

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF52BTIASDNT0#

General Specifications

Item	Dimension	Unit
Size	5.2	inch
Dot Matrix	480 x RGB x 128	dots
Module dimension	140.4 x 49.87 x 4.5	mm
Active area	127.152 x 33.9072	mm
Dot pitch	0.0883 x 0.2649	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	Bar Type	
Backlight Type	LED, Normally White	
Driver IC	ST7252 or equivalent	
Interface	RGB 24bit	
Touch Panel	Resistive Touch Panel	
Surface	Anti-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 LCM	VCC	3.0	3.3	3.6	V
Supply Current For LCM	ICC	—	20	—	mA

2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current		-	60	-	mA
LED voltage	VLED+	16.8	18.6	21	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	GND	Power ground
32	HSYNC	Horizontal sync signal; negative polarity
33	VSYNC	Vertical sync signal; negative polarity
34	NC	No connection
35	GND	Power ground
36	RESET	Reset signal
37	XL	Left electrode
38	YU	Top electrode
39	XR	Right electrode
40	YD	Bottom electrode

The drawing illustrates the mechanical specifications of the Winstar Display W480128-01. It includes a top view showing the display area (480*BGR*128) and various mounting dimensions. A side view shows the display's profile with a stiffener and contact side. A detail view (A) shows the mounting hole pattern.

Top View Dimensions:

- Overall width: 140.4(TFT_Outline)
- Overall height: 49.87(TFT_Outline)
- Display area: 480*BGR*128
- Mounting hole diameter: 4.3±0.5
- Mounting hole pitch: 5.66 (5.16)
- Mounting hole offset: 6.625 (6.13)
- Mounting hole diameter: 5.20±0.5
- Mounting hole offset: 0.50±0.5

Side View Dimensions:

- Overall height: 42.4±0.5
- Mounting hole diameter: 4.3±0.5
- Mounting hole pitch: 5.66 (5.16)
- Mounting hole offset: 6.625 (6.13)
- Mounting hole diameter: 5.20±0.5
- Mounting hole offset: 0.50±0.5

Detail A Dimensions:

- Mounting hole diameter: 4.3±0.5
- Mounting hole pitch: 5.66 (5.16)
- Mounting hole offset: 6.625 (6.13)
- Mounting hole diameter: 5.20±0.5
- Mounting hole offset: 0.50±0.5

Pinout Table:

PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	VLED-	21	B0
2	VLED+	22	B1
3	GND	23	B2
4	VCC	24	B3
5	R0	25	B4
6	R1	26	B5
7	R2	27	B6
8	R3	28	B7
9	R4	29	GND
10	R5	30	CLK
11	R6	31	GND
12	R7	32	Hsync
13	G0	33	Vsync
14	G1	34	NC
15	G2	35	GND
16	G3	36	RESET
17	G4	37	XL
18	G5	38	YU
19	G6	39	XR
20	G7	40	YD