TFT DISPLAY SPECIFICATION



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SPECIFICATION

CUSTOMER : _____

MODULE NO.: WF101-1280800LM#0SP1-FC

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

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
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	230.56 x 155.01 x 11.65	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	
With /Without TP	With RTP	
Surface	Anti-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

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	-

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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		-	-	700	750	-	cd/m²	Center of display
Uniformity		(U)	-	70	-	-	%	Note 5

Ta=25±2℃

Note 1: Definition of viewing angle range

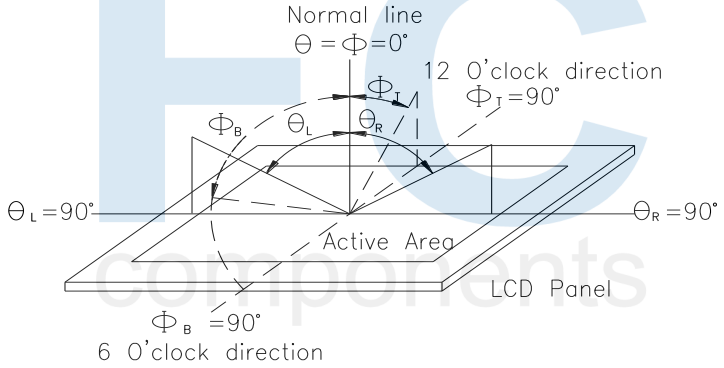


Fig. 1. Definition of viewing angle

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.

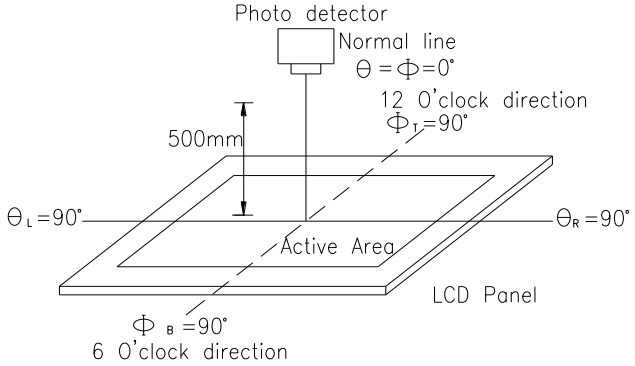


Fig. 2. Optical measurement system setup

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

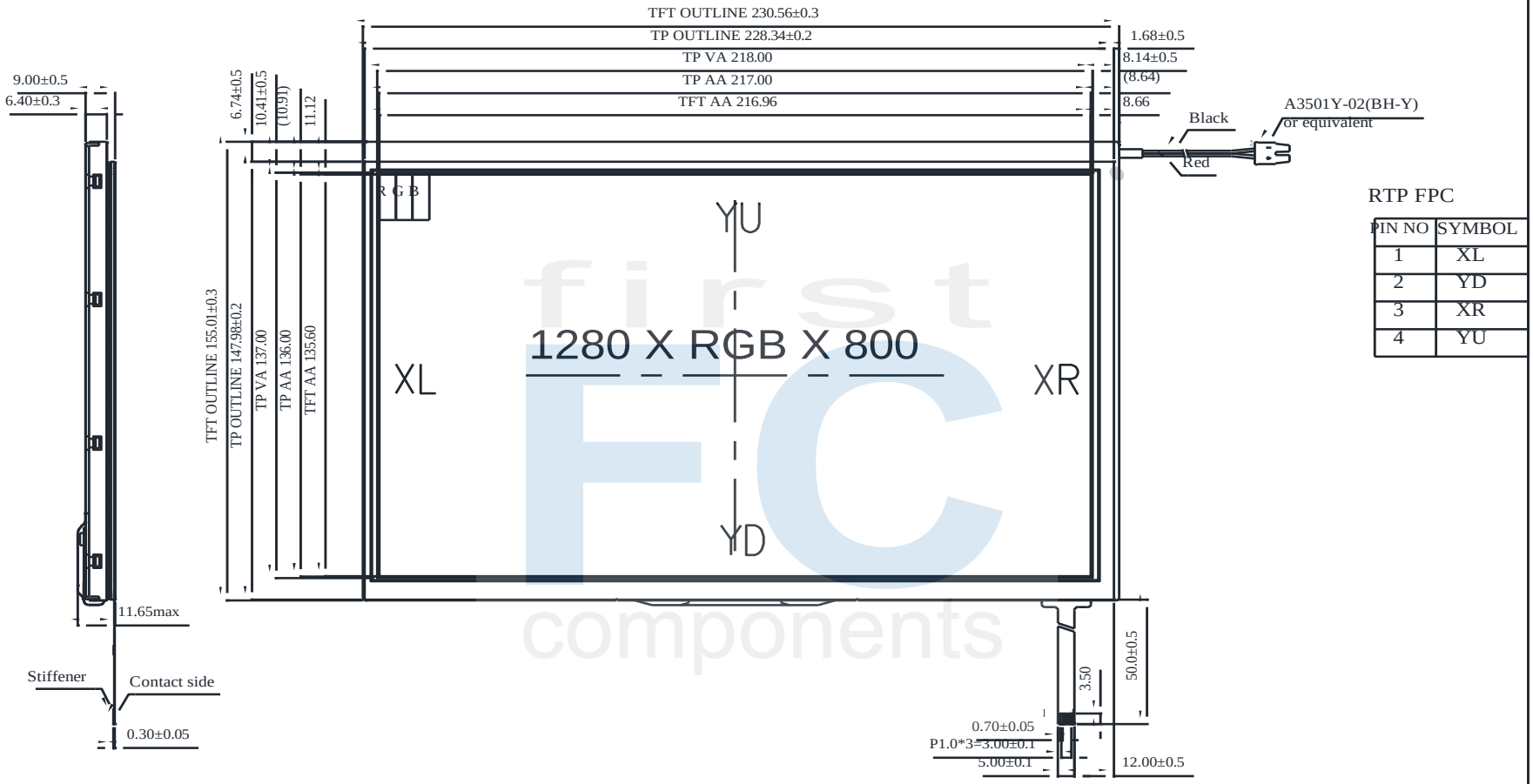
Backlight Driving Part

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

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Contour Drawing

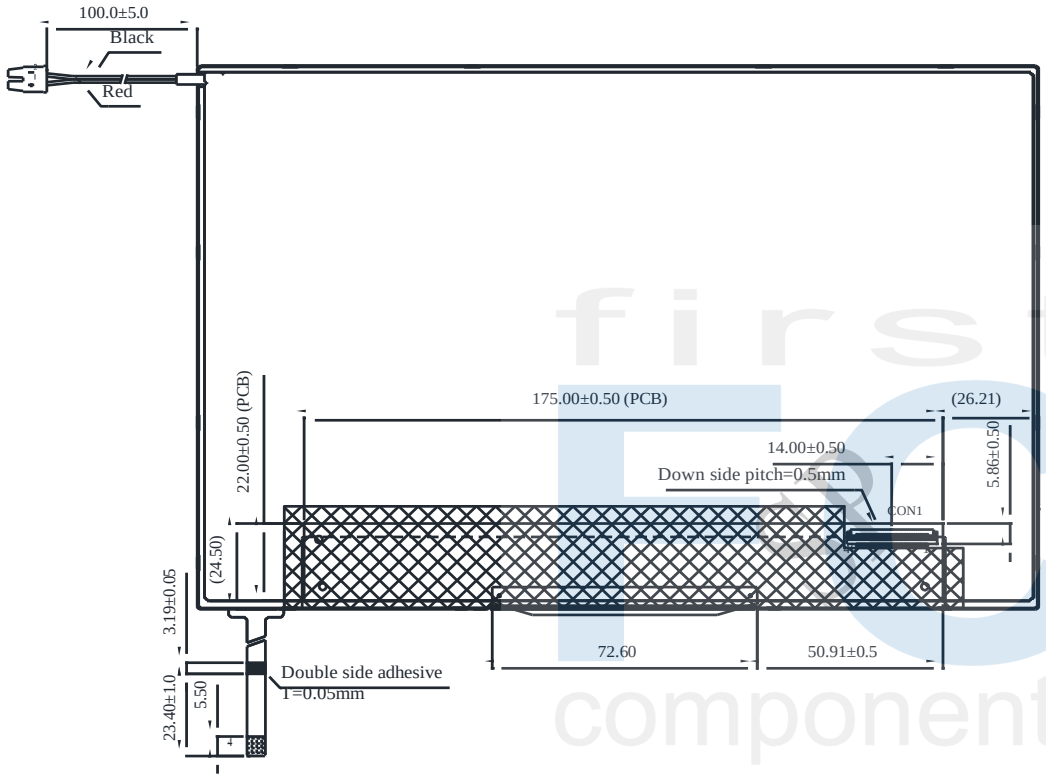


RTP FPC

PIN NO	SYMBOL
1	XL
2	YD
3	XR
4	YU

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

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B/L

PIN NO	SYMBOL
1	VLED+
2	VLED-

CON1

PIN NO	SYMBOL	PIN NO	SYMBOL
1	NC	21	D3P
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	D0N	28	NC
9	D0P	29	NC
10	GND	30	GND
11	D1N	31	NC
12	D1P	32	NC
13	GND	33	NC
14	D2N	34	NC
15	D2P	35	VGL
16	GND	36	NC
17	CLKN	37	NC
18	CLKP	38	VGH
19	GND	39	NC
20	D3N	40	NC

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

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