TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF121-1280800FL#0SP8-FC

General Specifications

Item	Dimension	Unit
Size	12.1	inch
Dot Matrix	1280 x RGB. x 800	dots
Module dimension	308.0 x 214.1 x 13.5	mm
Active area	261.12 x 163.2	mm
Pixel pitch	0.204 x 0.204	mm
LCD type	TFT, Normally Black, Transmissive	
Backlight Type	LED, Normally White	
Viewing Angle	85/85/85/85	
TFT Interface	LVDS	
Aspect Ratio	16:9	
CTP Driver IC	ILI2132 or equivalent	
CTP Resolution	16384*16384	
CTP Interface	USB (I2C available)	
CTP FW Version	0x07.0x00.0x00.0x00.0x02.0x00.0x00.0x00	
Touch Panel	Projected Capacitive Touch Panel	
Surface Treatment	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

5.1. Typical Operation Conditions

Item		Symbol	Min	Typ	Max	Unit
Supply voltage		V_{DD}	3.0	3.3	3.6	V
Current Consumption All Black	Logic	$I_{CC}+I_{IN}$	-	440	660	mA
	Analog					
Supply CTP		V_{DDT}(3.3V)	3.0	3.3	3.6	V
		I_{DDT}(3.3V)	-	87	135	mA
		V_{DDT}(5V)	-	5.0	-	V
		I_{DDT}(5V)	-	92	140	mA

2. Backlight Driving Conditions

Item	Symbol	Min	Typ	Max	Unit
LED current	ILED	-	360	-	mA
LED voltage	VLED+	22.8	24.8	27.2	V
LED Life Time		-	50,000	-	Hr

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Interface

1. LCM PIN Definition

Pin No.	Symbol	Function
1	NC	No contact
2	VDD	Power supply VDDIN=3.3V
3	VDD	
4	VDD	
5	NC	No contact
6	GND	Digital power
7	GND	Digital ground
8	RIN0-	LVDS Negative data signal (-)
9	RIN0+	LVDS Negative data signal (+)
10	GND	GND
11	RIN1-	LVDS Negative data signal (-)
12	RIN1+	LVDS Negative data signal (+)
13	GND	GND
14	RIN2-	LVDS Negative data signal (-)
15	RIN2+	LVDS Negative data signal (+)
16	GND	GND
17	LVDS_CLK-	LVDS Negative CLK signal (-)
18	LVDS_CLK+	LVDS Negative CLK signal (+)
19	GND	GND
20	RIN3-	LVDS Negative data signal (-)
21	RIN3+	LVDS Negative data signal (+)
22	GND	GND
23	NC	No contact
24	NC	No contact
25	GND	GND
26	NC	No contact
27	NC	No contact
28	GND	GND
29	NC	No contact
30	NC	No contact
31	GND	GND

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32	GND	GND
33	GND	GND
34-40	NC	No contact

2. BL CN

Pin No.	Symbol	Function
1	White(VLED+)	LED_ Anode
2	Black(VLED-)	LED_ Cathode

3. CON2

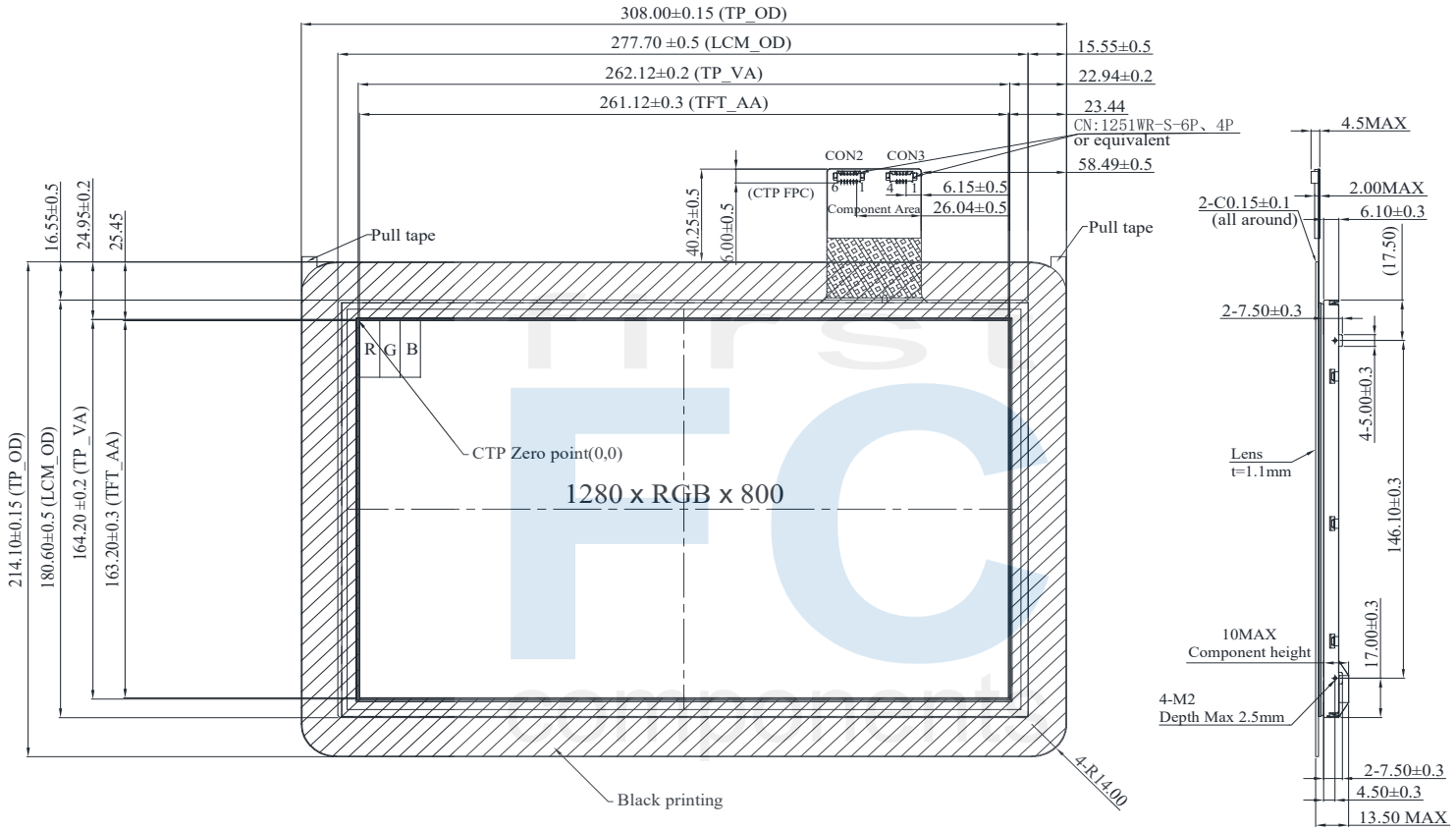
Pin No.	Symbol	Function
1	VDDT(3.3V)	Power supply
2	SDA	I2C data input and output
3	SCL	I2C clock input I2C clock input
4	RST	External Reset, Low is active
5	INT	External interrupt to the host
6	VSS	Ground for analog circuit

4. CON3

Pin No.	Symbol	Function
1	VDDT(5V)	Power supply
2	D-	Data -
3	D+	Data +
4	VSS	System ground

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Contour Drawing



CON2

PIN NO	SYMBOL
1	VDDT(3.3V)
2	SDA
3	SCL
4	RST
5	INT
6	VSS

CON3

PIN NO	SYMBOL
1	VDDT(5V)
2	D-
3	D+
4	VSS

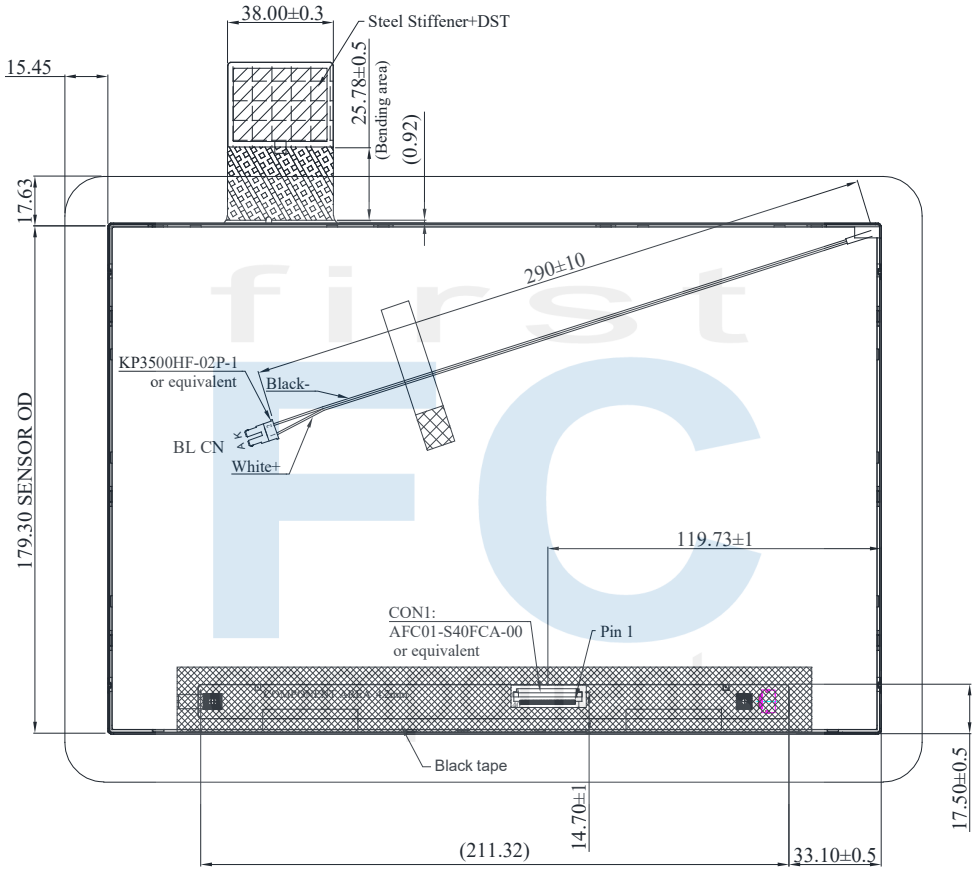
The non-specified tolerance of dimension is ±0.3 mm .

CON1

PIN NO	SYMBOL
1	NC
2	VDD
3	VDD
4	VDD
5	NC
6	GND
7	GND
8	RIN0-
9	RIN0+
10	GND
11	RIN1-
12	RIN1+
13	GND
14	RIN2-
15	RIN2+
16	GND
17	LVDS_CLK-
18	LVDS_CLK+
19	GND
20	RIN3-
21	RIN3+
22	GND
23	NC
24	NC
25	GND
26	NC
27	NC
28	GND
29	NC
30	NC
31	GND
32	GND
33	GND
34	NC
35	NC
36	NC
37	NC
38	NC
39	NC
40	NC

BL CN

PIN NO	SYMBOL
1	White(VLED+)
2	Black(VLED-)



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