

Phoenix Display International, Inc.

PRODUCT PREVIEW

128 x 64 Monochrome

TN/STN

Graphics

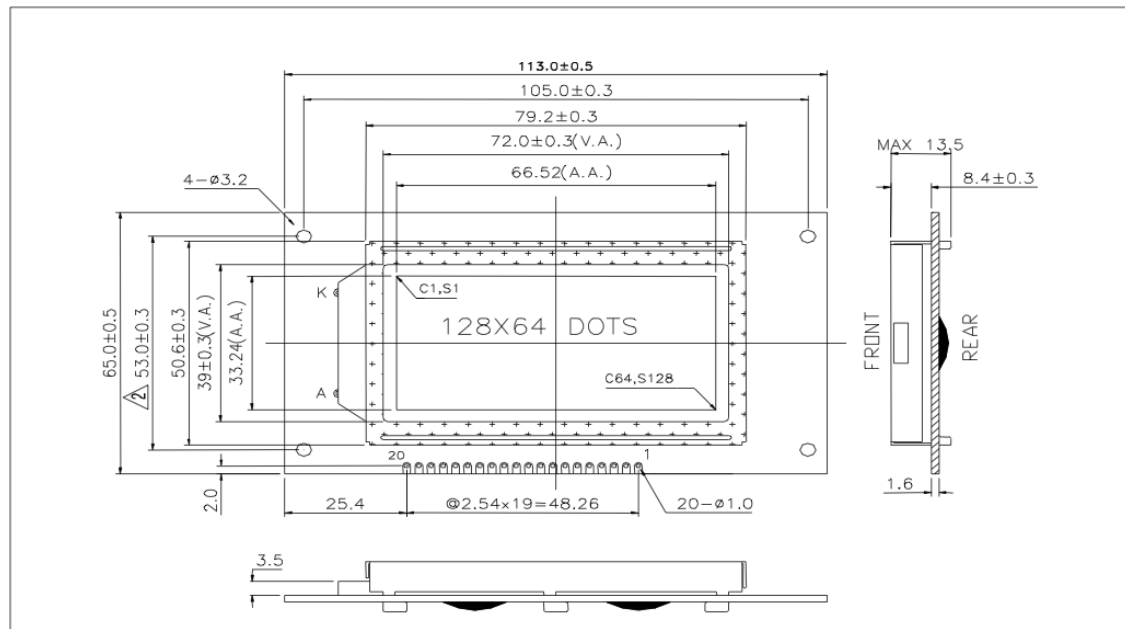
Liquid Crystal Display

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 | 72.0mm x 39.0mm |
| Pixel Pitch | 520um x 520um |
| Pixel Size | 480um x 480um |
| Backlight System | LED |
| Driver Attach | Chip on Board (COB) |
| Glass Type | STN, FSTN |
| Display Type | R,TF,TM |
| Duty | 1/64 |

1.0 DIMENSIONAL DRAWING



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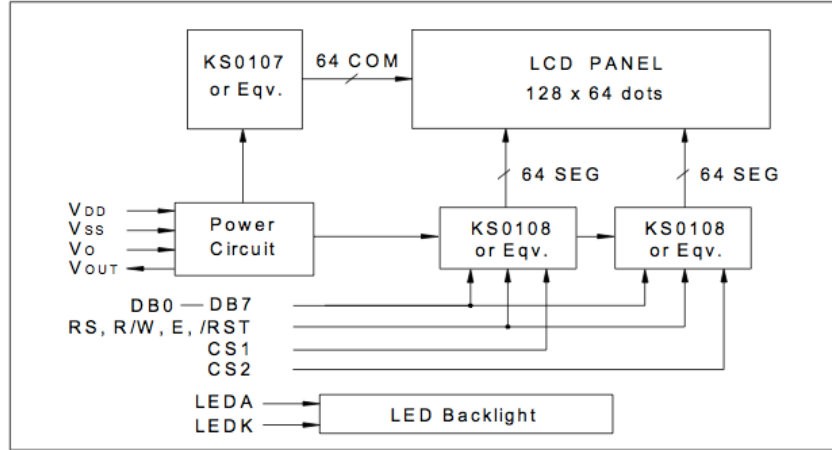


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2.0 BLOCK DIAGRAM



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 _{DD} | 25°C | -- | 5.0 | -- | V |
| LCD Operation Voltage | V _{OP1} (FSTN) | | -- | 11.5 | -- | V |
| LCM Current Consumption | I _{DD} | | -- | -- | 10.0 | mA |
| EL Backlight Voltage | V _F | | -- | 5.0 | -- | V |

4.0 ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Test Condition | Standard Value | | |
|------------------------|-------------------------------|----------------|-----------------------|----------------------|------|
| | | | Min. | Max. | Unit |
| Supply Voltage (Logic) | V _{DD-VSS} | 25°C | -0.3 | 7.0 | V |
| Supply Voltage (LCD) | V _{DD-V_O} | | V _{DD} -19.0 | 19.0 | V |
| Input Voltage | V _{IN} | | V _{LCD} -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 | 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.

