

Standard Graphic LCD Module

PSG12864E

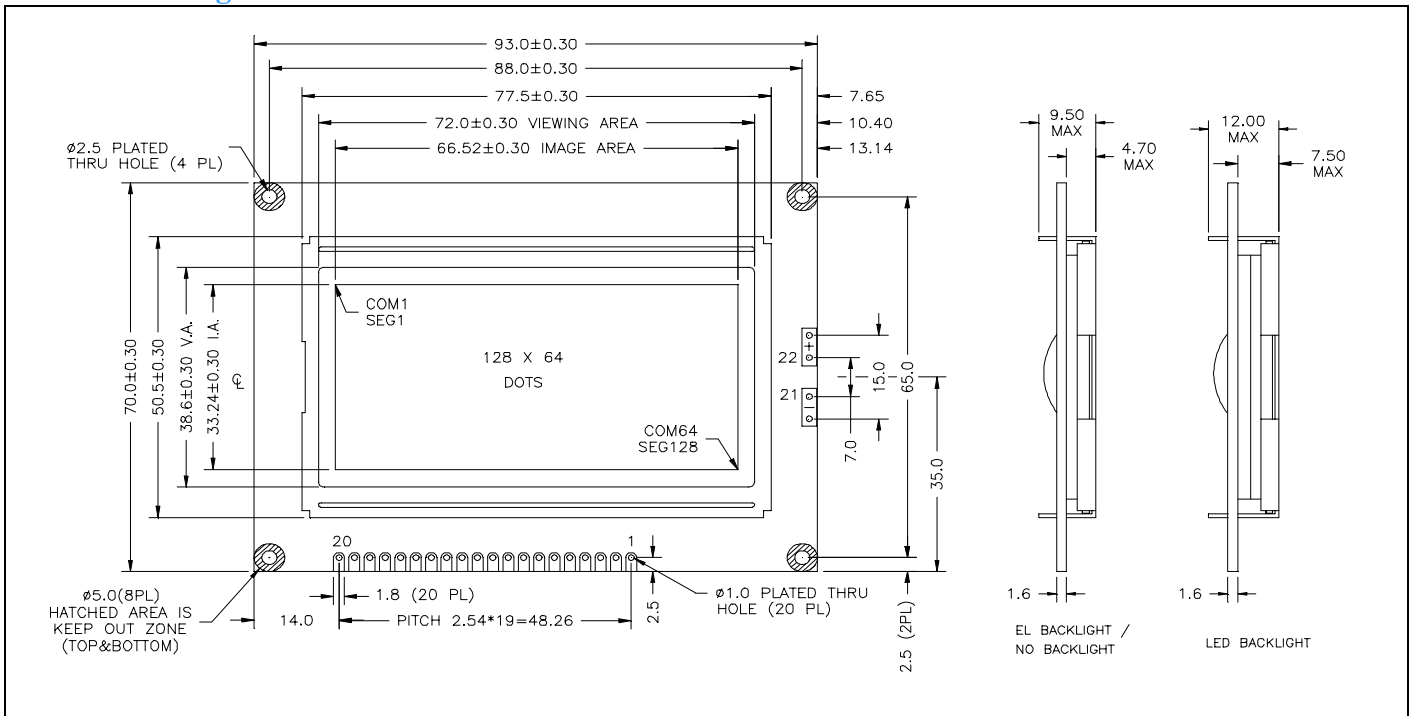
Feature

1. Dot Format (128 x 64)
2. 8-Bit parallel bus interface
3. Built-in LCD controller (KS0107 & KS0108)
4. Wide operating temperature range (Option)
5. High contrast ratio
6. LED or EL Backlight (Option)

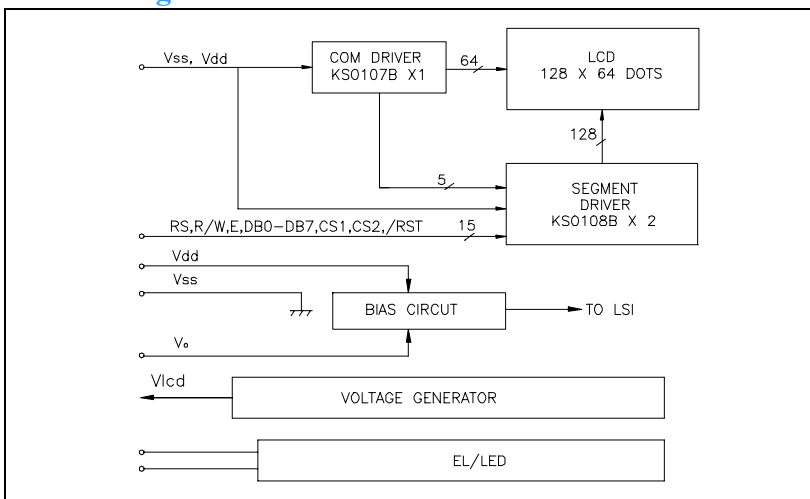


Mechanical Figure

Unit: mm

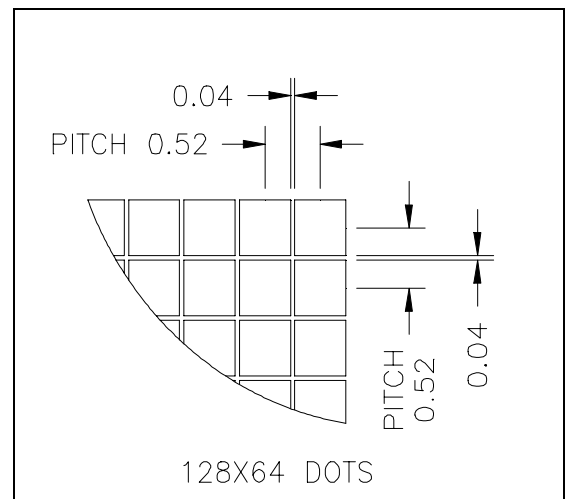


Block Diagram



Dots Size

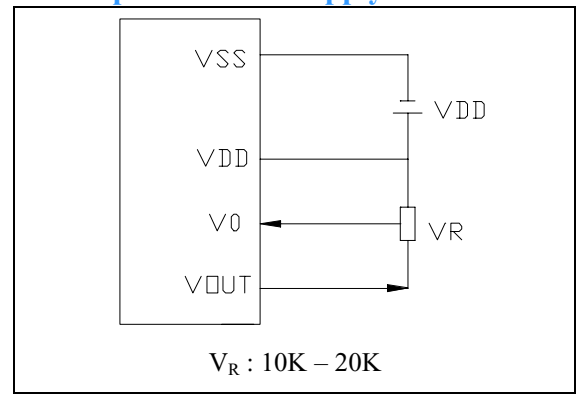
Unit: mm



Specification

ITEM	Standard Value	Unit
Number of dots	128x64 Dots	-
Module Dimension	93.0 (W)x70.0 (H)x9.5/12.0 (T)	mm
Viewing Area	72.0 (W)x38.6 (H)	mm
Dot Size	0.48(W)x0.48 (H)	mm
Dot Pitch	0.52 (W)x0.52 (H)	mm
LCD Type	STN	
Driver Method	1/64 Duty , 1/ 9 Bias	
Viewing Direction	6 O'clock	
Controller IC	KS0108B (Equivalent)	

Example of Power Supply



Absolute Maximum Ratings

项目 ITEM	符号 Symbol	MIN.	TYP.	MAX.	单位 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
Supply Voltage For Logic	$V_{DD}-V_{SS}$	-0.3	-	7.0	V
Supply Voltage For LCD	$V_{DD}-V_5$	-0.3	-	16.0	V

电性能 Electrical Characteristics

ITEM	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Supply Voltage For Logic	$V_{DD}-V_{SS}$	$T_a=25^\circ C$	-	5.0	5.5	V
Supply Voltage For LCD	$V_{DD}-V_{EE} (V_{OP})$		13.0	13.7	16.0	V
Input High Voltage			$0.8 V_{DD}$	-	V_{DD}	V
Input Low Voltage			0	-	$0.2 V_{DD}$	V
Output High Voltage		$I_{OH}=-0.5mA$	$0.8 V_{DD}$	-	V_{DD}	V
Output Low Voltage			0	-	$0.2 V_{DD}$	V

Pin Assignment

Pin Assignment				Value			Unit
Pin	Symbol	Level	Function	MIN.	TYP.	MAX.	
1	V_{SS}	0V	Power Supply (GND)				
2	V_{dd}	+5V	Power Supply (+5V)	4.5	5.0	5.5	V
3	V_0	-	Contrast Adjust Voltage	-	-	-	V
4	RS	H/L	Register Select Signal				
5	R/W	H/L	Data Read/Write				
6	E	H/L	Enable Signal				
7	DB0	H/L	Data Bus				
8	DB1	H/L					
9	DB2	H/L					
10	DB3	H/L					
11	DB4	H/L					
12	DB5	H/L					
13	DB6	H/L					
14	DB7	H/L					
15	CS1	H	Chip Select IC1				
16	CS2	H	Chip Select IC2				
17	/RST	-	Reset Signal				
18	V_{lcd}	-	Negative Voltage Output				
19	LED+	-	Power Supply For LED Backlight	3.9	4.1	4.3	V
20	LED-	-		-	0	-	V