TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WFN0460DB2#0P1-FC

General Specifications

Item	Dimension	Unit
Size	4.6	inch
Dot Matrix	800× 3(RGB) × 320	dots
Module dimension	120.7 (W) × 56.16 (H) × 4.2	mm
Active area	108.0 (W) × 43.2 (H)	mm
Pixel pitch	0.135(W) ×0.135(H)	mm
LCD type	TFT, Normally Black, Transmissive	
View Direction	80/80/80/80	
Aspect Ratio	Bar Type	
TFT Driver IC	ST7262 or equivalent	
TFT Interface	24 bit R.G.B.	
Backlight Type	LED, Normally White	
Touch Panel	Resistive Touch Panel	
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	℃

Electrical Characteristics

1. Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VCC	3.1	3.3	3.6	V
Current for Driver(Black)	I_{CC}	-	56.0	85.0	mA

2. Backlight Driving Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Voltage for LED backlight	VLED	16.2	18.0	19.8	V
Current for LED backlight	ILED	-	40	-	mA
LED life time	-	50,000	-	-	Hr

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Interface

1. LCM PIN Definition

FPC Connector is used for the module electronics interface.

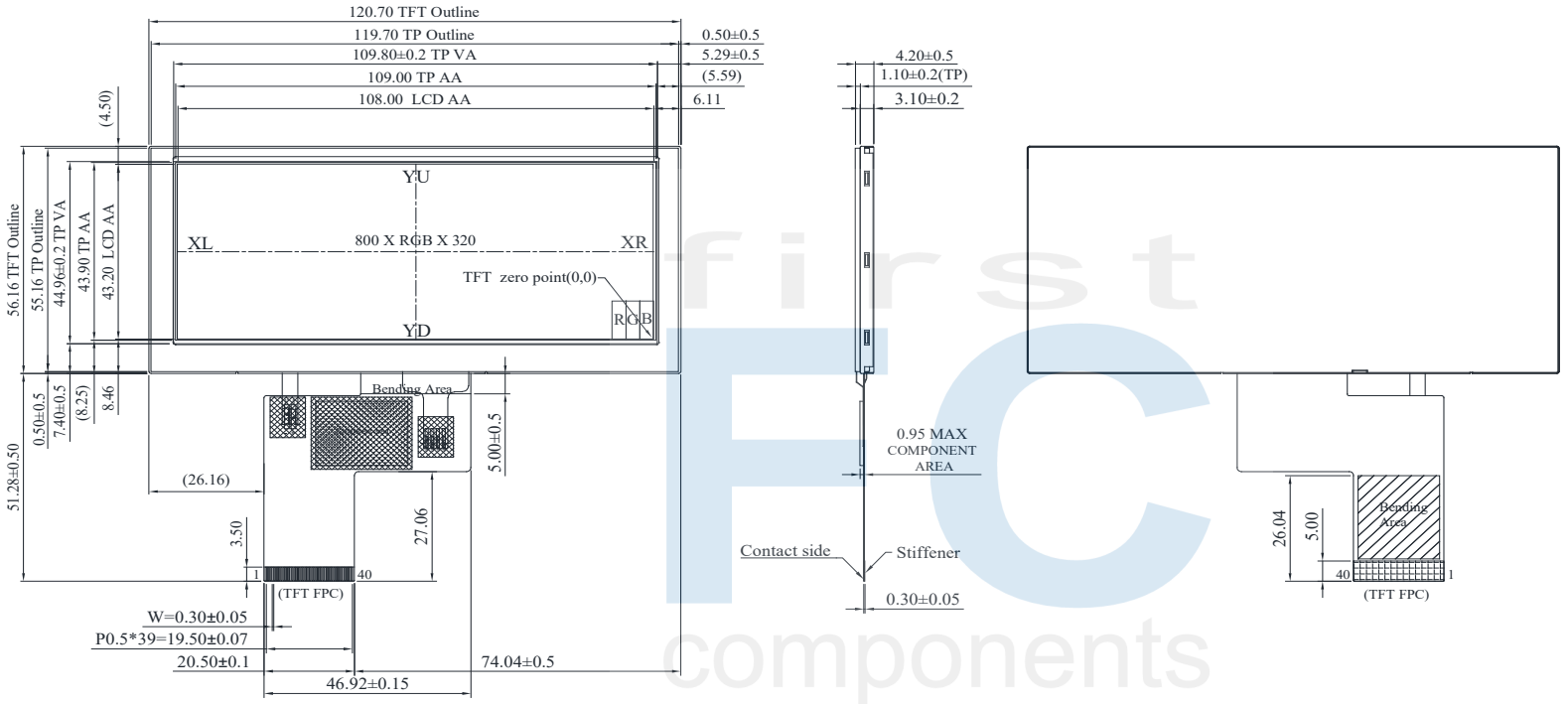
Pin	Symbol	Function
1	VLED-	Power for LED backlight (Cathode)
2	VLED+	Power for LED backlight (Anode)
3	GND	Power Ground
4	VCC	Power voltage
5	R0	Red data (LSB)
6	R1	Red data
7	R2	Red data
8	R3	Red data
9	R4	Red data
10	R5	Red data
11	R6	Red data
12	R7	Red data(MSB)
13	G0	Green data(LSB)
14	G1	Green data
15	G2	Green data
16	G3	Green data
17	G4	Green data
18	G5	Green data
19	G6	Green data
20	G7	Green data(MSB)
21	B0	Blue data(LSB)
22	B1	Blue data
23	B2	Blue data
24	B3	Blue data
25	B4	Blue data
26	B5	Blue data
27	B6	Blue data
28	B7	Blue data(MSB)
29	GND	Power Ground

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30	DCLK	Sample clock
31	DISP	Display on/off
32	HSYNC	Horizontal sync signal applied to the RGB interface, default is negative polarity.
33	VSYNC	Vertical sync signal applied to the RGB interface, default is negative polarity.
34	DE	Data input enable
35	NC	No connection
36	GND	Power Ground
37	XR	Right electrode
38	YD	Bottom electrode
39	XL	Left electrode
40	YU	Top electrode

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Contour Drawing



TFT FPC

PIN NO.	SYMBLE
1	VLED-
2	VLED+
3	GND
4	VCC
5	R0
6	R1
7	R2
8	R3
9	R4
10	R5
11	R6
12	R7
13	G0
14	G1
15	G2
16	G3
17	G4
18	G5
19	G6
20	G7
21	B0
22	B1
23	B2
24	B3
25	B4
26	B5
27	B6
28	B7
29	GND
30	DCLK
31	DISP
32	HSYNC
33	VSYNC
34	DE
35	NC
36	GND
37	XR
38	YD
39	XL
40	YU

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

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