

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF43VSZAEDNGA#

General Specifications

Item	Dimension	Unit
Size	4.3	inch
Dot Matrix	480 x RGBx272(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	
CTP FW Version	0x07.0x00.0x00.0x00.0x01.0x0C.0x11.0x43	
CTP IC	ILI2130 or equivalent	
CTP Interface	I2C	
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	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

1. Operating conditions:

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For Logic	Vcc	3.1	3.3	3.5	V
Digital operation current	ICC		22	33	mA
Supply CTP	VDDT	3.1	3.3	3.5	V
	ICTP	—	52	78	mA

2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	-	-	40	-	mA
Power Consumption	-	896	1024	1088	mW
LED voltage	VBL+	22.4	25.6	27.2	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

CTP 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

TFT Outline 105.50 $\pm$ 0.5
TP Outline 104.80
 TP AA 97.64
 TP VA 96.24
 TPT AA 95.04

0.22 $\pm$ 0.5
 (3.80)
 4.50 $\pm$ 0.5
 5.10

0.30 $\pm$ 0.5
 (3.08)
 3.78 $\pm$ 0.5
 4.18

TFT Outline 67.20 $\pm$ 0.5
 TP Outline 66.50
 TP AA 56.06
 TP VA 54.66
 TPT AA 53.856

4-R0.50
 Pull tape
 Black printing
 CTP Zero point (0,0)
 480XRGBX272
 4-R0.5
 Bonding Area
 IC
 3.57 $\pm$ 0.5
 40.60 $\pm$ 0.5
 4.00
 26.05 $\pm$ 0.5
 5.50 $\pm$ 0.1
 P0.5*9=4.50 $\pm$ 0.1
 23.82 $\pm$ 0.5
 49.70
 10
 1
 40
 1
 Contact
 Stiffener
 0.30 $\pm$ 0.05
 0.30 $\pm$ 0.05
 1.65MAX
 1.80MAX
 Stiffener+BSI
 Bending Area
 8.40 $\pm$ 0.5
 6.00 $\pm$ 0.5
 7.57 $\pm$ 0.5
 5.50 $\pm$ 0.1
 40
 1
 (CTP FPC)
 (TFT FPC)
 Black Tape
 Bending Area
 (17.85)
 5.00
 40
 1
 (TFT FPC)

PIN NO. **SYMBOL**

1	VSS
2	VDDT
3	SCL
4	NC
5	SDA
6	NC
7	/RST
8	NC
9	/INT
10	VSS

PIN NO. **SYMBOL**

1	VLED-
2	VLED+
3	GND
4	VCC
5	R0
6	R1
7	R2
8	R3
9	R4
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	VSNC
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 $\pm 0.3\text{mm}$.