# SG12864C ( 128 DOTS X 64 DOTS )

## ¦ FEATURES

. BUILT-IN CONTROLLER (KS0107 OR EQUIVALENT)
. +5 V POWER SUPPLY
. 1/64 DUTY CYCLE
. 8-BIT PARALLEL INTERFACE

## ¦ MECHANICAL DATA

| ITEM | DIMENSIONS | UNIT |
|---|---|---|
| Module Size (W x H x T) | 78.0 x 70.0 x 8.8 ( 12.7 LED ) | mm |
| Viewing Area ( W x H ) | 72.0 x 40.0 | mm |
| Active Area ( W x H ) | 66.52 x 33.24 | mm |
| Dot Size ( W x H ) | 0.48 x 0.48 | mm |
| Dot Pitch ( W x H ) | 0.52 x 0.52 | mm |

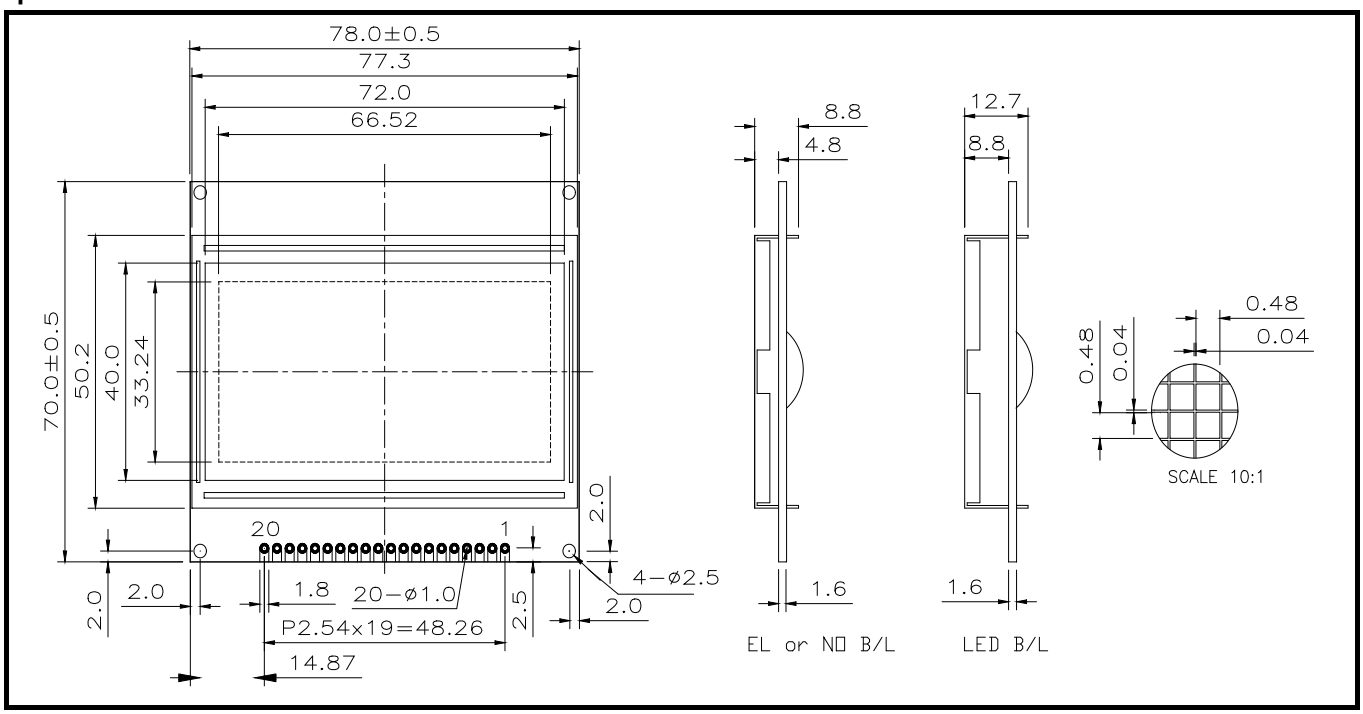
## ¦ INTERFACE PIN CONNECTIONS

| NO. | SYMBOL | LEVEL | FUNCTION |
|---|---|---|---|
| 1 | $V_{SS}$ | 0V | Power Supply Ground |
| 2 | $V_{DD}$ | 5V | Power Supply Voltage |
| 3 | $V_O$ | - | Contrast Adjustment Voltage |
| 4 | D/I | H/L | L : Data, H : Instruction Code |
| 5 | R/W | H/L | H : Read / L : Wrtie |
| 6 | E | H→L | Enable Signal |
| 7~14 | DB0~DB7 | H/L | Data Bus Line |
| 15 | CS1 | H | Chip Select Signal For IC1 |
| 16 | CS2 | H | Chip Select Signal For IC2 |
| 17 | /RES | L | Reset Signal |
| 18 | Vout | - | Power Supply Voltage For LCD |
| 19 | A | 4.2V | LED Power (+) |
| 20 | K | 0V | LED Power (-) |

## ¦ ABSOLUTE MAXIMUM RATINGS

| ITEM | SYMBOL | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|
| Supply Voltage For Logic | $V_{DD}$-$V_{SS}$ | 0 | - | 7 | V |
| Supply Voltage For LCD Drive | $V_{DD}$-$V_o$ | 0 | - | 14 | V |
| Input Voltage | $V_I$ | Vss | - | $V_{DD}$ | V |

## ¦ ELECTRICAL CHARACTERISTICS

| ITEM | | SYMBOL | CONDITION | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|---|---|
| Supply Voltage For Logic | | $V_{DD}$-$V_{SS}$ | - | 4.5 | 5 | 5.5 | V |
| Supply Voltage For LCD | | $V_{DD}$-$V_o$ | $V_{DD}$=5V Ta=25. | 7.6 | 8.3 | 9.2 | V |
| Supply Current | | $I_{DD}$ | $V_{DD}$=5V | - | 4.5 | 10 | mA |
| Input Voltage | "HIGH" Level | $V_{IH}$ | - | 2.2 | - | VDD | V |
| | "LOW" Level | $V_{IL}$ | - | - | - | 0.6 | V |
| Output Voltage | "HIGH" Level | $V_{OH}$ | - | 2.4 | - | - | V |
| | "LOW" Level | $V_{OL}$ | - | - | - | 0.4 | V |

## ¦ EXTERNAL DIMENSIONS