

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF43VTZAEDNGA#

General Specifications

Item	Dimension	Unit
Size	4.3	inch
Dot Matrix	480 x RGB x 272(TFT)	dots
Module dimension	105.5(W) x 67.2(H) x 4.6(D)	mm
Active area	95.04 x 53.856	mm
Dot pitch	0.066 x 0.198	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	16:9	
TFT Driver IC	ST7282 or equivalent	
TFT Interface	24-bit RGB	
Backlight Type	LED, Normally White	
PCAP FW Version	0x07.0x00.0x00.0x00.0x01.0x0C.0x11.0x43	
PCAP IC	ILI2130 or equivalent	
PCAP Interface	I2C	
Touch Panel	Projected capacitive touch screen (PCAP)	
Surface	Glare	

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

1. Operating conditions

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For Logic	V _{CC}	3.1	3.3	3.5	V
Digital operation current	I _{CC}		22	33	mA
Supply PCAP	VDDT	3.0	3.3	3.6	V
	I _{CTP}	—	52	78	mA

2. LED driving conditions

Item	Symbol	Min	Typ	Max	Unit
LED current	—	—	20	—	mA
Power Consumption	—	—	640	680	mW
LED voltage	LED+	29	32	35	V
LED Life Time	—	—	50,000	—	Hr

Interface

1. LCM PIN Definition

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
30	CLK	Pixel clock (DCLK)

31	DISP	Display on/off
32	HSYNC	Horizontal sync signal; negative polarity
33	VSYNC	Vertical sync signal; negative polarity
34	DE	Data 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

PCAP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.3V
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

Top View Dimensions:

- TFT Outline: 105.50±0.5
- TP Outline: 104.80
- TP AA: 97.64
- TP VA: 96.24
- TFT AA: 95.04
- TP Outline: 66.50
- TP AA: 56.06
- TP VA: 54.66
- TFT AA: 53.856
- CTP Zero point (0, 0)
- 480XRGBX272
- Pull tape
- Black printing
- 4.00±0.5
- 3.57±0.5
- 4.00±0.5
- 40.60±0.5
- 4.00
- 26.05±0.5
- 5.50±0.1
- 49.70
- 23.82±0.5
- 40
- A:
- (TFT FPC) P0.5*9=4.50±0.1
- (CTP FPC)

Side View Dimensions:

- C 0.15
- 4.6±0.5
- 2.95±0.5
- 1.65MAX
- 1.80MAX
- Contact
- Stiffener
- Stiffener+BSI
- 0.30±0.05
- 0.30±0.05

Cross-Sectional View Details:

- Bending Area
- IC
- Black Tape
- Bending Area
- 8.40±0.5 Bending Area
- 6.00±0.5
- 5.50±0.1
- (CTP FPC)
- 7.57±0.5
- 17.85
- 40
- 5.00
- 1

Pin Configurations:

CTP		TFT	
PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	VSS	1	VLED-
2	VDDT	2	VLED+
3	SCL	3	GND
4	NC	4	VCC
5	SDA	5	R0
6	NC	6	R1
7	/RST	7	R2
8	NC	8	R3
9	/INT	9	R4
10	VSS	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	CLK
		31	DISP
		32	HSYNC
		33	VSYNC
		34	DE
		35	NC
		36	GND
		37	NC
		38	NC
		39	NC
		40	NC

DETAIL A
SCALE 4/1

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