

*Phoenix Display International, Inc.*

# PRODUCT PREVIEW

## 128 x 64 Monochrome

**TN/STN**

Graphics  
Liquid Crystal Display

### SPECIFICATIONS

#### MODULE

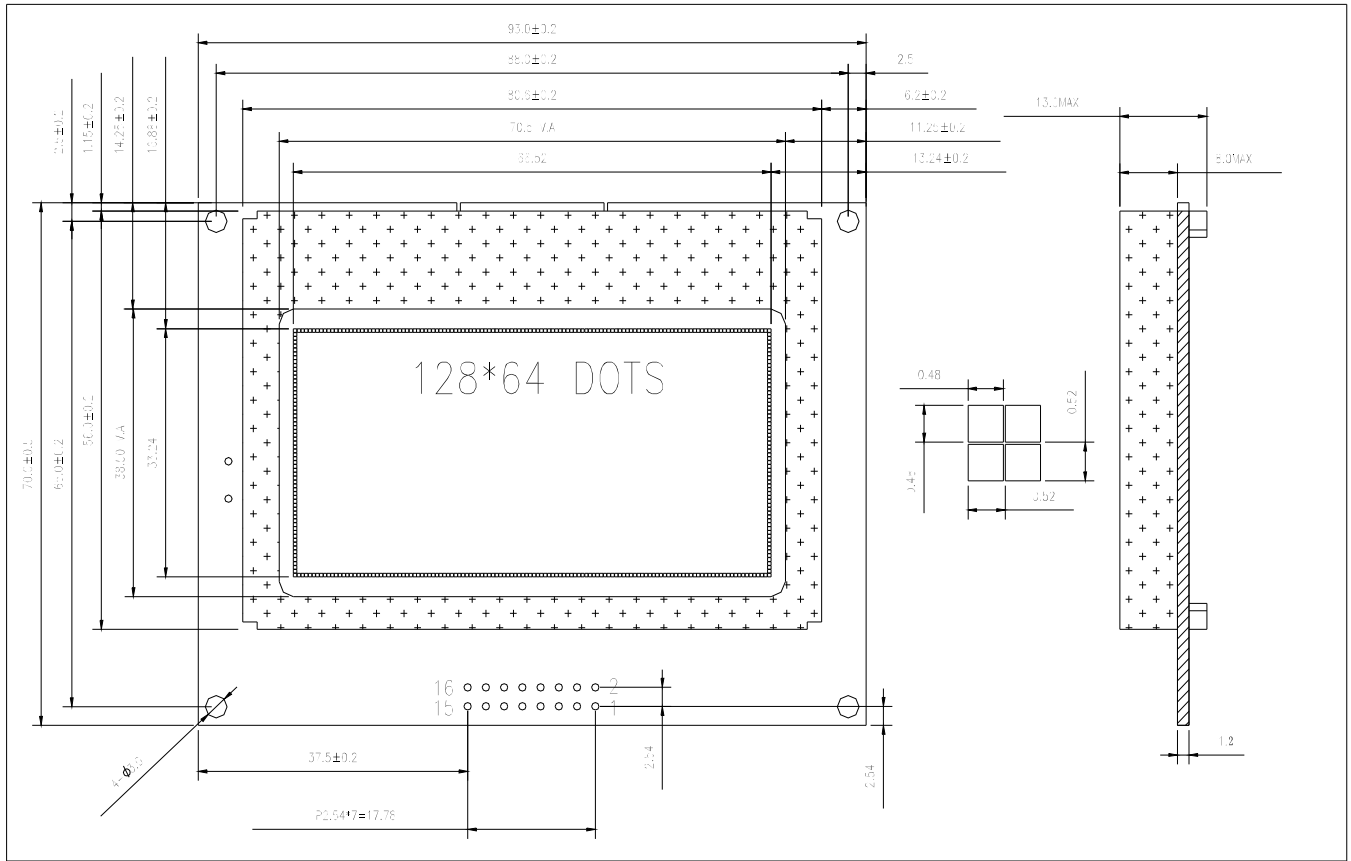
Part Number	G-1286449G-VA
Format	128 Columns by 64 Rows
Controller	SSD1815BZ
Overall Dimensions	93.0mm x 70.0mm x 13mm
Active Area	66.5mm x 33.2mm
Pixel Pitch	520um x 520um
Pixel Size	480um x 480um
Backlight System	EL
Driver Attach	Chip on Glass (COG)
Display Type	STN, FSTN
Duty	1/64
Bias	1/9



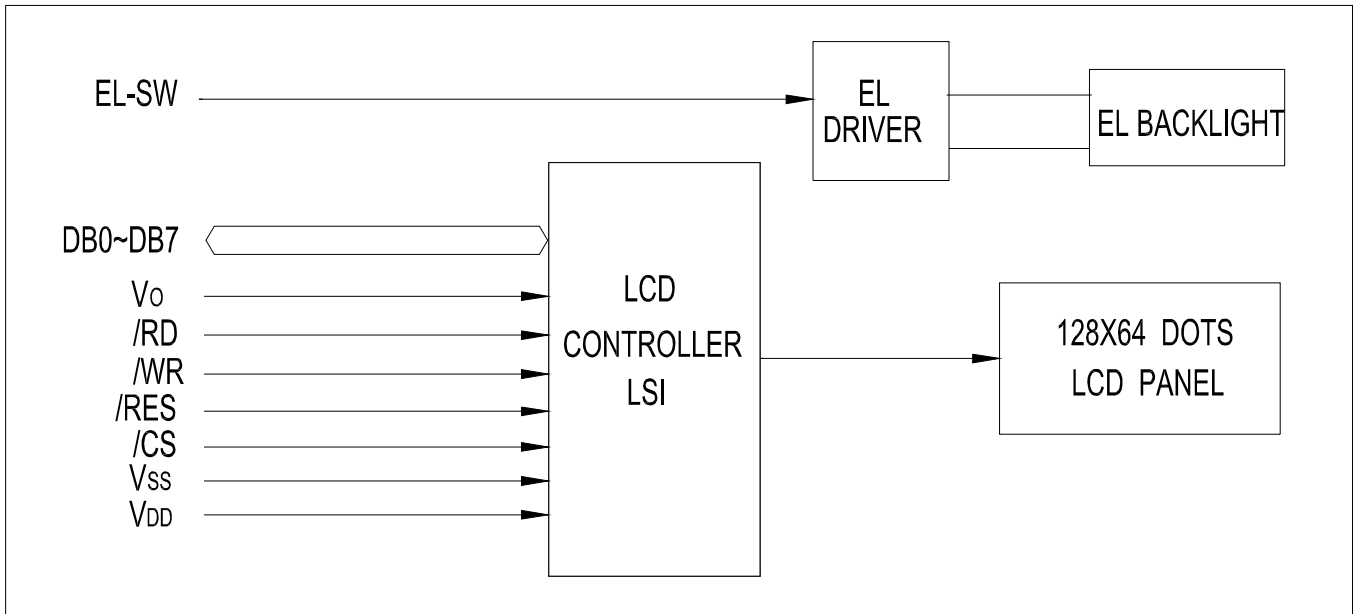
# G-1286449G-VA

1/64 DUTY, 1/9 BIAS  
128x64 DOTS

## 1.0 DIMENSIONAL DRAWING



## 2.0 BLOCK DIAGRAM



## 3.0 ELECTRICAL CHARACTERISTICS $T_a=25^\circ\text{C}$ $V_{DD}=3.0\text{V}\pm 0.25\text{V}$

Item	Symbol	Test Condition	Standard Value			Unit
			Min.	Typ.	Max.	
Power Supply Voltage	$V_{DD}-V_{SS}$	25°C	2.7	3.0	3.6	V
LCD Operation Voltage	$V_{OP}$			10.5	15	V
LCM Current Consumption	$I_{DD}$			0.09	0.12	mA
Backlight Forward Voltage	$V_F$				110	Vrms

#### 4.0 ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Test Condition	Standard Value		
			Min.	Max.	Unit
Supply Voltage (Logic)	$V_{DD}-V_{SS}$	25°C	-0.3	7	V
Supply Voltage (LCD)	$V_{DD}-V_{O}$		-0.3	17	V
Input Voltage	$V_{IN}$		-0.3	$V_{DD}+0.3$	V
Operating Temp.	$T_{OPR}$		-20	70	°C
Storage Temp.	$T_{STG}$		-30	80	°C

#### 5.0 PIN ASSIGNMENT

PIN No.	Symbol	Description
1	A0	H: Data signal L: Instruction signal
2	RD	Rear mode
3	WR	Write mode
4	/RES	Reset signal
5	/CS	Chip select pin
6	GND	Ground
7	EL_SW	EL Back Light Enable Pin
8	VDD	Supply Voltage For Logic
9	D0	DATA BIT 0
10	D1	DATA BIT 1
11	D2	DATA BIT 2
12	D3	DATA BIT 3
13	D4	DATA BIT 4
14	D5	DATA BIT 5
15	D6	DATA BIT 6
16	D7	DATA BIT 7

#### Remark

1. LCD option: STN, FSTN .
2. Customized module.
3. Backlight option: EL backlight feature, other specs not available on catalog is under request.