



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



Winstar Display Co., LTD

華凌光電股份有限公司

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



SPECIFICATION

MODULE NO.:

WO12864Q

General Specification

Item	Dimension	Unit
Number of Dots	128 x 64 dots	—
Module dimension	80.0 x 54.0 x 9.5	mm
View area	70.7 x 38.8	mm
Active area	66.52 x 33.24	mm
Dot size	0.48 x 0.48	mm
Dot pitch	0.52 x 0.52	mm
Duty	1/65 , 1/9 Bias	
Backlight Type	LED	
IC	ST7567	
Interface	6800/8080/4-Line SPI	

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	°C
Storage Temperature	T_{ST}	-30	—	+80	°C
Input Voltage	V_I	-0.3	—	$V_{DD}+0.3$	V
Digital Power Supply Voltage	$V_{DD}-V_{SS}$	-0.3	—	3.6	V
LCD Power supply voltage	V0-XV0	-0.3	—	16	V

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	$V_{DD}-V_{SS}$	—	2.7	3.0	3.3	V
Supply Voltage For LCM	V_{OP}	$T_a=-20^{\circ}\text{C}$	—	—	—	V
		$T_a=25^{\circ}\text{C}$	9.7	9.9	10.1	V
		$T_a=70^{\circ}\text{C}$	—	—	—	V
Input High Volt.	V_{IH}	—	$0.7 V_{DD}$	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	V_{SS}	—	$0.3V_{DD}$	V
Output High Volt.	V_{OH}	—	$0.8 V_{DD}$	—	V_{DD}	V
Output Low Volt.	V_{OL}	—	V_{SS}	—	$0.2 V_{DD}$	V
Supply Current	I_{DD}	$V_{DD}=3.0\text{V}$	—	0.3	1.0	mA

Interface Pin Function

Pin No.	Symbol	Function
1	CSB	Chip select input pin
2	RSTB	Hardware reset input pin
3	A0	It determines whether the access is related to data or command. A0="H" : Indicates that signals on D[7:0] are display data. A0="L" : Indicates that signals on D[7:0] are command.
4	RWR	Write execution control pin
5	ERD	Read execution control pin
6~13	D0~D7	Data bus
14	VDD	Power
15	VSS	Ground
16~20	NC	No connection
21	V0	LCD driving voltage for common circuits at negative frame
22	XV0	XV0 is the LCD driving voltage for common circuits at positive frame
23~24	NC	No connection
25	VG	LCD driving voltage for segment circuits
26~30	NC	No connection
31	C86	C86 selects the microprocessor type in parallel interface mode
32	PSB	This pin configures the interface to be parallel mode or serial mode.
33-34	NC	No connection

