

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF101LSYAPLNNB#

General Specifications

Item	Dimension	Unit
Screen Diagonal	10.1	inch
Number of Pixels	1280 x 3(R GB) x 800	dots
Module dimension	230.56 x 155.01 x 6.4	mm
Active area	216.96 (H) x 135.6(V)	mm
Pixel pitch	0.1695 x 0.1695	mm
Display Mode	Normally Black , Transmissive	
Viewing Angle	80/80/80/80	
Pixel Arrangement	R.G.B. Vertical Stripe	
TFT Drive IC	EK79202B1 or Equivalent	
Backlight Type	LED, Normally White	
Aspect Ratio	16:10	
TFT Interface	LVDS	
Touch Panel	Without 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. Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	MAX.	
Power voltage	VCC	3.0	3.3	3.5	V
	VGH	17.5	18.0	18.5	V
	VGL	-11.5	-10.5	-10.0	V
	VSP	—	5.5	—	V
	VSN	—	-5.5	—	V

2. Current Consumption

Item	Symbol	Values			Unit
		Min.	Typ.	MAX.	
Current for Driver	IGH	—	7.7	—	mA
	IGL	—	7.7	—	mA
	IVCC	—	85	130	mA

3. Backlight Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply voltage of white LED backlight	VL	13.5	15.0	16.5	V
Current for LED backlight	IL	—	630	—	mA
LED life time	-	50000	-	-	Hr

Interface

1. Interface Connector

A 40pin connector is used for the module electronics interface. The recommended model is F62240-H1210B manufactured by Vigorconn.

Pin No.	Symbol	I/O	Function
1	NC	-	No connection
2	VCC	P	Power Supply
3	VCC	P	Power Supply
4	NC	-	No connection
5	NC	-	No connection
6	NC	-	No connection
7	GND	P	Ground
8	Rxin0-	I	-LVDS Differential Data Input
9	Rxin0+	I	+LVDS Differential Data Input
10	GND	P	Ground
11	Rxin1-	I	-LVDS Differential Data Input
12	Rxin1+	I	+LVDS Differential Data Input
13	GND	P	Ground
14	Rxin2-	I	-LVDS Differential Data Input
15	Rxin2+	I	+LVDS Differential Data Input
16	GND	P	Ground
17	RxCLK-	I	-LVDS Differential Clock Input
18	RxCLK+	I	+LVDS Differential Clock Input
19	GND	P	Ground
20	Rxin3-	I	-LVDS Differential Data Input
21	Rxin3+	I	+LVDS Differential Data Input
22	GND	P	Ground
23	NC	-	No connection
24	NC	-	No connection
25	GND	P	Ground
26	NC	-	No connection
27	NC	-	No connection
28	NC	-	No connection
29	NC	-	No connection

30	GND	P	Ground
31	NC	-	No connection
32	NC	-	No connection
33	NC	-	No connection
34	NC	-	No connection
35	VGL	P	Gate OFF Voltage
36	NC	-	No connection
37	NC	-	No connection
38	VGH	P	Gate ON Voltage
39	NC	-	No connection
40	NC	-	No connection

I: input, O: output, P: Power

2. Backlight Driving Part

Pin No.	Symbol	Function
1	VLED+	Red, LED_ Anode
2	VLED-	Black, LED_ Cathode

Technical drawing of the A3501Y-02(BH-Y) LCD module. The drawing shows the module's dimensions and pin connections. The main display area is labeled "1280 X RGB X 800". The dimensions are as follows:

- Overall width: 230.56 ± 0.3 mm
- Width (VA): 222.2 mm
- Width (POL): 221.4 mm
- Width (AA): 216.96 mm
- Overall height: 155.01 ± 0.3 mm
- Height (VA): 139.2 mm
- Height (POL): 138.4 mm
- Height (AA): 135.6 mm
- Top edge width: 6.4 ± 0.3 mm
- Bottom edge width: 8.35max mm
- Right edge width: 6.04 mm
- Right edge width: 6.44 mm
- Right edge width: 8.66 mm
- Pin 1 (Black): A3501Y-02(BH-Y) or equivalent
- Pin 2 (Red): CON2
- Pin 3 (Black): Pull tape
- Pin 4 (Red): Pull tape
- Pin 5 (Black): Pull tape
- Pin 6 (Red): Pull tape
- Pin 7 (Black): Pull tape
- Pin 8 (Red): Pull tape
- Pin 9 (Black): Pull tape
- Pin 10 (Red): Pull tape
- Pin 11 (Black): Pull tape
- Pin 12 (Red): Pull tape
- Pin 13 (Black): Pull tape
- Pin 14 (Red): Pull tape
- Pin 15 (Black): Pull tape
- Pin 16 (Red): Pull tape
- Pin 17 (Black): Pull tape
- Pin 18 (Red): Pull tape
- Pin 19 (Black): Pull tape
- Pin 20 (Red): Pull tape
- Pin 21 (Black): Pull tape
- Pin 22 (Red): Pull tape
- Pin 23 (Black): Pull tape
- Pin 24 (Red): Pull tape
- Pin 25 (Black): Pull tape
- Pin 26 (Red): Pull tape
- Pin 27 (Black): Pull tape
- Pin 28 (Red): Pull tape
- Pin 29 (Black): Pull tape
- Pin 30 (Red): Pull tape
- Pin 31 (Black): Pull tape
- Pin 32 (Red): Pull tape
- Pin 33 (Black): Pull tape
- Pin 34 (Red): Pull tape
- Pin 35 (Black): Pull tape
- Pin 36 (Red): Pull tape
- Pin 37 (Black): Pull tape
- Pin 38 (Red): Pull tape
- Pin 39 (Black): Pull tape
- Pin 40 (Red): Pull tape
- Pin 41 (Black): Pull tape
- Pin 42 (Red): Pull tape
- Pin 43 (Black): Pull tape
- Pin 44 (Red): Pull tape
- Pin 45 (Black): Pull tape
- Pin 46 (Red): Pull tape
- Pin 47 (Black): Pull tape
- Pin 48 (Red): Pull tape
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- Pin 50 (Red): Pull tape
- Pin 51 (Black): Pull tape
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- Pin 53 (Black): Pull tape
- Pin 54 (Red): Pull tape
- Pin 55 (Black): Pull tape
- Pin 56 (Red): Pull tape
- Pin 57 (Black): Pull tape
- Pin 58 (Red): Pull tape
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- Pin 87 (Black): Pull tape
- Pin 88 (Red): Pull tape
- Pin 89 (Black): Pull tape
- Pin 90 (Red): Pull tape
- Pin 91 (Black): Pull tape
- Pin 92 (Red): Pull tape
- Pin 93 (Black): Pull tape
- Pin 94 (Red): Pull tape
- Pin 95 (Black): Pull tape
- Pin 96 (Red): Pull tape
- Pin 97 (Black): Pull tape
- Pin 98 (Red): Pull tape
- Pin 99 (Black): Pull tape
- Pin 100 (Red): Pull tape

