

*Phoenix Display International, Inc.*

# PRODUCT PREVIEW

## 128 x 64 Monochrome

**TN/STN**

Graphics  
Liquid Crystal Display

### SPECIFICATIONS

#### MODULE

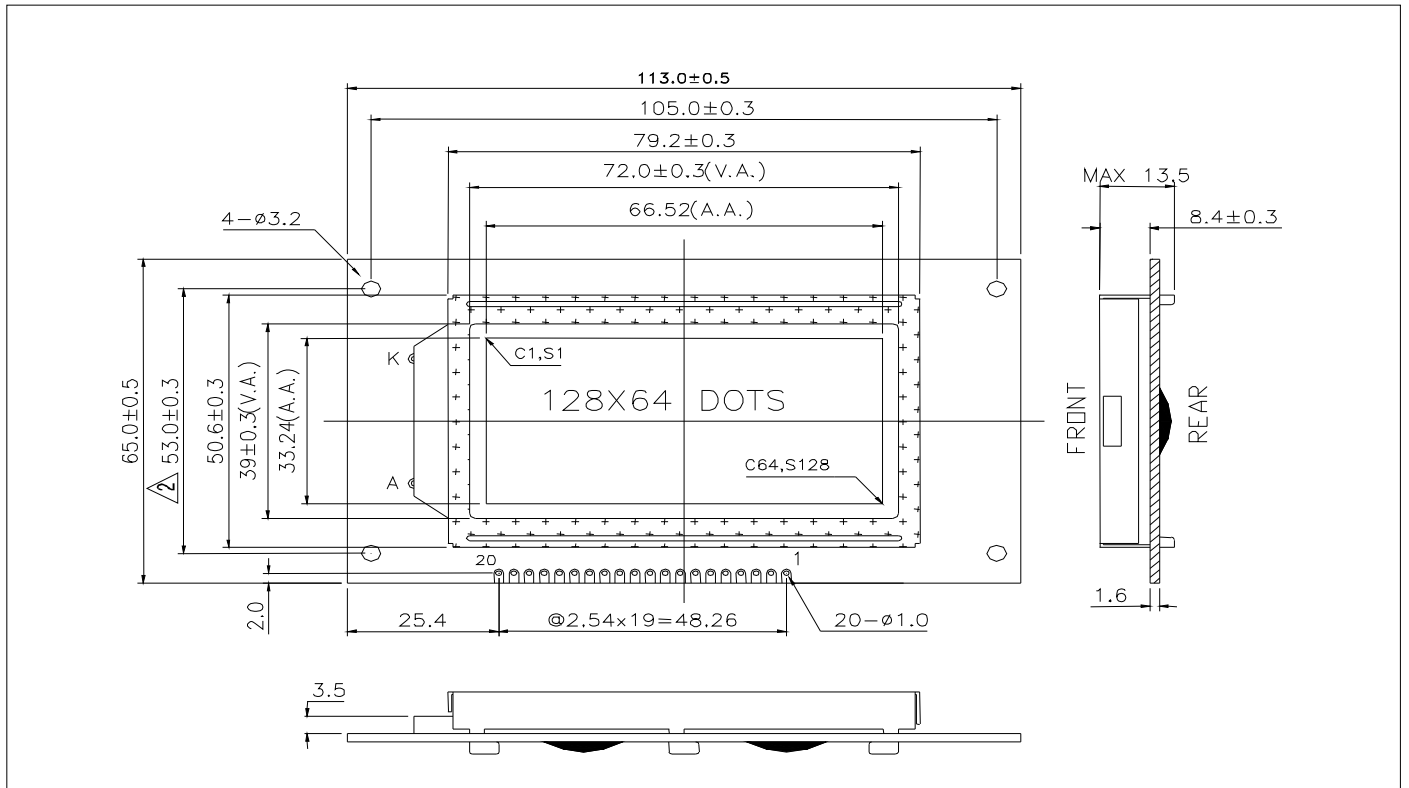
Part Number	G-12864A4C-VA
Format	128 Columns by 64 Rows
Controller	S6B0107 plus S6B0108
Overall Dimensions	113.0mm x 65.0mm x 13.5mm
Active Area	66.5mm x 33.2mm
Pixel Pitch	520um x 520um
Pixel Size	480um x 480um
Backlight System	LED
Driver Attach	Chip on Board (COB)
Display Type	STN, FSTN
Duty	1/64
Bias	1/9



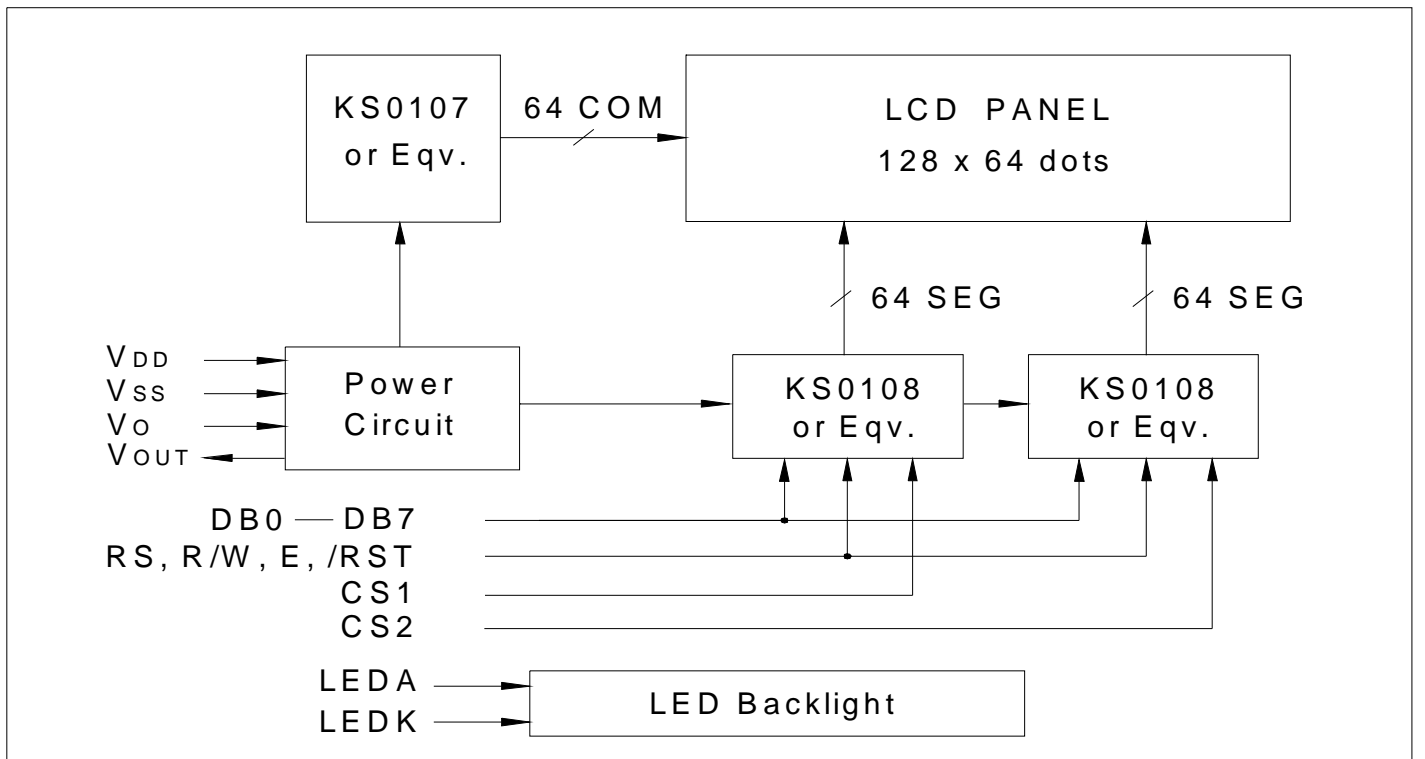
# G-12864A4C-VA

1/64 DUTY, 1/9BIAS  
128×64DOTS

## 1.0 DIMENSIONAL DRAWING



## 2.0 BLOCK DIAGRAM



## 3.0 ELECTRICAL CHARACTERISTICS (VDD=5.0V ± 10%, Ta=25°C )

Item	Symbol	Test Condition	Standard Value			
			Min.	Typ.	Max.	Unit
Supply Voltage(Logic)	V <sub>DD</sub>	25°C	--	5.0	--	V
LCD Operation Voltage	V <sub>OP</sub> (FSTN)		--	11.5	--	V
LCM Curren Consumption	I <sub>DD</sub>		--	--	10.0	mA
EL Backlight Voltage	V <sub>F</sub>		--	5.0	--	V

## 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	7.0	V
Supply Voltage (LCD)	$V_{DD}-V_O$		VDD-19.0	19.0	V
Input Voltage	$V_{IN}$		VLCD-0.3	VDD+0.3	V
Operating Temp.	$T_{OPR}$		-20	70	°C
Storage Temp.	$T_{STG}$		-30	80	°C

## 5.0 PIN ASSIGNMENT

Pin No.	Symbol	Level	Function
1	VSS	0V	Ground
2	VDD	+5V	Power supply for logic
3	VO	-	Operating voltage for LCD
4	RS	H/L	Register selection H: Display data L: Instruction code
5	R/W	H/L	Read/Write selection H: Read operation L: Write operation
6	E	H, H→L	Enable signal. Read data when E is "H", write data at the falling edge of E.
7~14	DB0~DB7	H/L	Data bit0~Data bit7
15	CS1	H	Chip selection for IC1, active "H"
16	CS2	H	Chip selection for IC2, active "H"
17	/RST	L	Reset signal, active "L"
18	VOUT	-10V	Output voltage for LCD driving
19	LEDA	+5V	Power supply for LED backlight
20	LEDK	0V	Power supply for LED backlight

**Remark:**

1. LCD option: TN,STN, FSTN .
2. Customized module.