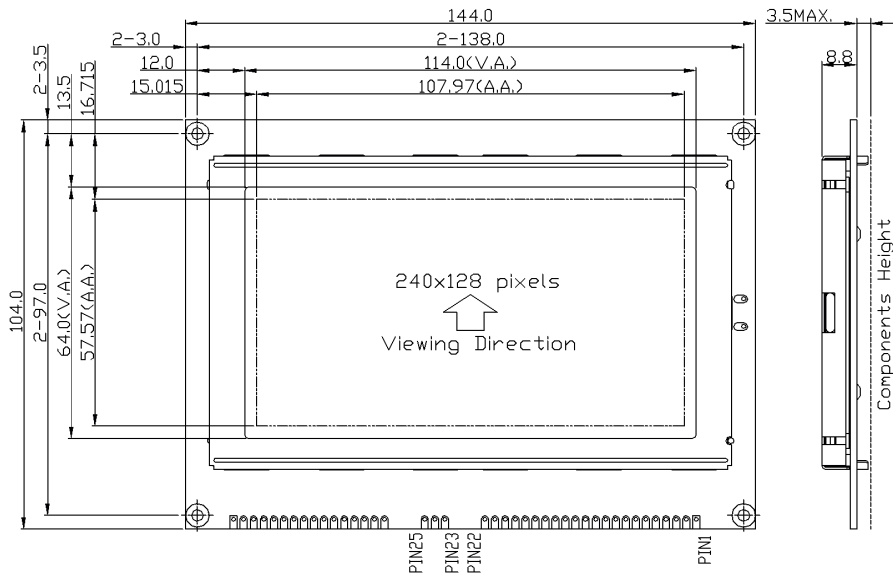


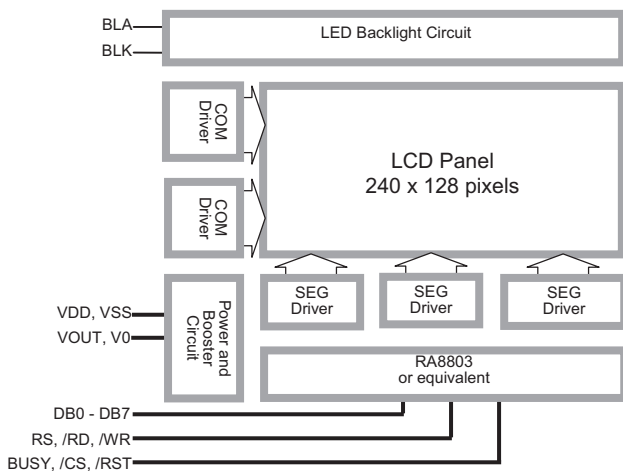
OUTLINE DRAWING



TERMINAL FUNCTIONS

| Pin | Name | Descriptions |
|-----|------|--|
| 1 | FG | Frame Ground |
| 2 | VSS | 0V Power Supply, Ground |
| 3 | VDD | Positive Power Supply |
| 4 | V0 | LCD Contrast Reference Input |
| 5 | /WR | Write enable input, active LOW |
| 6 | /RD | Read enable input, active LOW |
| 7 | /CS | Chip Enable Signal |
| 8 | RS | Register Select RS=HIGH, Transferring Display Data RS=LOW: Transferring Instruction Data |
| 9 | BUSY | Controller busy signal |
| 10 | /RST | Reset Signal /RST = L, Reset the LCD Module /RST = H, Normal Running |
| 11 | DB0 | 8-bit bi-directional data bus |
| : | : | |
| 18 | DB7 | |
| 19 | NC | No connection (leave open) |
| 20 | VOUT | Power Booster Output for V0 |
| 21 | BLA | LED Backlight Positive Power Supply |
| 22 | BLK | LED Backlight Negative Power Supply |
| 23 | BLA | LED Backlight Positive Power Supply |
| 24 | NC | No connection (leave open) |
| 25 | BLK | LED Backlight Negative Power Supply |

BLOCK DIAGRAM



DISPLAY CHARACTERISTICS

| Item | Value |
|------------------|-------------------------------|
| LCD Display Mode | FSTN, Positive, Transflective |
| Viewing Angle | 6:00 |
| Driving Method | 1/128 duty, 1/12 bias |
| Backlight | White LED backlight |

MECHANICAL DATA

| Item | Value |
|-------------------|---------------------------|
| Outline (mm) | 144.0 x 104.0 x 12.3 MAX. |
| Viewing Area (mm) | 114.0 x 64.0 |
| Active Area (mm) | 107.97 x 57.57 |
| Dot Pitch (mm) | 0.45 x 0.45 |
| Dot Size (mm) | 0.42 x 0.42 |

ABSOLUTE MAXIMUM

| Item | Sym. | Min | Max |
|----------------------------|-----------------|-----|-----|
| Operating Voltage (V) | V _{DD} | 0 | 5.5 |
| Operating Temperature (°C) | T _{OP} | -20 | +70 |
| Storage Temperature (°C) | T _{ST} | -30 | +80 |

ELECTRICAL CHARACTERISTICS *

| Item | Sym. | Min | Typ | Max |
|------------------------|-----------------|--------------------|-----|---------------------|
| Operating Voltage (V) | V _{DD} | 4.8 | 5.0 | 5.2 |
| Input High Voltage (V) | V _{IH} | 0.8V _{DD} | - | V _{DD} |
| Input Low Voltage (V) | V _{IL} | V _{SS} | - | 0.2 V _{DD} |
| Operating Current (mA) | I _{DD} | - | 9.1 | 22.8 |

BACKLIGHT CHARACTERISTICS

| Item | Symbol | Min | Typ | Max |
|----------------------|-------------------|-----|-----|-----|
| Forward Voltage (V) | V _{fBLA} | - | 5.0 | - |
| Forward Current (mA) | I _{fBLA} | - | 170 | 230 |

LM240128R series

| | Highlight | |
|---------------|-----------|----------|
| | LCD Mode | *Voltage |
| LM240128RCC* | FSTN-Pos | 5.0V |
| LM240128RCC-1 | FSTN-Pos | 3.3V |
| LM240128RFC | STN-Blue | 5.0V |
| LM240128RFC-1 | STN-Blue | 3.3V |

For similar product or (semi) custom made LCD module, please visit our web site or contact us.

*The above product information is based on this model.