TFT DISPLAY SPECIFICATION



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SPECIFICATION

CUSTOMER : _____

MODULE NO.: WF43-480272UP#E05-FC

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

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
ISSUED DATE:	2026/08/07		

General Specifications

Item	Dimension	Unit
Size	4.3	inch
Dot Matrix	480 x RGBx272(TFT)	dots
Module dimension	106.7 x 69.6 x 9.4	mm
Active area	95.04 x 53.856	mm
Dot pitch	0.066 x 0.198	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	16:9	
Backlight Type	LED, Normally White	
Controller IC	SSD1963	
Interface	Digital 8080 family MPU	
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

Operating conditions: (CON3.Pin1=GND, Pin2=VDD)

Item	Symbol	Condition	Min	Typ	Max	Unit	Remark
Supply Voltage For LCM	VDD	—	3.0	3.1	3.3	V	—
Supply Current For LCM	IDD	—	—	177	265.5	mA	Note1

Note 1 : This value is test for VDD=3.3V , Ta=25℃ only

Backlight driving conditions (CON3.Pin33,34=VLED-, Pin35,36=VLED+)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Operation Current For LED Driver	VLED+=3.3V	145	—	225	mA	Note 1,2
Power Consumption	VLED+=3.3V	478.5	—	1125	mW	Note 1,2
Supply Voltage For LED Driver	VLED+	3.3	—	5	V	Note 1,2
LED Life Time		50,000	—	—	Hr	Note 2,3,4

Note 1 : Base on VLED= 3.3V for the back light driver IC specification
Note 2 : Ta = 25 ℃
Note 3 : Brightness to be decreased to 50% of the initial value
Note 4 : The single LED lamp case

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Optical Characteristics

Item		Symbol	Condition.	Min	Typ.	Max.	Unit	Remark
Response time		Tr+ Tf	θ=0°、Φ=0°	-	25	50	ms	Note 3
Contrast ratio		CR	At optimized viewing angle	-	500	-	-	Note 4
Color Chromaticity	White	Wx	θ=0°、Φ=0	0.265	0.315	0.365	-	Note 2,6,7
		Wy		0.276	0.326	0.376	-	
Viewing angle (Gray Scale Inversion Direction)	Hor.	ΘR	CR≧10	-	70	-	Deg.	Note 1
		ΘL		-	70	-		
	Ver.	ΦT		-	50	-		
		ΦB		-	60	-		
Brightness		-	-	250	350	-	cd/m²	Center of display
Uniformity		(U)	-	75	-	-	%	Note5

Ta=25±2℃

Note 1: Definition of viewing angle range

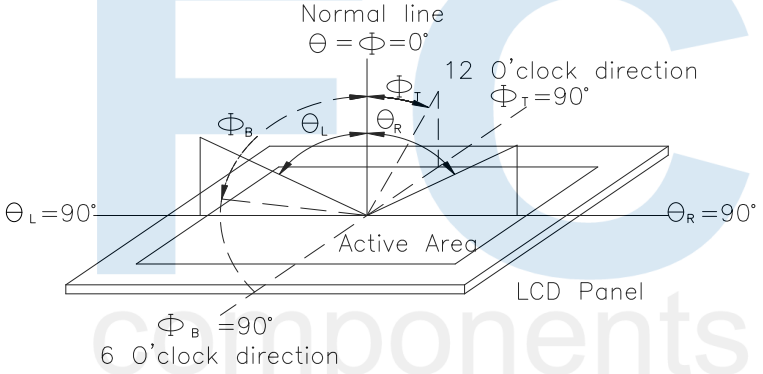


Fig. 1. Definition of viewing angle

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-7orBM-5 luminance meter 1.0° field of view at a distance of 50cm and normal direction.

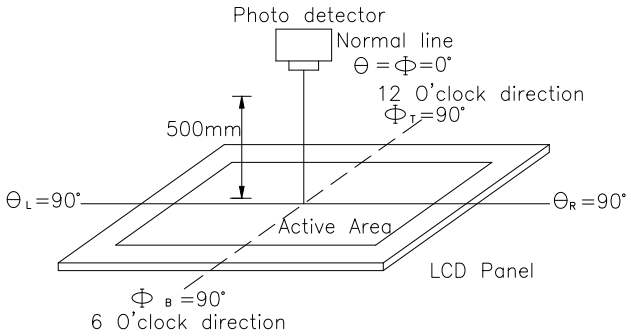


Fig. 2. Optical measurement system setup

Note 3: Definition of Response time:

Interface

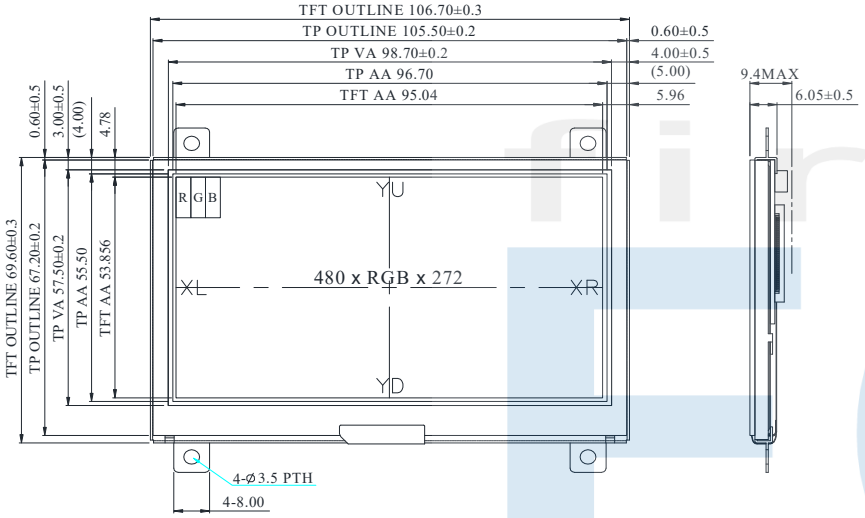
LCM PIN Definition

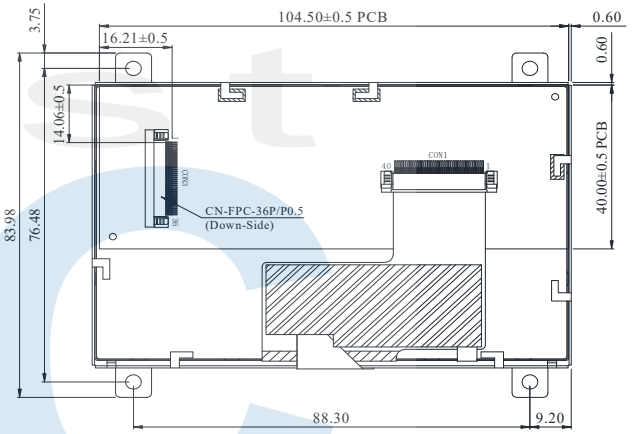
Pin	Symbol	Function	Remark
1	GND	Power ground	
2	VDD	Power Supply	
3	BL_E	Enable to light the Backlight	
4	D/C	Data/Command select	
5	WR	write strobe signal	
6	RD	read strobe signal	
7-22	DB0-DB15	Data bus. Pins not used should be floating	
23	NC	No connection	
24	NC	No connection	
25	CS	Chip select	
26	RESET	Master synchronize reset	
27	DISP_ON	Display on/off	
28	NC	No connection	
29	XL	Left electrode	
30	YU	Top electrode	
31	XR	Right electrode	
32	YD	Bottom electrode	
33-34	VLED-	VLED- for B/L LED inverter (GND)	
35-36	VLED+	VLED+ for B/L LED inverter (+3.3V)	

Note1: When select 8bit mode, DB0~DB7 be used, DB8~DB15 no connect
When select 16bit mode, DB0~DB15 be used

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Contour Drawing





PIN NO.	SYMBOL
1	GND
2	VDD
3	BL_E
4	D/C
5	WR
6	RD
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	DB8
16	DB9
17	DB10
18	DB11
19	DB12
20	DB13
21	DB14
22	DB15
23	NC
24	NC
25	CS
26	RESET
27	DISP_ON
28	NC
29	XL
30	YU
31	XR
32	YD
33	VLED-
34	VLED-
35	VLED+
36	VLED+

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

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