



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.:

WO320240H

General Specification

Item	Dimension	Unit
Number of dots	320 x 240 dots	—
Module dimension	94.20 x 80.60 x 6.05(MAX)	mm
View area	80.2 x 61.00	mm
Active area	76.79 x 57.59	mm
Dot size	0.23 x 0.23	mm
Dot pitch	0.24x 0.24	mm
Duty	1/240 duty; 1/12 bias	
Backlight Type	LED	
IC	IST3088	
Interface	6800/8080/4-Line	

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	°C
Storage Temperature	T_{ST}	-30	—	+80	°C
Supply voltage range	V_{CC}	-0.3	—	+8.0	V
	V_0/V_{OUT}	-0.3	—	+40	V
	$V_1/V_2/V_3/V_4$	-0.3	—	V_0	V

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	$V_{CC}-V_{SS}$	—	2.8	3.0	3.3	V
Supply Voltage For LCM	V_{OP}	$T_a=-20^{\circ}C$	—	—	—	V
		$T_a=25^{\circ}C$	21.5	22.0	22.5	V
		$T_a=+70^{\circ}C$	—	—	—	V
Input High Volt.	V_{IH}	—	$0.8V_{CC}$	—	V_{CC}	V
Input Low Volt.	V_{IL}	—	GND	—	$0.2 V_{CC}$	V
Output High Volt.	V_{OH}	—	$0.8 V_{CC}$	—	V_{CC}	V
Output Low Volt.	V_{OL}	—	GND	—	$0.2 V_{CC}$	V
Supply Current	I_{DD}	$V_{CC}=3.0V$	—	15	25	mA

Interface Pin Function

Pin	Symbol	Function Description			
1	ESD	ESD			
2	VOUT2	VOUT2 is the internal booster output, step-up voltage based on the difference voltage of VCI & GND.			
3	VOUT1	VOUT1 is the internal booster output, step-up voltage based on the difference voltage of VCI & GND.			
4	VCI	Power source			
5	RWRDB-SDI	4-line serial interface			
6	RS	Internal resistor select pin			
7	RESETB	Reset pin			
8	EWRB-SCI	4-line serial interface			
9	IM0	IM2	IM1	IM0	MPU interface mode
		GND	GND	GND	68-system 16-bit bus interface
10	IM1	GND	GND	VCC	68-system 8-bit bus interface
		GND	VCC	GND	80-system 16-bit bus interface
11	IM2	GND	VCC	VCC	80-system 8-bit bus interface
		VCC	GND	GND	4-line serial interface
12	CSB	Chip select			
13	VDD	Power source			
14	VCC	Power supply			
15	VPP	External power VPP is the power pin of embedded OTP (One-Time-Programming)			
16	GND	Ground			
17-24	DB8-DB15	8 bit bi-directional data bus.			
25	ESD	ESD			
26-27	LEDA	Backlight A			
28-29	LEDK	Backlight K			
30	GND	Ground			

Contour Drawing

