



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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WEB: <https://www.winstar.com.tw> E-mail: sales@winstar.com.tw

SPECIFICATION

MODULE NO.: WF0283ATDAJDNN0#

General Specifications

Item	Dimension	Unit
Size	2.83	inch
Dot Matrix	240 x RGB x 320 (TFT)	dots
Module dimension	53.1(W) x 71.1(H) x 5.35 (D)	mm
Active area	43.2 x 57.6	mm
Dot pitch	0.18 x 0.18	mm
LCD type	TFT, Normally White, Transflective	
TFT Driver IC	HX8367-A or equivalent	
TFT Interface	MCU/SPI/RGB	
View Direction	3 o'clock	
Gray Scale Inversion Direction	9 o'clock	
Aspect Ratio	3:4	
Backlight Type	LED, Normally White	
Touch Panel	Without Touch Panel	
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

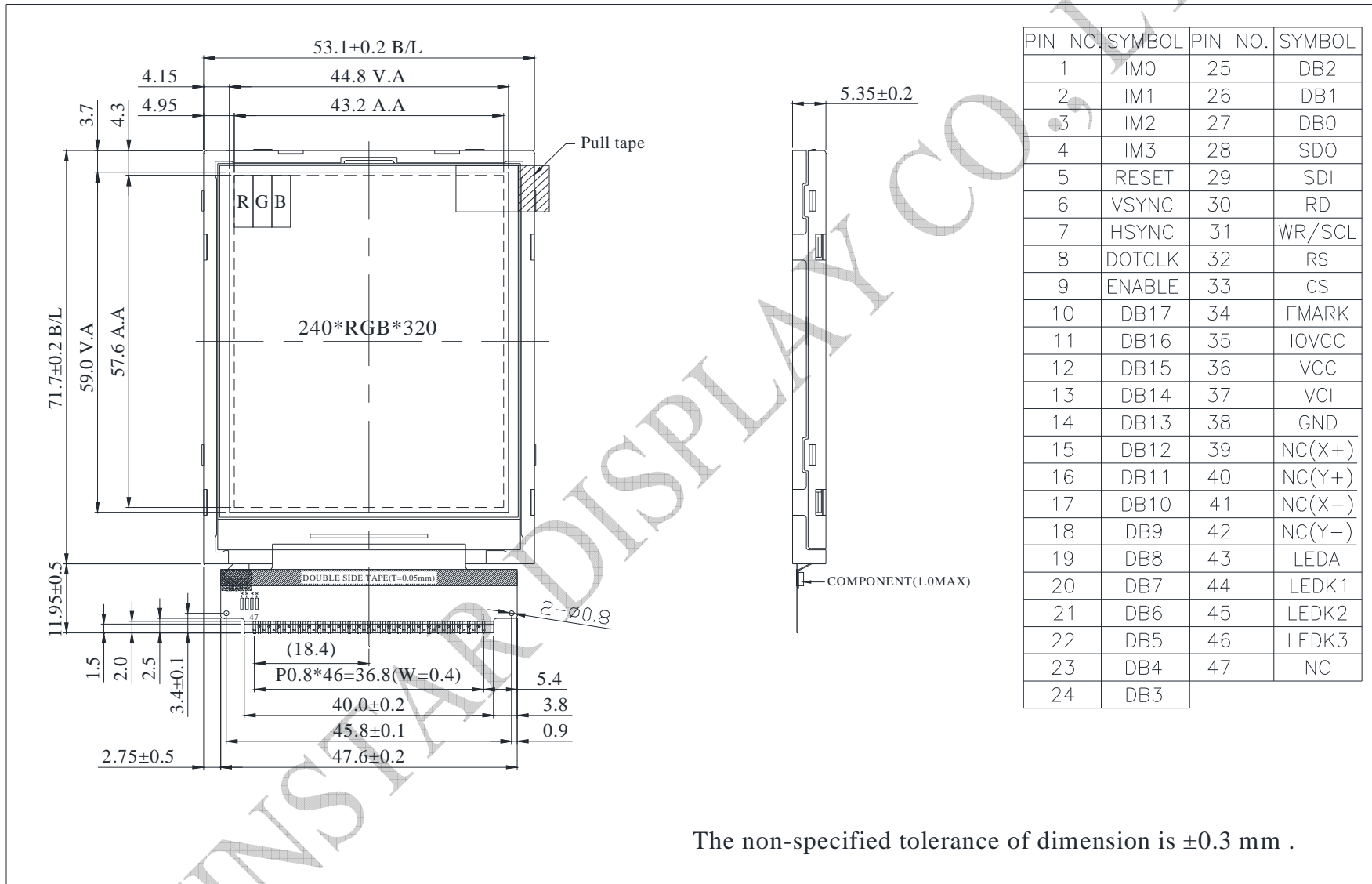
Item	Symbol	Min	Typ	Max	Unit
Supply voltage for logic	VCI	2.5	2.8	3.3	V
I/O power supply	IOVCC	1.65	1.8	3.3	V
Input current	I _{dd}	—	6.7	10.1	mA
Input voltage 'H' level	VIH	0.7IOVCC	—	IOVCC	V
Input voltage 'L' level	VIL	GND	—	0.3IOVCC	V
Output voltage 'H' level	VOH	0.8IOVCC	—	IOVCC	V
Output voltage 'L' level	VOL	GND	—	0.2IOVCC	V

Interface

LCM PIN Definition

NO	Symbol	Function	I/O																																																						
1	IM0	System interface select.	I																																																						
2	IM1																																																								
3	IM2																																																								
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		<table border="1"> <thead> <tr> <th>IM3</th> <th>IM2</th> <th>IM1</th> <th>IM0</th> <th>Interface</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>8080 MCU 16-bits Parallel type I</td> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>8080 MCU 8-bits Parallel type I</td> </tr> <tr> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>8080 MCU 16-bits Parallel type II</td> </tr> <tr> <td>0</td> <td>0</td> <td>1</td> <td>1</td> <td>8080 MCU 8-bits Parallel type II</td> </tr> <tr> <td>0</td> <td>1</td> <td>0</td> <td>ID</td> <td>3-wire Serial interface</td> </tr> <tr> <td>0</td> <td>1</td> <td>1</td> <td>-</td> <td>4-wire Serial interface</td> </tr> <tr> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>8080 MCU 18-bits Parallel type I</td> </tr> <tr> <td>1</td> <td>0</td> <td>0</td> <td>1</td> <td>8080 MCU 9-bits Parallel type I</td> </tr> <tr> <td>1</td> <td>0</td> <td>1</td> <td>0</td> <td>8080 MCU 18-bits Parallel type II</td> </tr> <tr> <td>1</td> <td>0</td> <td>1</td> <td>1</td> <td>8080 MCU 9-bits Parallel type II</td> </tr> </tbody> </table>	IM3	IM2	IM1	IM0	Interface	0	0	0	0	8080 MCU 16-bits Parallel type I	0	0	0	1	8080 MCU 8-bits Parallel type I	0	0	1	0	8080 MCU 16-bits Parallel type II	0	0	1	1	8080 MCU 8-bits Parallel type II	0	1	0	ID	3-wire Serial interface	0	1	1	-	4-wire Serial interface	1	0	0	0	8080 MCU 18-bits Parallel type I	1	0	0	1	8080 MCU 9-bits Parallel type I	1	0	1	0	8080 MCU 18-bits Parallel type II	1	0	1	1	8080 MCU 9-bits Parallel type II
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5	RESET	Reset pin. Setting either pin low initializes the LSI. Must be reset after power is supplied.	I																																																						
6	VSYNC	Vertical synchronizing signal in RGB interface.	I																																																						
7	HSYNC	Horizontal synchronizing signal in RGB interface	I																																																						
8	DOTCLK	Data enable signal in RGB interface	I																																																						
9	ENABLE	A data ENABLE signal in RGB I/F mode	I																																																						
10-27	DB17-DB0	18-bit bi-directional data bus.	I/O																																																						
28	SDO	Serial data output pin in serial bus system interface	O																																																						
29	SDI	Serial data input pin in serial bus system interface. The data is inputted on the rising edge of the SCL signal.	I																																																						
30	RD	Read enable pin I80 parallel bus system interface.	I																																																						
31	WR/SCL	(WR)Write enable pin I80 parallel bus system interface.(SCL)server as serial data clock in serial bus system interface.	I																																																						
32	RS	Command / parameter or display data selection pin.	I																																																						
33	CS	Chip select signal.Low: chip can be accessed;High: chip cannot be accessed	I																																																						
34	FMARK	Tearing effect output.	O																																																						
35	IOVCC	Digital IO Pad power supply.	P																																																						
36	VCC	Analog power supply	P																																																						
37	VCI	Analog power supply.	P																																																						
38	GND	Power ground.	P																																																						
39	NC	No connection	-																																																						
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43	LEDA	LED light, anode.																																																							
44	LEDK1	LED light, cathode																																																							
45	LEDK2	LED light, cathode																																																							
46	LEDK3	LED light, cathode																																																							
47	NC	No connection																																																							

Contour Drawing



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