

12864 Graphic LCD Module Brief Introduction User's Guide

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NOTES:

Product Version : Ver 1.0

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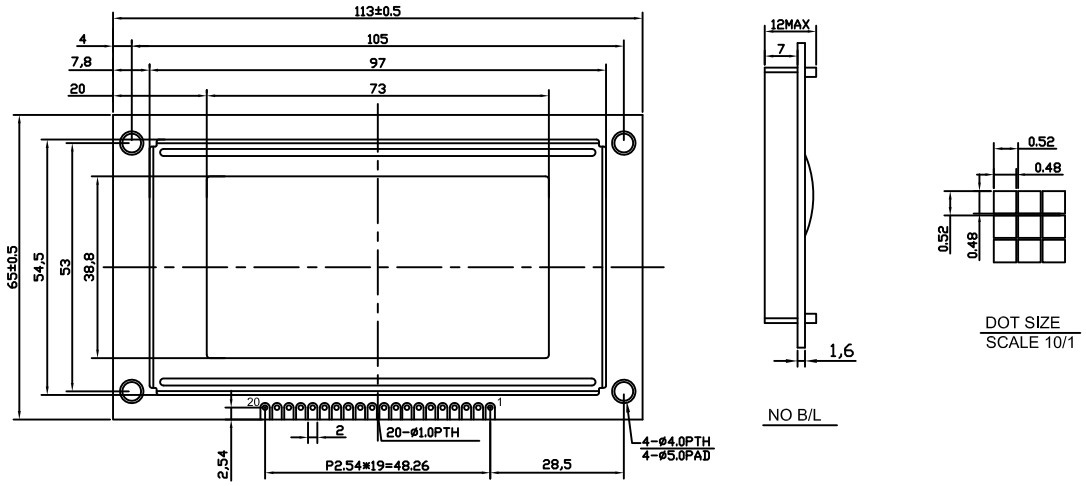
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Chapter1. 12864 Graphic LCD Module Brief Introduction

Physical Data

Item	Contents	Unit
LCD type	STN	---
LCD duty	1/64	---
LCD bias	1/9	---
Viewing direction	6	o'clock
Module size (W×H×T)	112× 66	mm
Viewing area (W×H)	73.4 × 38.8 (2.89″ × 1.53″)	mm
Number of dots	128 × 64	dots
Dot size (W×H)	0.48 × 0.48 (0.019″ × 0.019″)	mm
Dot pitch (W×H)	0.52 × 0.52 (0.020″ × 0.020″)	mm

External Dimensions



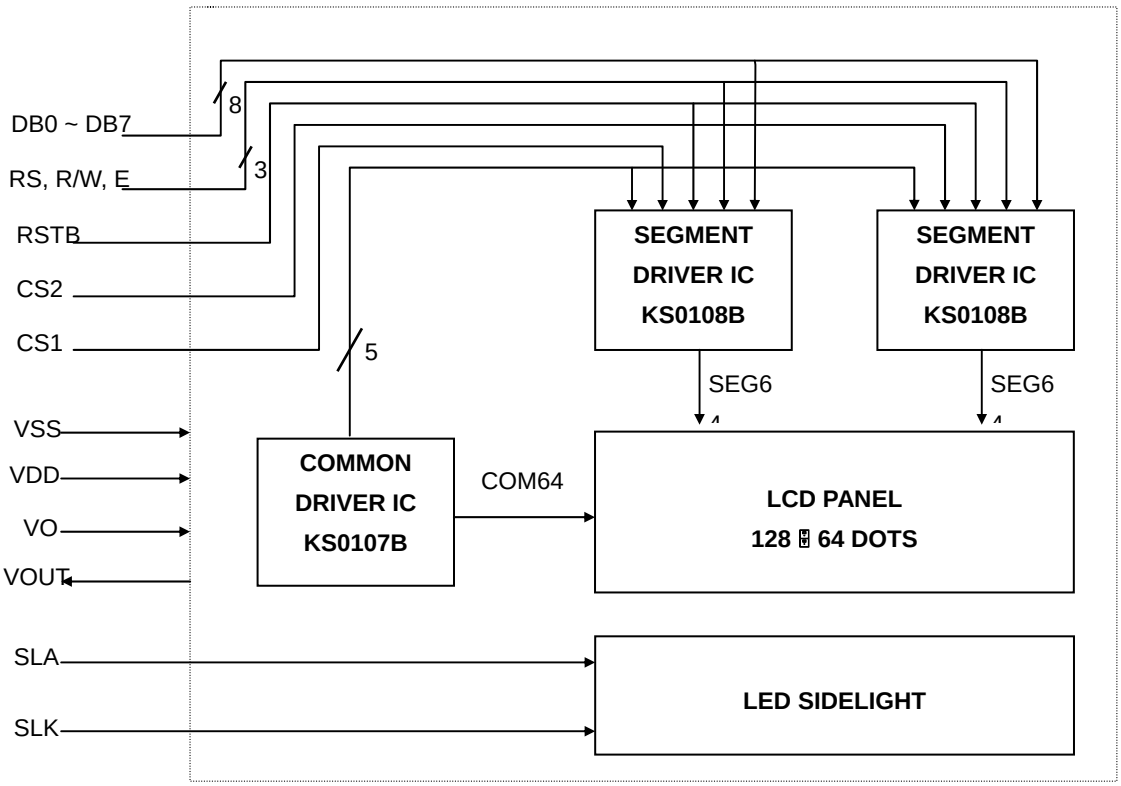
Mechanical Data

Item	Standard Value	Unit
Module Dimension	113×65	mm
Viewing Area	73×38.8	mm
Mounting hole	105×53	mm
Dot pitch	0.52×0.52	mm

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Block Diagram

20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
SLK	SLA	VOUT	RSTB	CS2	CS1	DB7	DB6	DB5	DB4	DB3	DB2	DB1	DB0	E	R/W	RS	VO	VDD	VSS



Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Min	Max	Unit
Supply voltage for logic	VDD	-0.3	7.0	V
Supply voltage for LCD	VDD - VO	-0.3	VDD+0.3	V
Input voltage	VI	-0.3	VDD+0.3	V
Operating temperature	TOP	0	50	°C
Storage temperature	TST	-10	60	°C

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Electrical Characteristics (VDD = +5V±5%, VSS = 0V, Ta = 25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Supply voltage for logic	VDD	---	4.5	5.0	5.5	V
Supply current for logic	IDD	---	---	2.02	4	mA
Operating voltage for LCD	VDD - VO	0°C	8.4	8.8	9.2	V
		25°C	8.1	8.5	8.9	V
		50°C	7.4	7.8	8.2	V
Supply voltage for sidelight	VF	---	---	4.2	4.6	V
Supply current for sidelight	IF	VF=4.2V	---	180	300	mA
Input voltage ' H ' level	VIH	---	0.7VDD	---	VDD	V
Input voltage ' L ' level	VIL	---	0	---	0.3VDD	V

Interface Pin Connections

Pin No.	Symbol	Level	Description
1	VSS	0V	Ground
2	VDD	5.0V	Supply voltage for logic
3	VO	---	Input voltage for LCD
4	RS	H/L	H : Data signal, L : Instruction signal
5	R/W	H/L	H : Read mode, L : Write mode
6	E	H, H → L	Chip enable signal
7	DB0	H/L	Data bit 0
8	DB1	H/L	Data bit 1
9	DB2	H/L	Data bit 2
10	DB3	H/L	Data bit 3
11	DB4	H/L	Data bit 4
12	DB5	H/L	Data bit 5
13	DB6	H/L	Data bit 6
14	DB7	H/L	Data bit 7
15	CS1	H	Chip select signal for KS0108B(1)
16	CS2	H	Chip select signal for KS0108B(2)
17	RSTB	L	Reset signal
18	VOUT	-5V	Output voltage for LCD
19	SLA	4.2V	Sidelight anode
20	SLK	0V	Sidelight cathode

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Chapter2. Contact Us

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