TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.

華凌光電股份有限公司

SPECIFICATION

MODULE NO.: WF101-1024600JD#0SP8-FC

General Specifications

Item	Dimension	Unit
Size	10.1	inch
Dot Matrix	1024 RGB× 600	dots
Module dimension	235.0(W) ×143.0(H) × 8.78 (D)	mm
Active area	222.72 (H) × 125.28(V)	mm
Pixel pitch	0.2175(W) × 0.2088(H)	mm
LCD type	TFT, Normally Black, Transmissive	
TFT Interface	24 bit RGB	
TFT Driver IC	EK79001HN-S+EK73215BCGA or equivalent	
Viewing Angle	85/85/85/85	
Aspect Ratio	16:9	
Backlight Type	LED, Normally White	
PCAP Driver IC	ILI2511 or equivalent	
PCAP Interface	USB (I2C available)	
PCAP FW Version	V6.0.0.0.62.90.1.2	
PCAP Resolution	16384*16384	
Touch Panel	With PCAP	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

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 (At Ta = 25 °C,)

Item	Symbol	Min	Typ	Max	Unit
Digital Power Supply Voltage For LCD	Vcc	3.0	3.3	3.6	V
Analog Power Supply Voltage	AVDD	9.89	10.2	10.5	V
Gate On Power Supply Voltage	VGH	19.4	20.0	20.6	V
Gate Off Power Supply Voltage	VGL	-10.3	-10.0	-9.7	V
Common Power Supply Voltage	VCOM	4.0	4.3	4.6	V
Input logic high voltage	VIH	0.7 Vcc	-	Vcc	V
Input logic low voltage	VIL	0	-	0.3 Vcc	V
Supply CTP	VDDT	3.0	3.3	3.6	V
	I_{VDDT}	-	90.5	115	mA
	USB_VDD 5V	4.4	5.0	5.5	V
	$I_{VDD\ 5V}$	-	97.8	120	mA

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Interface

TFT LCD Module

Pin No.	Symbol	Function
1	VLED+	LED Anode
2	VLED+	LED Anode
3	VLED-	LED Cathode
4	VLED-	LED Cathode
5	GND	Ground
6	VCOM	Common voltage
7	VCC	Power for Digital Circuit
8	MODE	DE/SYNC mode select
9	DE	Data Input Enable (DEN)
10	VS	Vertical Sync Input (VSD)
11	HS	Horizontal Sync Input (HSD)
12	B7	Blue data(MSB)
13	B6	Blue data
14	B5	Blue data
15	B4	Blue data
16	B3	Blue data
17	B2	Blue data
18	B1	Blue data
19	B0	Blue data(LSB)
20	G7	Green data(MSB)
21	G6	Green data
22	G5	Green data
23	G4	Green data
24	G3	Green data
25	G2	Green data
26	G1	Green data
27	G0	Green data(LSB)
28	R7	Red data(MSB)
29	R6	Red data
30	R5	Red data
31	R4	Red data

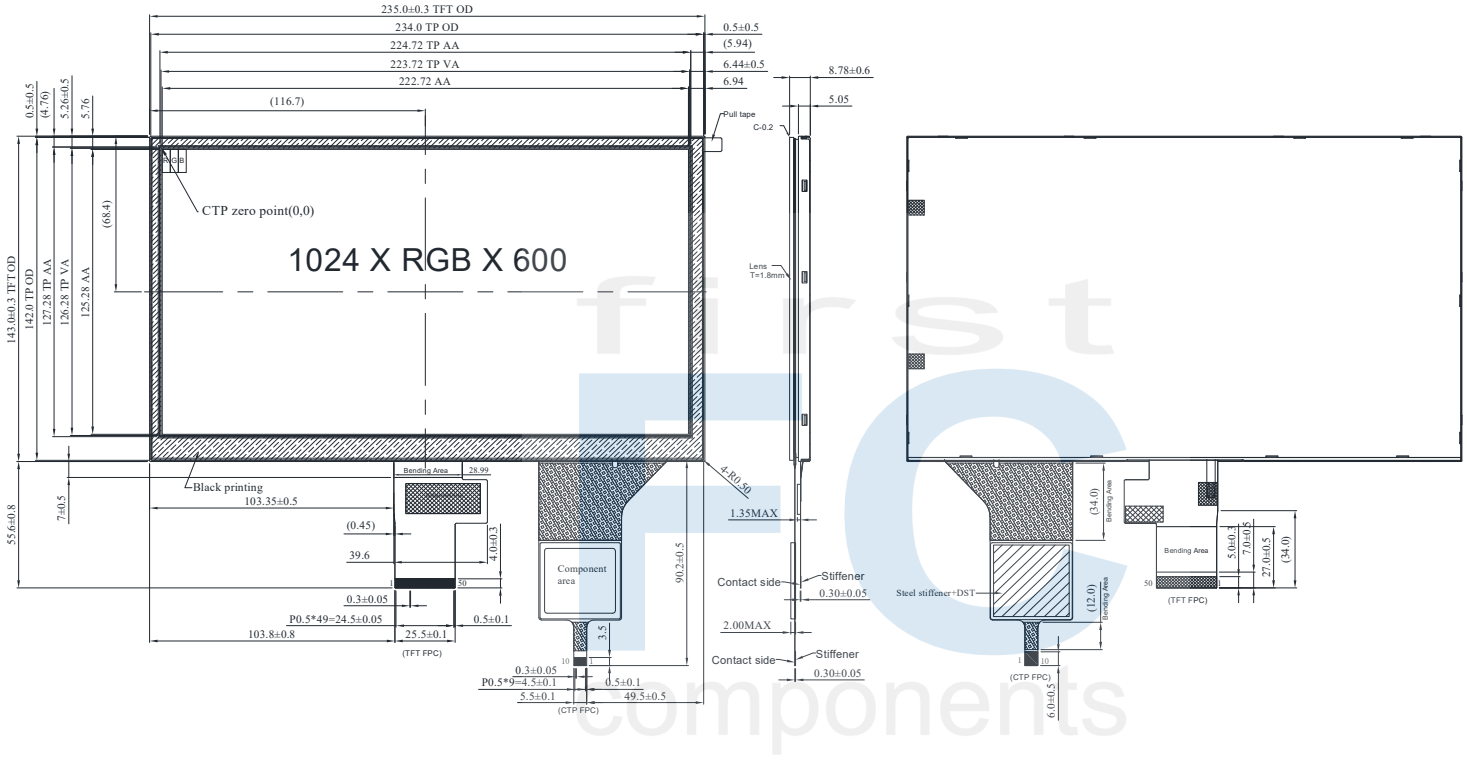
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32	R3	Red data
33	R2	Red data
34	R1	Red data
35	R0	Red data(LSB)
36	GND	Power Ground
37	DCLK	Sample clock (CLK)
38	GND	Power Ground
39	L/R	Left / right selection
40	U/D	Up/down selection
41	VGH	Gate ON Voltage
42	VGL	Gate OFF Voltage
43	AVDD	Power for Analog Circuit
44	RESET	Global reset pin.
45	NC(BIST)	No connection
46	VCOM	Common Voltage
47	DITHB	Dithering function
48	GND	Power Ground
49	NC(FGND)	No connection
50	NC(FGND)	No connection

2. PCAP PIN Definition

Pin	Symbol	Function
1	USB_VSS	System ground
2	USB_VDD 5V	Power supply
3	USB_D+	Data +
4	USB_D-	Data -
5	VSS	System ground
6	SDA	I2C data input and output
7	SCL	I2C clock input
8	RST	External Reset, Low is active
9	INT	External interrupt to the host
10	VDDT 3.3	Power supply

Contour Drawing



TFT

PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	VLED+	26	G1
2	VLED+	27	G0
3	VLED−	28	R7
4	VLED−	29	R6
5	GND	30	R5
6	VCOM	31	R4
7	VCC	32	R3
8	MODE	33	R2
9	DE	34	R1
10	VS	35	R0
11	HS	36	GND
12	B7	37	DCLK
13	B6	38	GND
14	B5	39	L/R
15	B4	40	U/D
16	B3	41	VGH
17	B2	42	VGL
18	B1	43	AVDD
19	B0	44	RESET
20	G7	45	NC(BIST)
21	G6	46	VCOM
22	G5	47	DITHB
23	G4	48	GND
24	G3	49	NC(FGND)
25	G2	50	NC(FGND)

CTP

PIN NO.	SYMBOL
1	USB_VSS
2	USB_VDD 5V
3	USB_D+
4	USB_D−
5	VSS
6	SDA
7	SCL
8	RST
9	INT
10	VDDT 3.3

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

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