



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF70A9SWAGDNT0#

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGB x 480(TFT)	dots
Module dimension	165.8 (W) x 106.61 (H) x 8.0(D)	mm
Active area	152.40 x 91.44	mm
Pixel pitch	0.1905 x 0.1905	mm
LCD type	TFT, Normally Black, Transmissive	
View Direction	80/80/80/80	
TFT Interface	24-bit RGB	
TFT Driver IC	HX8249-A + HX8678-C or Equivalent	
Aspect Ratio	15:9	
Backlight Type	LED, Normally White	
Touch Panel	Resistive Touch Screen	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

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

Electrical Characteristics

Operating conditions

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	Vcc	2.7	3.3	3.6	V
Current of power supply	Icc	—	101	150	mA

Interface

1.LCM PIN Definition

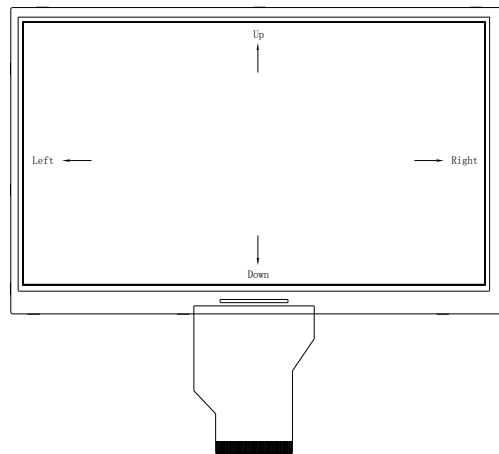
Pin	Symbol	Function	Remark									
1-4	NC	No connection										
5	GND	Power Ground										
6	NC	No connection										
7	VCC	Power voltage										
8	MODE	Input timing mode selection. <table border="1"><thead><tr><th>MODE</th><th>Function</th><th>Note</th></tr></thead><tbody><tr><td>0</td><td>DE only</td><td>-</td></tr><tr><td>1</td><td>HS+VS</td><td>Default</td></tr></tbody></table>	MODE	Function	Note	0	DE only	-	1	HS+VS	Default	
MODE	Function	Note										
0	DE only	-										
1	HS+VS	Default										
9	DE	Data enable signal for TTL mode.										
10	VS	Vertical sync input										
11	HS	Horizontal sync input										
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										

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										
38	GND	Power Ground										
39	L/R	Horizontal shift direction (source output) selection. <table><tr><th>L/R</th><th>Source output sequence and data order</th><th>Note</th></tr><tr><td>1</td><td>Left to right</td><td>Default</td></tr><tr><td>0</td><td>Right to left</td><td>-</td></tr></table>	L/R	Source output sequence and data order	Note	1	Left to right	Default	0	Right to left	-	Note1
L/R	Source output sequence and data order	Note										
1	Left to right	Default										
0	Right to left	-										
40	U/D	Vertical shift direction (gate output) selection. <table><tr><th>U/D</th><th>Function</th><th>Note</th></tr><tr><td>1</td><td>Top→bottom</td><td>Default</td></tr><tr><td>0</td><td>Bottom→top</td><td>-</td></tr></table>	U/D	Function	Note	1	Top→bottom	Default	0	Bottom→top	-	Note2
U/D	Function	Note										
1	Top→bottom	Default										
0	Bottom→top	-										
41	NC	No connection										
42	NC	No connection										
43	NC	No connection										
44	RESET	Reset pin. The chip is in reset state when RESETB=0.										
45	NC	No connection										
46	NC	No connection										
47	DITHB	STBYB Standby mode setting pin. The chip is in standby mode when STBYB=0.										
48	GND	Power Ground										
49	NC	No connection										
50	NC	No connection										

Note 1: Selection of scanning mode

Setting of scan control input		Scanning direction
U/D	L/R	
1	1	Top to Bottom, left to right
1	0	Top to Bottom, right to left
0	0	Bottom to Top, right to left
0	1	Bottom to Top, left to right

Note 2: Definition of scanning direction.
Refer to the figure as below:



2. Backlight PIN Definition

Pin	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	Black, LED_ Cathode

Contour Drawing

