TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WFN0500DA4#0PW2-FC

General Specifications

Item	Dimension	Unit
Size	5.0	inch
Dot Matrix	800 × 3(RGB) × 480	dots
Module dimension	147.00 (W) × 104.00 (H) × 4.88	mm
Active area	108.0 (W) × 64.8 (H)	mm
Pixel pitch	0.135(W) × 0.135(H)	mm
LCD type	TFT, Normally Black, Transmissive	
View Direction	85/85/85/85	
Driver IC	FL58202DA or equivalent	
Interface	24 bit R.G.B.	
Backlight Type	LED, Normally White	
CTP IC	GT911 or equivalent	
CTP Interface	I2C	
CTP FW Version	65	
CTP Resolution	800*480	
Touch Panel	Projected Capacitive Touch Panel	
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	-30	—	+80	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

1. Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VDD	3.0	3.3	3.6	V
Current for Driver(Black)	IDD	—	82	123	mA
Input logic high voltage	V_{IH}	0.7 VDD	—	VDD	V
Input logic low voltage	V_{IL}	0	—	0.3 VDD	
Supply CTP	VDDT	2.8	—	3.3	V
	IDDT	—	14.0	21.0	mA

2. Backlight Driving Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Voltage for LED backlight	VLED	12.5	14.0	15.5	V
Current for LED backlight	ILED	—	30	—	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 No	Symbol	Function
1	VLED-	Power for LED backlight (Cathode)
2	VLED+	Power for LED backlight (Anode)
3	GND	Power Ground
4	VDD	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

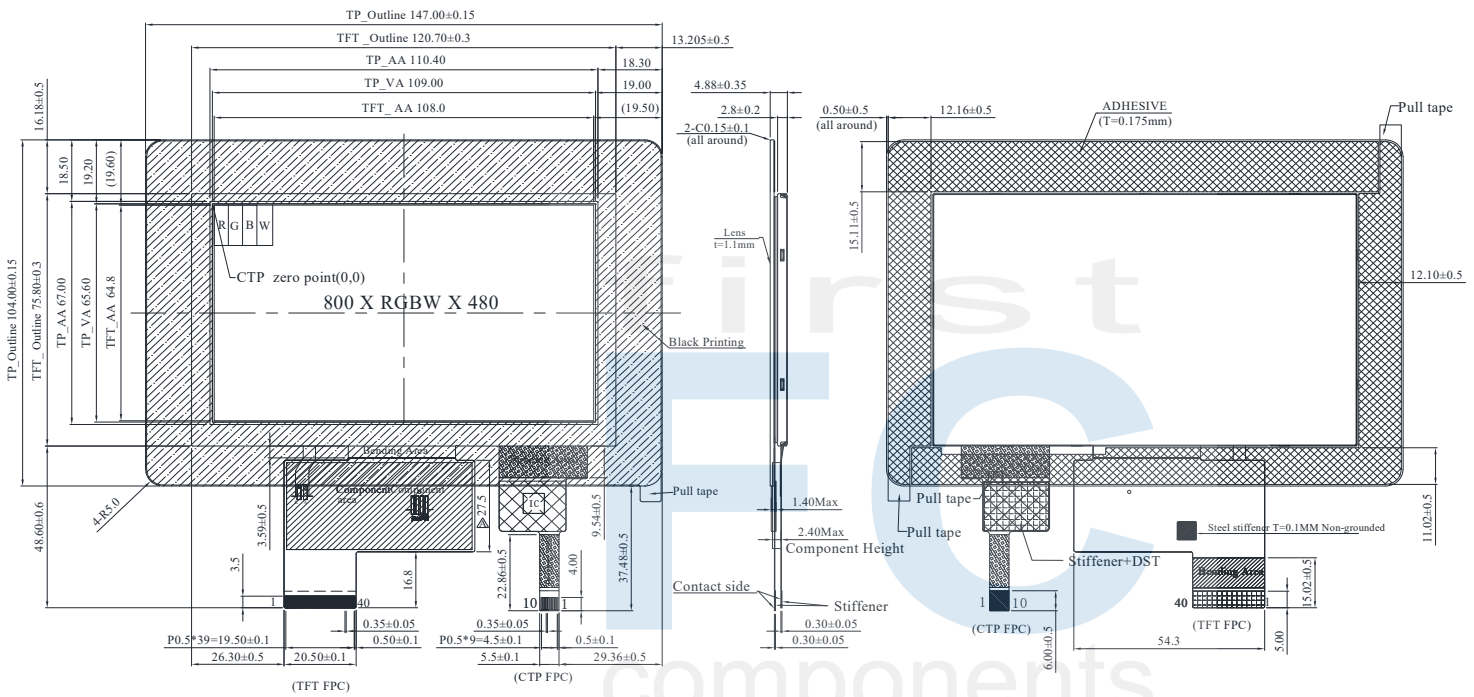
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30	CLK	Sample clock (DCLK)
31	DISP	Display on/off
32	NC	No connection
33	NC	No connection
34	DE	Data input enable
35	NC	No connection
36	GND	Power Ground
37	NC	No connection
38	NC	No connection
39	NC	No connection
40	NC	No connection

CTP PIN Definition

Pin No	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply
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



TFT FPC

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

CTP FPC

PIN NO.	SYMBOL
1	VSS
2	VDDT
3	SCL
4	NC
5	SDA
6	NC
7	/RST
8	NC
9	/INT
10	VSS

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

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