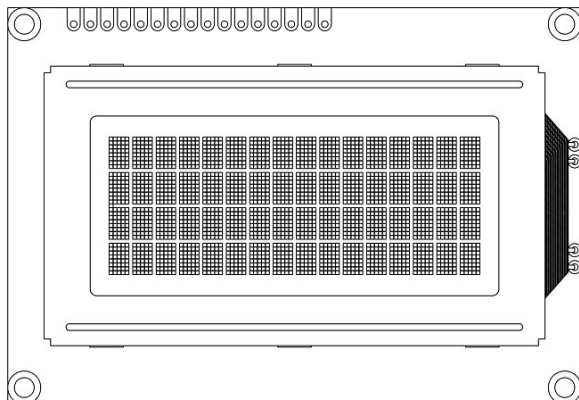


## 16X4 Character LCD



## FEATURES

- Type: Character
- Display format: 16x4 Character
- Controller IC: AIP31066L(or equivalent)
- Duty cycle: 1/16
- 5x8 dots includes cursor
- +5.0V power supply (also available for +3.3V)
- LED can be driven by in pin1,pin2,pin15,pin16

| MECHANICAL DATA  |                |      |
|------------------|----------------|------|
| ITEM             | STANDARD VALUE | UNIT |
| Module Dimension | 87.00 x 60.00  | mm   |
| Viewing Area     | 62.00 x 27.20  |      |
| Active Area      | 56.21 x 20.81  |      |
| Dot Size         | 0.56 x 0.56    |      |
| Dot Pitch        | 0.60 x 0.60    |      |
| Character Size   | 2.96 x 4.76    |      |
| Height           | 12.9           |      |

| ABSOLUTE MAXIMUM RATINGS |           |     |     |     |      |
|--------------------------|-----------|-----|-----|-----|------|
| ITEM                     | SYMBOL    | MIN | TYP | MAX | UNIT |
| Power Supply             | VDD - VSS | 0   | -   | 7.0 | V    |
| Input Voltage            | Vin       | 0   | -   | VDD |      |

## Note

- VSS=0 V , VDD=5.0V

| ELECTRICAL CHARACTERISTICS |        |                   |                |     |     |      |
|----------------------------|--------|-------------------|----------------|-----|-----|------|
| ITEM                       | SYMBOL | CONDITION         | STANDARD VALUE |     |     | UNIT |
|                            |        |                   | MIN            | TYP | MAX |      |
| Supply voltage for LCD     | VDD-V0 | Ta =25°C          | 4.3            | 4.5 | 4.7 | V    |
| Input voltage              | VDD    |                   | 4.8            | 5.0 | 5.2 |      |
| Supply current             | IDD    | Ta=25°C, VDD=5.0V | 0.5            | 1.5 | 2.5 | mA   |
| LED Forward Voltage        | Vf     | Ta =25°C          | 4.8            | 5.0 | 5.2 | V    |
| LED Forward current-Edge   | If     |                   | 30             | 40  | 50  | mA   |

| Options       |          |            |          |          |           |           |     |    |      |
|---------------|----------|------------|----------|----------|-----------|-----------|-----|----|------|
| PROCESS COLOR |          |            |          |          |           | BACKLIGHT |     |    |      |
| TN            | STN Gray | STN Yellow | STN Blue | FSTN B&W | STN Color | None      | LED | EL | CCFL |
| √             | √        | √          | √        | √        |           | √         | √   |    |      |

For detailed information, please refer to the “Product Numbering System” document.

| Display character address code |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
|--------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1                              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

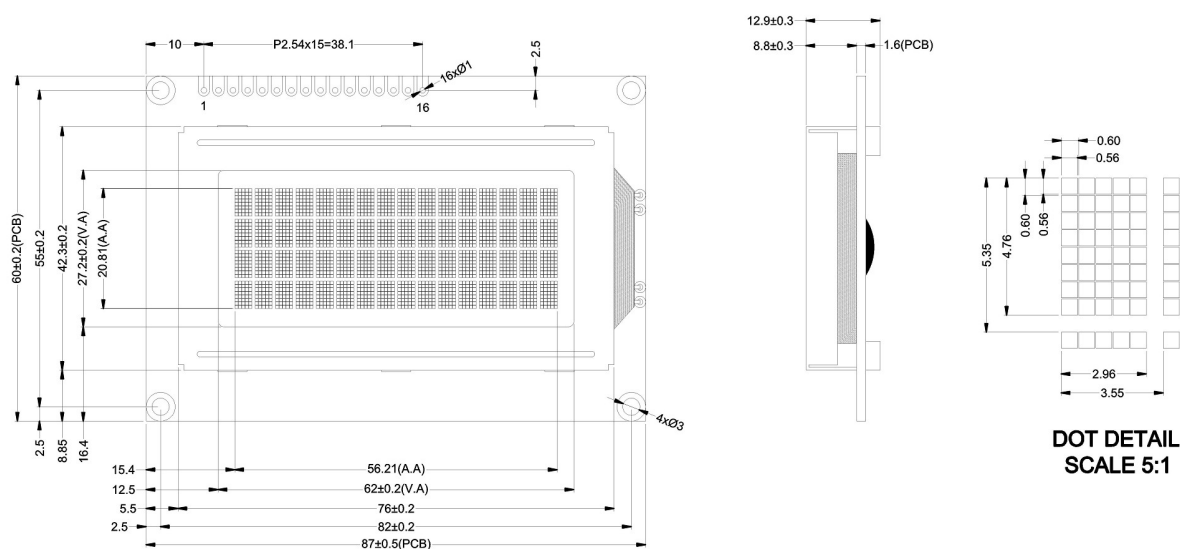
## Display Zone

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 4A | 4B | 4C | 4D | 4E | 4F |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 1A | 1B | 1C | 1D | 1E | 1F |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 5A | 5B | 5C | 5D | 5E | 5F |

## INTERFACE PIN FUNCTION

| PIN NO. | SYMBOL | FUNCTION                   |
|---------|--------|----------------------------|
| 1       | VSS    | Ground                     |
| 2       | VDD    | +3.3V or +5.0V             |
| 3       | V0     | Contrast adjustment        |
| 4       | RS     | H/L Register select signal |
| 5       | RW     | H/L Read/write signal      |
| 6       | E      | H→L enable signal          |
| 7       | DB0    | H/L data bus line          |
| 8       | DB1    | H/L data bus line          |
| 9       | DB2    | H/L data bus line          |
| 10      | DB3    | H/L data bus line          |
| 11      | DB4    | H/L data bus line          |
| 12      | DB5    | H/L data bus line          |
| 13      | DB6    | H/L data bus line          |
| 14      | DB7    | H/L data bus line          |
| 15      | LED+   | Power supply for BKL       |
| 16      | LED-   | Power supply for BKL       |

## DIMENSIONS in millimeters



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