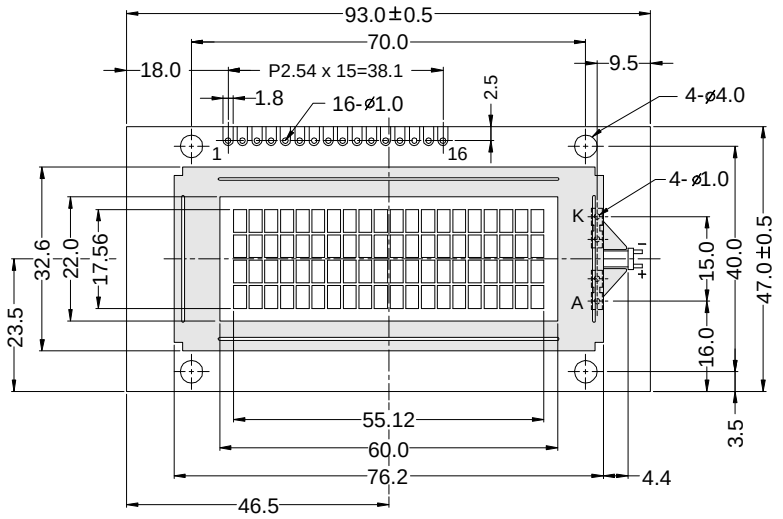
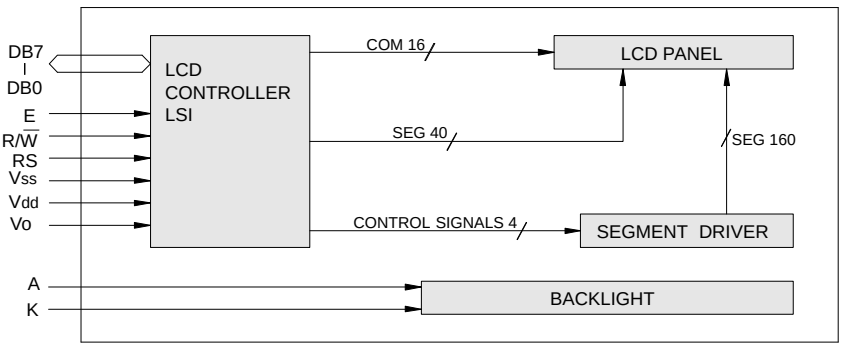
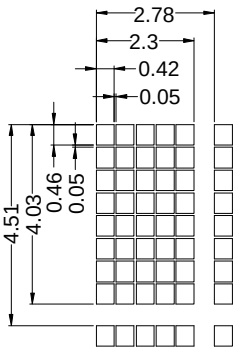
POWERTIP

# PC 2004-C-PI

## OUTLINE DIMENSION & BLOCK DIAGRAM




The tolerance unless classified ± 0.3mm

| MECHANICAL SPECIFICATION | | | |
|---|---|---|---|
| Overall Size | 93.0 x 47.0 | Module | H2 / H1 |
| View Area | 60.0 x 22.0 | W /O B/L | 5.0 / 9.6 |
| Dot Size | 0.42 x 0.46 | EL B/L | 5.0 / 9.6 |
| Dot Pitch | 0.47 x 0.51 | LED B/L | 7.8 / 11.5 |

| PIN ASSIGNMENT | | |
|---|---|---|
| Pin no. | Symbol | Function |
| 1 | Vss | Power supply(GND) |
| 2 | Vdd | Power supply(+) |
| 3 | Vo | Contrast Adjust |
| 4 | RS | Register select signal |
| 5 | R/$\overline{W}$ | Data read / write |
| 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 | A | Power supply for LED B/L (+) |
| 16 | K | Power supply for LED B/L (–) |

| ABSOLUTE MAXIMUM RATING | | | | | |
|---|---|---|---|---|---|
| Item | Symbol | Condition | Min. | Max. | Units |
| Supply for logic voltage | Vdd-Vss | 25°C | -0.3 | 7 | V |
| LCD driving supply voltage | Vdd-Vee | 25°C | -0.3 | 13 | V |
| Input voltage | Vin | 25°C | -0.3 | Vdd+0.3 | V |

| ELECTRICAL CHARACTERISTICS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Item | Symbol | Condition | Min. | | Typical | | Max. | | Units |
| Power supply vlotage | Vdd-Vss | 25°C | 2.7 | | – | | 5.5 | | V |
| LCD operation voltage | Vop | Top | N | W | N | W | N | W | V |
| | | -20°C | – | 7.4 | – | 7.8 | – | 8.2 | V |
| | | 0°C | 4.9 | – | 5.2 | – | 5.5 | – | V |
| | | 25°C | 4.5 | 6.4 | 4.8 | 6.7 | 5.1 | 7 | V |
| | | 50°C | 4.1 | – | 4.4 | – | 4.7 | – | V |
| | | 70°C | – | 6 | – | 6.3 | – | 6.6 | V |
| LCM current consumption (No B/L) | Idd | Vdd=5V | – | | 2.5 | | 4 | | mA |
| Backlight current consumption | LED/edge | VB/L=3.3V | – | | 20 | | – | | mA |
| | LED/array | VB/L=4.2V | – | | – | | – | | mA |

## REMARK

LCD option: STN, TN, FSTN

Backlight Option: LED,EL Backlight feature, other Specs not available on catalog is under request.