

Phoenix Display International, Inc.

# PRODUCT PREVIEW

## 128 x 32 Monochrome

**TN/STN**

Graphics

Liquid Crystal Display

### SPECIFICATIONS

#### MODULE

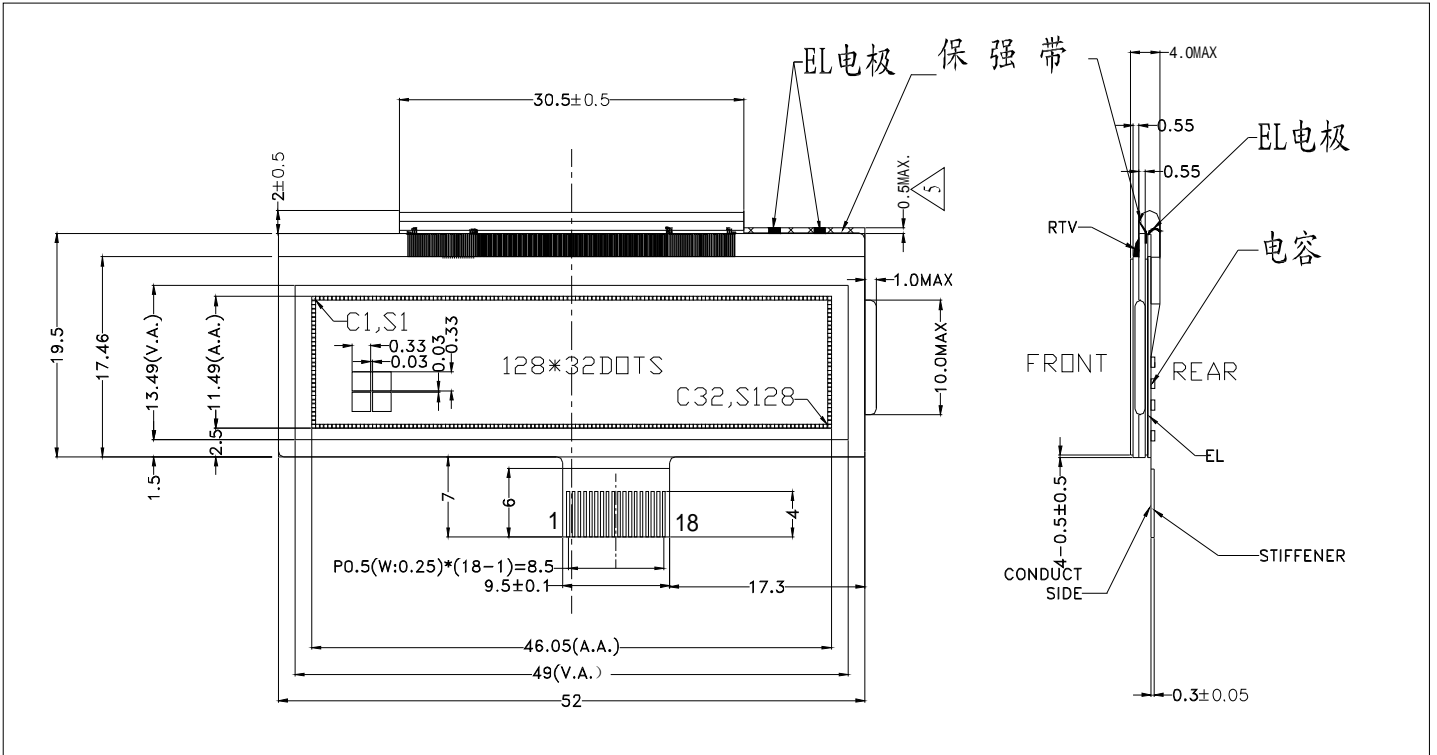
Part Number	G-1283212T-VA
Format	128 Columns by 32 Rows
Controller	S6B0723
Overall Dimensions	52.0mm x 43.6mm x 2.4mm
Active Area	46.1mm x 11.5mm
Pixel Pitch	360um x 360um
Pixel Size	330um x 330um
Backlight System	EL
Driver Attach	Chip on Glass (COG)
Display Type	STN, FSTN
Duty	1/33
Bias	1/6



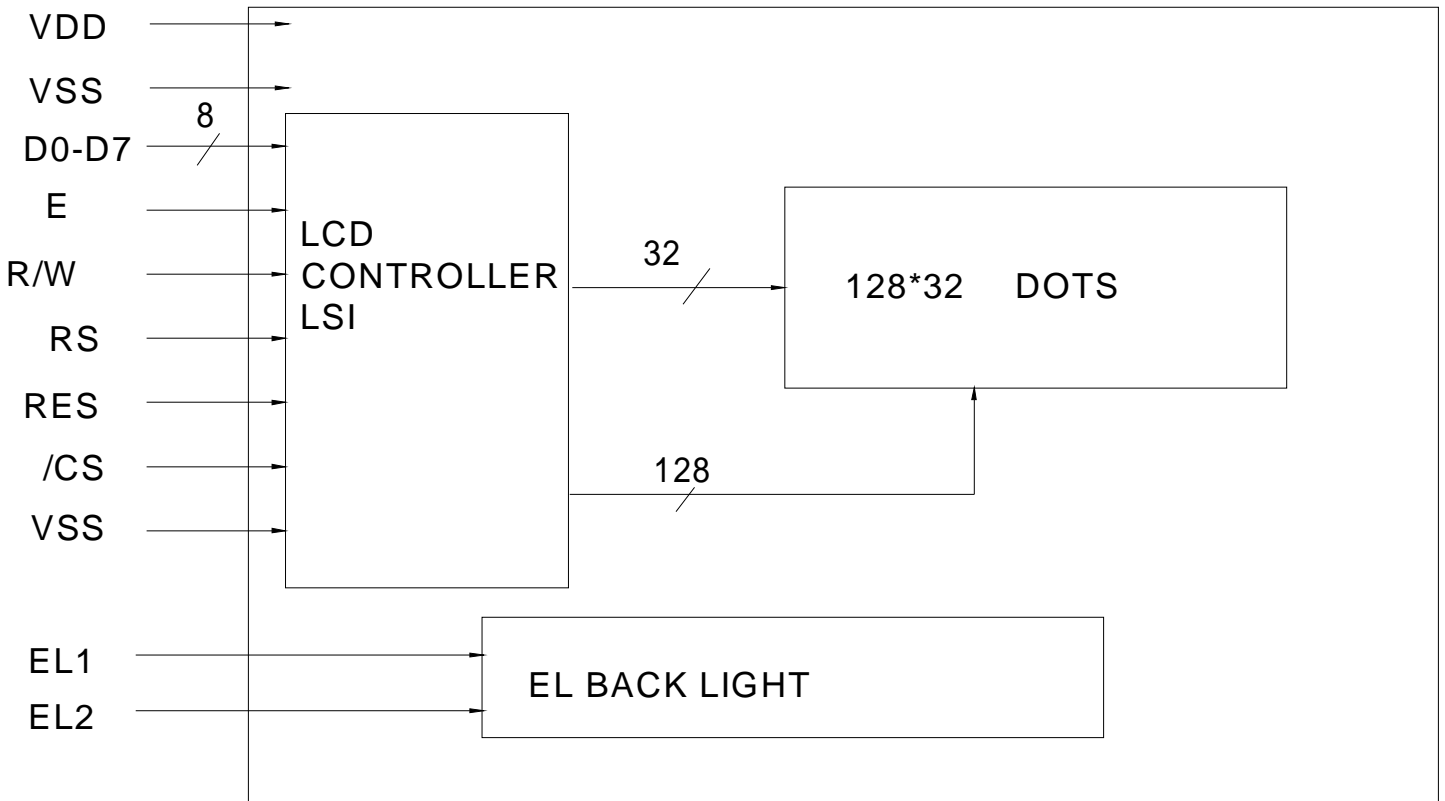
# G-1283212T-VA

1/33 DUTY, 1/6 BIAS  
128\*32DOTS

## 1.0 DIMENSIONAL DRAWING



## 2.0 BLOCK DIAGRAM



## 3.0 ELECTRICAL CHARACTERISTICS (Ta=25 °C, V<sub>DD</sub>=3.0V±0.25V )

Item	Symbol	Test Condition	Standard Value			
			Min.	Typ.	Max.	Unit
Supply Voltage(Logic)	VDD	25°C	VDD	VDD	VDD	VDD
LCD Operation Voltage	Vop(FSTN)		Vop	Vop	Vop	Vop
LCM Curren Consumption	IDD		IDD	IDD	IDD	IDD
EL Backlight Voltage	Vel		Vel	Vel	Vel	Vel

## 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)	$V_{DD}-V_O$		-0.3	VDD+0.3	V
Input Voltage	$V_{IN}$		-0.3	VDD+0.3	V
Operating Temp.	$T_{OPR}$		-0	50	°C
Storage Temp.	$T_{STG}$		-10	60	°C

## 5. PIN ASSIGNMENT

Pin No.	Symbol	Level	Function
1	VSS	0V	Ground
2	VDD	+3V	Power supply for logic
3~10	DB0~DB7	H/L	Data bit0~Data bit7
11	E	H	Enable signal
12	R/W	H/L	Read/Write selection H: Read L:Write
13	RS	H/L	Register selection H:Display data L:Control data
14	RES		When /RES is "L", initialization is executed
15	/CS		This is the chip select signal. High active.
16	VSS		Ground
17	EL1		Connect to EL1
18	EL2		Connect to EL2

**Remark:**

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