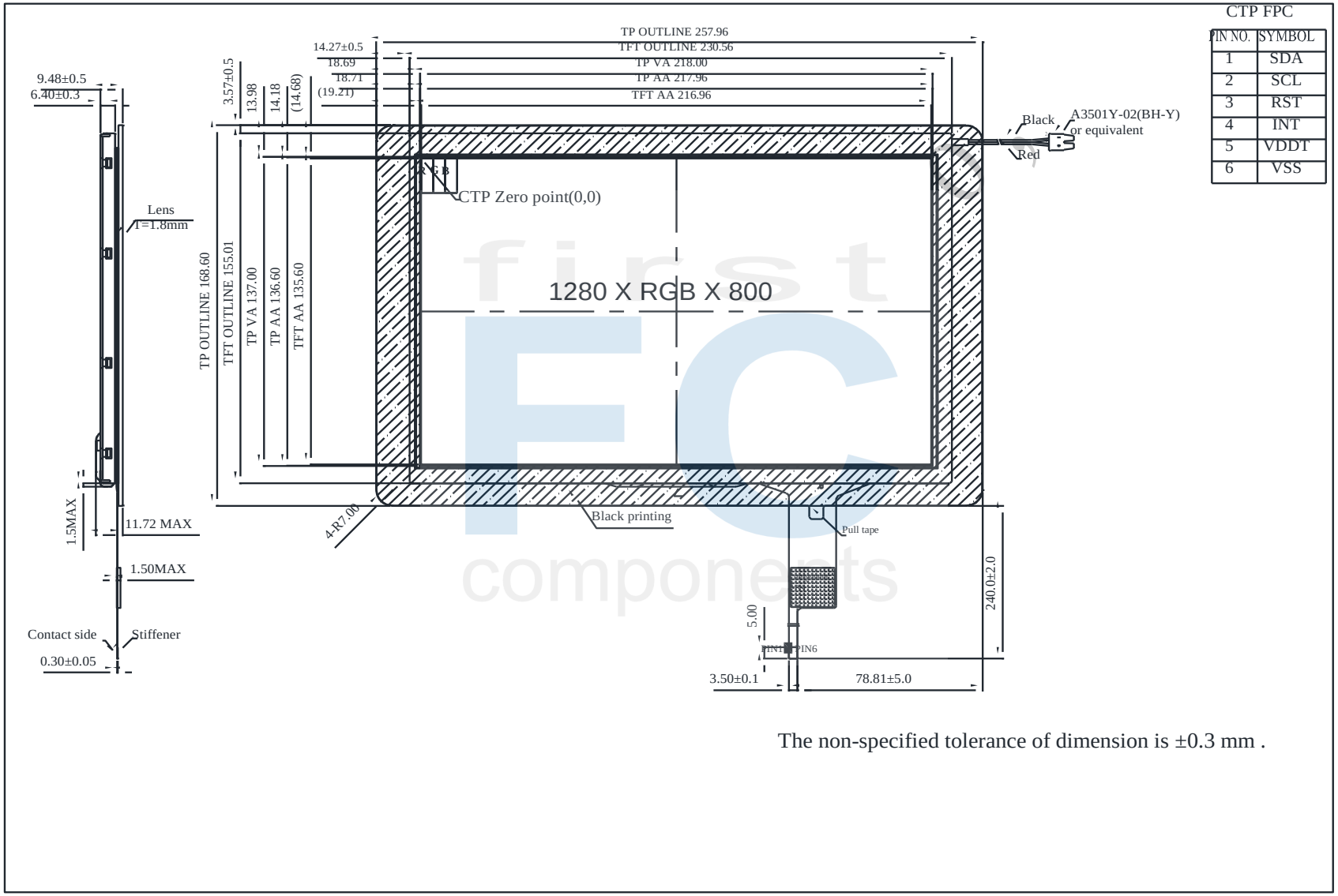
Pin No.	Symbol	Function
1	VLED+	Red, LED_ Anode
2	VLED-	Black, LED_ Cathode

Note: The backlight interface connector is a model A3501Y-02(BH-Y) or equivalent

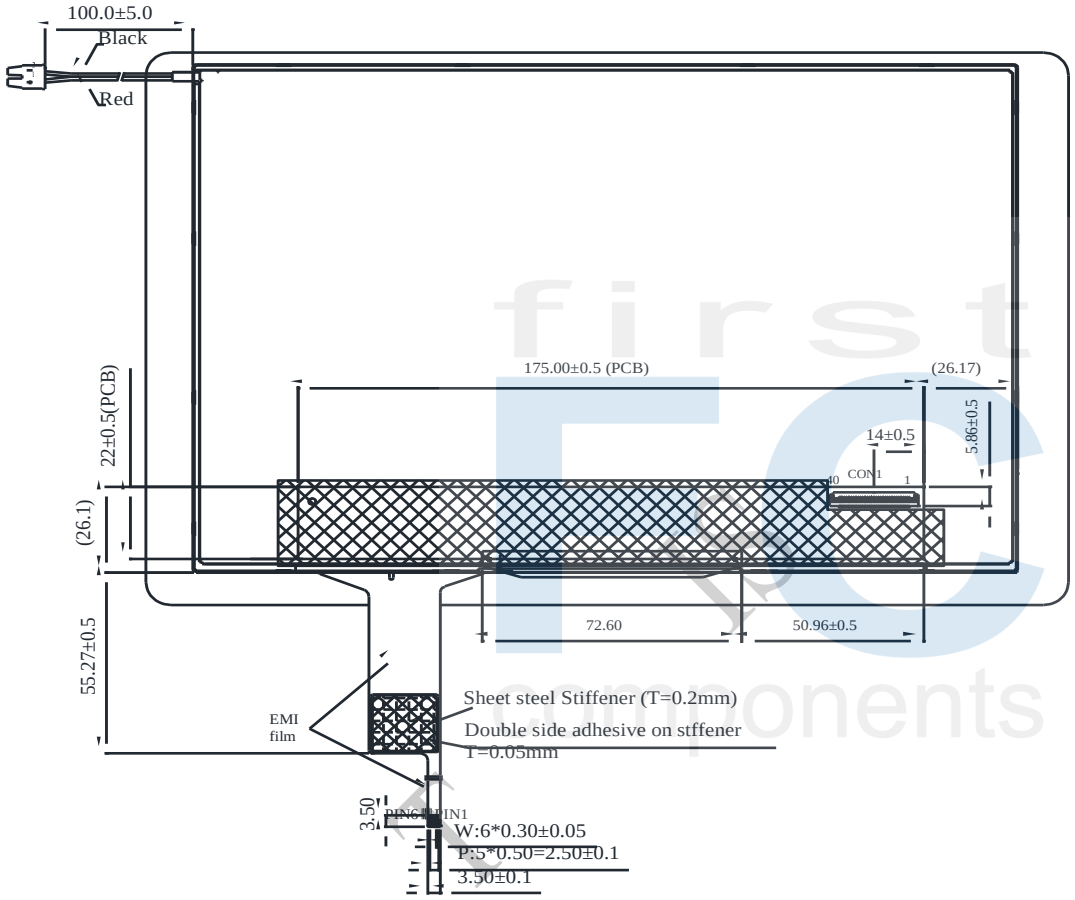
CTP PIN Definition

Pin	Symbol	Function	Remark
1	SDA	I2C data input and output	
2	SCL	I2C clock input	
3	RST	External Reset, Low is active	
4	INT	External interrupt to the host	
5	VDDT	Power Supply : +3.3V	
6	VSS	Ground for analog circuit	

Contour Drawing



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



CN1

PIN NO	SYMBOL
1	LED+
2	LED-

PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	NC	21	Rxin3+
2	VCC	22	GND
3	VCC	23	NC
4	NC	24	NC
5	NC	25	GND
6	NC	26	NC
7	GND	27	NC
8	Rxin0-	28	NC
9	Rxin0+	29	NC
10	GND	30	GND
11	Rxin1-	31	NC
12	Rxin1+	32	NC
13	GND	33	NC
14	Rxin2-	34	NC
15	Rxin2+	35	VGL
16	GND	36	NC
17	RxCLK-	37	NC
18	RxCLK+	38	VGH
19	GND	39	NC
20	Rxin3-	40	NC

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