



RAYSTAR

RAYSTAR Optronics, Inc.
曜凌光電股份有限公司



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T: +886-4-2565-0761 | F: +886-4-2565-0760

salescontact@raystar-optronics.com | www.raystar-optronics.com

RG12864A2

General Specification

The Features of the Module is description as follow:

- Module dimension: 93.0 x 70.0 x 13.6 (MAX) mm
- View area: 72.0 x 40.0 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
- Number of dots: 128 x 64
- Duty: 1/32
- Backlight Type: LED
- IC: ST7920
- Interface:68 series

Interface Pin Function

Pin No.	Symbol	Level	Description
1	VSS	0V	Ground
2	VDD	5.0V	Supply voltage for logic
3	V _o	—	Supply voltage for LCD
4	RS	—	H: Data , L : Instruction
5	R/W	H/L	H: Read (Module --> MPU) L: Write(MPU --> Module)
6	E	H/L	ENABLE SIGNAL
7	DB0	H/L	Data bus line
8	DB1	H/L	Data bus line
9	DB2	H/L	Data bus line
10	DB3	H/L	Data bus line
11	DB4	H/L	Data bus line
12	DB5	H/L	Data bus line
13	DB6	H/L	Data bus line
14	DB7	H/L	Data bus line
15	A	—	Power Supply for LED backlight (+)
16	K	—	Power Supply for LED backlight (-)
17	RST	H/L	Reset LCM
18	Vout	—	Positive voltage for LCD

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_{IN}	-0.3	—	$V_{DD}+0.3$	V
Supply Voltage For Logic	$V_{DD}-V_{SS}$	-0.3	—	5.5	V
LCD Driver Voltage	V_{LCD}	-0.3	—	7.0	V

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	$V_{DD}-V_{SS}$	—	4.5	5.0	5.5	V
Supply Voltage For LCD	V_0-V_{SS}	$T_a=-20$	—	—	—	V
		$T_a=25$	4.4	4.6	4.8	V
		$T_a=+70$	—	—	—	V
Input High Volt.	V_{IH}	—	$0.7V_{DD}$	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	-0.3	—	0.6	V
Output High Volt.	V_{OH}	—	$0.8 V_{DD}$	—	V_{DD}	V
Output Low Volt.	V_{OL}	—	—	—	0.4	V
Supply Current	I_{DD}	$V_{DD}=5.0V$	—	2.6	3.0	mA