TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WFN1025LA2#0SPW15-FC

General Specifications

Item	Dimension	Unit
Size	10.25	inch
Dot Matrix	1920 x RGB x 720	dots
Module dimension	277.5 x 127.0 x 12.95	mm
Active area	243.65 x 91.37	mm
Pixel Pitch	0.1269 X 0.1269	mm
LCD type	TFT, Normally Black, Transmissive	
View Angle	85/85/85/85	
TFT Interface	1-port LVDS(VESA)	
TFT Driver IC	FL5896*1 & FL5101*2	
Backlight Type	LED, Normally White	
CTP IC	GT9271 or equivalent	
CTP Interface	I2C	
CTP FW Version	65	
CTP Resolution	1920x720	
Touch Panel	Projected Capacitive Touch Panel (PCAP)	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+85	℃
Storage Temperature	TST	-40	—	+90	℃

Electrical Characteristics

1. Operating conditions:

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VDD	-	3.3	-	V
Power current	I_{DD}	-	333	500	mA
High Level Input Voltage	V_{IH}	0.7 V_{DD}	-	V_{DD}	V
Low Level Input Voltage	V_{IL}	0	-	0.3 V_{DD}	V
Supply CTP	TP_VDD	2.8	3.1	3.3	V
	TP_IDD	-	13.0	20.0	mA

2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	ILED	-	360	-	mA
LED voltage	VLED+	23.4	27.0	30.6	V
LED Life Time	-	30,000	-	-	Hr

Interface

1.LCM PIN Definition

FPC Connector is used for the module electronics interface.The recommended model is 60030-5007-1001 manufactured by XFE.

Pin. No	Symbol	I/O	Function
1	GND	P	Ground
2	TP_RST	-	TP Reset pin
3	TP_INT	-	TP Interrupt
4	TP_I2C_SCL	-	TP High speed interface Clock differential signal input pins.
5	TP_I2C_SDA	-	TP serial data input/output bi-direction pin
6	TP_VDD	-	Power supply for CTP
7	NC	-	No connection
8	GND	P	Ground
9	LVDS_D0P	I	+LVDS Differential Data Input
10	LVDS_D0N	I	-LVDS Differential Data Input
11	GND	P	Ground
12	LVDS_D1P	I	+LVDS Differential Data Input
13	LVDS_D1N	I	-LVDS Differential Data Input
14	GND	P	Ground
15	LVDS_D2P	I	+LVDS Differential Data Input
16	LVDS_D2N	I	-LVDS Differential Data Input
17	GND	P	Ground
18	LVDS_CLK0P	I	+LVDS Differential Clock Input
19	LVDS_CLK0N	I	-LVDS Differential Clock Input
20	GND	P	Ground
21	LVDS_D3P	I	+LVDS Differential Data Input
22	LVDS_D3N	I	-LVDS Differential Data Input
23	GND	P	Ground
24	NC	-	No connection
25-27	VDD	P	Power supply

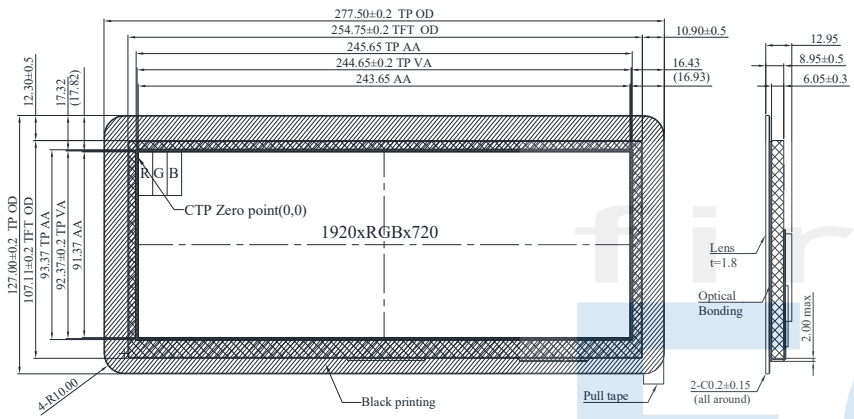
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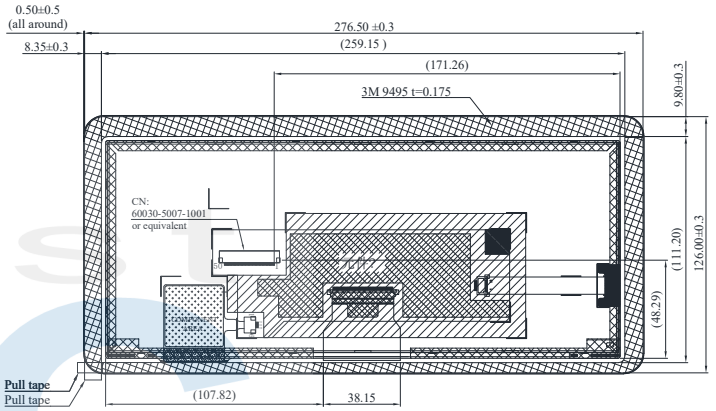
28	DP_I2C_SCL	I	Serial communication data input.
29	DP_I2C_SDA	I	Serial communication clock input.
30	BIST	I	Enable built-in self test (BIST) function BISTEN=H, BIST mode BISTEN=L, Normal mode (Default)
31	NC	-	No connect.
32	TB	I	Vertical shift direction (Gate output) selection.TB function is the hardware setting “XOR” with register setting when FCS=L.) H：Forward,Top-Bottom (Default) L：Reverse,Bottom-Top
33	STBYB	I	Standby mode. STBYB=H : normal (Default), STBYB=L: standby mode.
34	FAIL_DET	O	Fail detection signal output Normal = H , Abnormal = L
35	LCD_RST	I	Global reset pin. Active low to enter reset state. Keep VDD during operation. Normally pull high.
36	RL	I	Horizontal shift direction (Source output) selection. H: Left - Right (Default); L: Right - Left.
37	NC	-	No connection
38-39	LEDA	P	Power Supply For LED Backlight Anode Input
40	NC	-	No connection
41	NTC1	P	NTC PIN
42	NTC2	P	NTC PIN
43	NC	-	No connection
44	VLEDK1	P	Power Supply For LED Backlight Cathode Input
45	VLEDK2	P	Power Supply For LED Backlight Cathode Input
46	VLEDK3	P	Power Supply For LED Backlight Cathode Input
47	VLEDK4	P	Power Supply For LED Backlight Cathode Input
48	NC	-	No connection
49-50	GND	P	Ground

I: input; O: output; P: Power or Ground(0V).

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Contour Drawing





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PIN	SYMBOL	PIN	SYMBOL	PIN	SYMBOL	PIN	SYMBOL	PIN	SYMBOL
1	GND	11	GND	21	LVDS_D3P	31	NC	41	NTC1
2	TP_RST	12	LVDS_D1P	22	LVDS_D3N	32	TB	42	NTC2
3	TP_INT	13	LVDS_D1N	23	GND	33	STBYB	43	NC
4	TP_I2C_SCL	14	GND	24	NC	34	FAIL_DET	44	VLED-1
5	TP_I2C_SDA	15	LVDS_D2P	25	VDD	35	LCD_RST	45	VLED-2
6	TP_VDD	16	LVDS_D2N	26	VDD	36	RL	46	VLED-3
7	NC	17	GND	27	VDD	37	NC	47	VLED-4
8	GND	18	LVDS_CLK0P	28	DP_I2C_SCL	38	VLED+	48	NC
9	LVDS_D0P	19	LVDS_CLK0N	29	DP_I2C_SDA	39	VLED+	49	GND
10	LVDS_D0N	20	GND	30	BIST	40	NC	50	GND

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

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