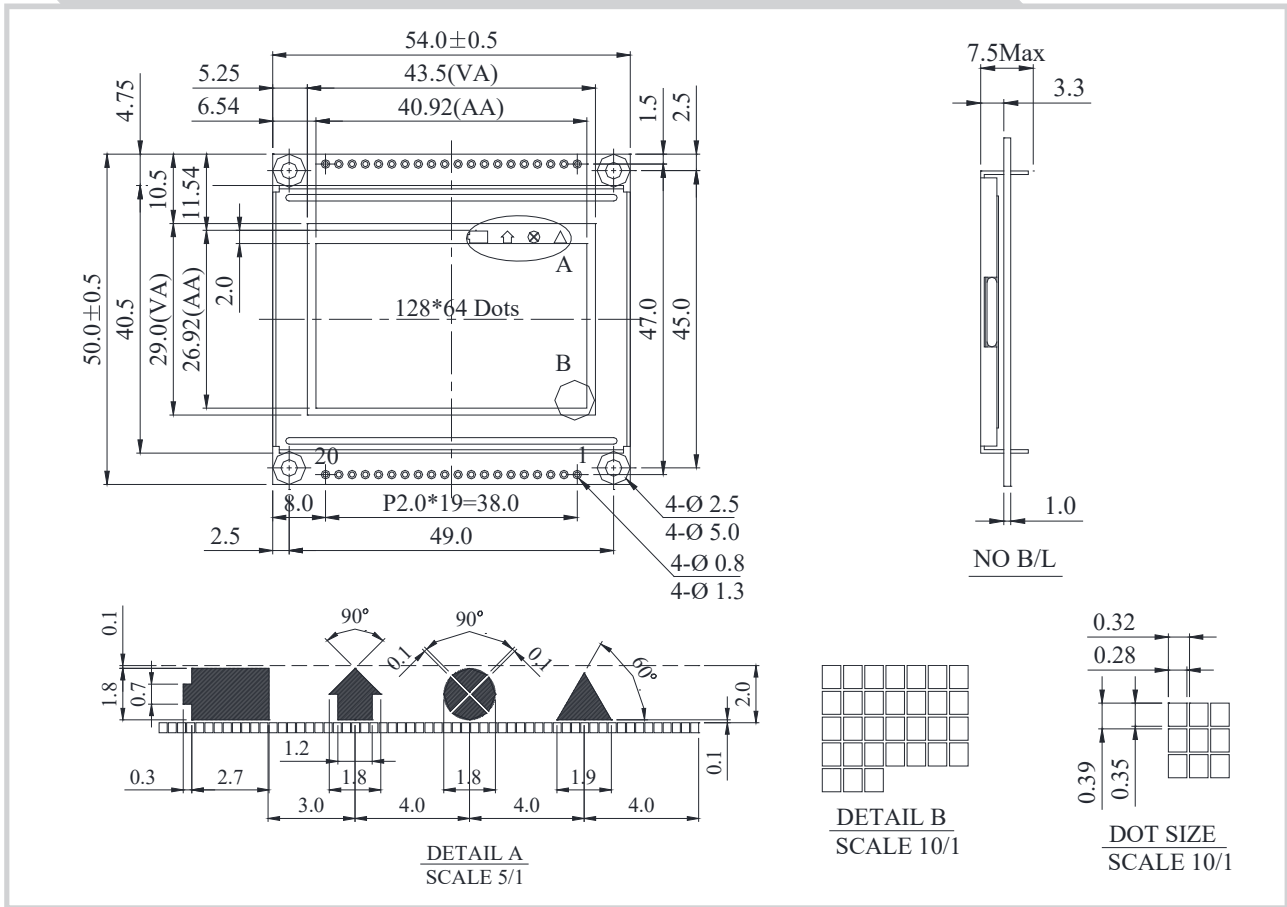


# NTG12864E/E1/EP2 Graphic 128x64 dots



## Feature

- 128X64 dots + 4 icons
- Built-in controller NT7108
- 5V power supply
- 1/64 duty cycle
- EL backlight (Built-in EL inverter)
- Built-in N.V.
- NTG12864E1: LED B/L with 4 ICONs, outline 55.0x50.0mm
- NTG12864EP2: LED B/L without 4 ICONs, outline 55.0x60.0mm

| Pin No. | Symbol          | Description                                 |
|---------|-----------------|---|
| 1       | V <sub>SS</sub> | Ground                                      |
| 2       | V <sub>DD</sub> | Power supply for logic                      |
| 3       | V <sub>O</sub>  | Contrast Adjustment                         |
| 4       | D/I             | Data/ Instruction select signal             |
| 5       | R/W             | Read/Write select signal                    |
| 6       | E               | Enable signal                               |
| 7       | DB0             | Data bus line                               |
| 8       | DB1             | Data bus line                               |
| 9       | DB2             | Data bus line                               |
| 10      | DB3             | Data bus line                               |
| 11      | DB4             | Data bus line                               |
| 12      | DB5             | Data bus line                               |
| 13      | DB6             | Data bus line                               |
| 14      | DB7             | Data bus line                               |
| 15      | CS1             | Chip Enable (Select Column 1 ~ Column 64)   |
| 16      | CS2             | Chip Enable (Select Column 65 ~ Column 128) |
| 17      | /RST            | Controller reset signal, Active Low         |
| 18      | V <sub>EE</sub> | Negative Voltage Output                     |
| 19      | A               | Power supply for B/L +                      |
| 20      | K               | Power supply for B/L -                      |

## Mechanical Data

| Item             | Standard Value | Unit |
|------------------|----------------|------|
| Module Dimension | 54.0 x 50.0    | mm   |
| Viewing Area     | 43.5 x 29.0    | mm   |
| Mounting Hole    | 45.0 x 49.0    | mm   |
| Dot Pitch        | 0.32 x 0.39    | mm   |
| Dot Size         | 0.28 x 0.35    | mm   |

## Electrical Characteristics

| Item  | Symbol             | Standard Value | Unit |
|---|--------------------|----------------|------|
|   |                    | typ.           |      |
| Input Voltage   | V <sub>DD</sub>    | 5.0            | V    |
| Recommended LCD Driving Voltage for Normal Temp. Version module @25°C | V <sub>DD-VO</sub> | 8.40           | V    |