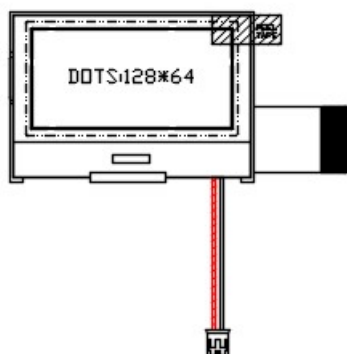


128 x 64 Graphic LCD



FEATURES

- Type: Graphic
- Display format: 128 x 64 dots
- Controller IC: ST7565R (or equivalent)
- Duty cycle: 1/64
- +3.0V power supply
- LED can be driven by pinA, pinK

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	57.20 x 40.00	mm
Viewing Area	49.53 x 26.67	
Active Area	47.34 x 23.66	
Dot Size	0.35 x 0.35	
Dot Pitch	0.37 x 0.37	
height	2.10/5.00	

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VDD - VSS	0	-	7.0	V
Input Voltage	Vin	0	-	VDD	

Note

- VSS=0 V , VDD= 3.0V

ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN	TYP	MAX	
Supply voltage for LCD	VDD-V0	Ta =25°C	8.8	9.0	9.2	V
Input voltage	VDD		2.8	3.0	3.2	
Supply current	IDD	Ta=25°C, VDD=5.0V	0.5	2.0	3.5	mA
LED Forward Voltage	Vf	Ta =25°C	2.8	3.0	3.2	V
LED Forward current-Edge	If		30	45	60	mA

Options									
PROCESS COLOR						BACKLIGHT			
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
	√	√	√	√		√	√		

For detailed information, please refer to the “Product Numbering System” document.

INTERFACE PIN FUNCTION		
PIN NO.	SYMBOL	FUNCTION
1	ESD-GND	Frame ground
2	/CS1	Chip select in serial interface low active
3	/RES	External reset PIN. Must be fixed to VDD low active.
4	A0	Select registers. 0: instruction; 1: data register

5	/WR	Read/write select signal
6	/RD	Operation (data read/write) enable signal
7-14	D0-D7	This is an 8-bit-directional data bus.
15	VDD	Power supply for logic for LCM
16	VSS	Signal ground for LCM
17	VOUT	DC/DC voltage converter
18	C3+	For voltage booster circuit. External capacitor about 0.47uF~2.2Uf.
19-20	C1~C1+	
21-22	C2+~C2-	
23	C4+	
24-28	V4~V0	Power supply LCD
29	ESD-GND	Frame ground
30	NC	-
A	A	Power supply for BKL
K	K	Power supply for BKL

Disclaimer

ALL PRODUCT , PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Display Zone Co., Ltd., its affiliates, agents, and employees, and all persons acting on its or their behalf, disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheets or in any other disclosure relating to any products.

Display Zone makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Display Zone disclaims:

- (i) any and all liability arising out of the application or use of any product,
- (ii) any and all liability, including without limitation special, consequential or incidental damages,
- (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Display Zone's knowledge of typical requirements that are often placed on Display Zone products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Display Zone's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Display Zone of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Display Zone disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Display Zone products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Display Zone product could result in personal injury or death. Customers using or selling Display Zone products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Display Zone personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Display Zone. Product names and markings noted herein may be trademarks of their respective owners.