

AND791GST/GST-LED

4 Lines x 40 Characters

Intelligent Character Display

The AND791GST/GST-LED devices are compact, LCD modules that have an on-board LCD controller and driver circuit. These devices can display 160 characters (numerals, letters, symbols and Kana letters), as well as eight custom characters.

Features

• RoHS Compliant

- AND791GST: Super Twist Technology
- AND791GST-LED: STN with LED backlight
- 5 x 7 Dots with Cursor
- Built-in Controller (KS0066 or equivalent)
- 5V Power Supply
- 1/16 Duty Cycle
- 4.2V LED Forward Voltage

Mechanical Characteristics

| Item | Specification | Unit |
|-----------------|--|------|
| Module Size | 190.0 (W) x 54.0 (H) x 8.8 (D) (13.0 LED) | mm |
| Viewing Area | 149 (W) x 29.5 (H) | mm |
| Character Size | 2.78 (W) x 4.89 (H) | mm |
| Character Pitch | 3.53 (W) x 5.49 (H) | mm |
| Dot Size | 0.50 (W) x 0.55 (H) | mm |
| Dot Pitch | 0.57 (W) x 0.62 (H) | mm |

Absolute Maximum Ratings

| Item | Symbol | Rating | Unit |
|-----------------------|-----------|-----------------------------|------|
| Supply Voltage | V_{DD} | 7.0 | V |
| Input Voltage | V_{IN} | $0 \leq V_{IN} \leq V_{DD}$ | V |
| LED Forward Current | I_F | 960 | mA |
| LED Reverse Voltage | V_R | 8 | V |
| LED Power Dissipation | P_D | 4160 | mW |
| Operating Temperature | T_{op} | 0 to +50 | °C |
| Storage Temperature | T_{stg} | -20 to +70 | °C |

Electrical Characteristics (TA = 25°C)

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit | |
|-----------------------|-----------------|-----------|------|------|------|----------|---|
| LCD Operating Voltage | $V_{DD}-V_O$ | T=0°C | - | 4.8 | - | V | |
| | | T=25°C | - | 4.5 | - | V | |
| | | T=50°C | - | 4.2 | - | V | |
| Supply Voltage | $V_{DD}-V_{SS}$ | - | 4.7 | 5 | 5.3 | V | |
| Supply Current | I_{DD} | - | - | 5.2 | 10.8 | mA | |
| Input Voltage | "High" Level | V_{IH} | - | 2.2 | - | V_{DD} | V |
| | "Low" Level | V_{IL} | - | 0 | - | 0.6 | V |
| Output Voltage | "High" Level | V_{OH} | - | 2.4 | - | - | V |
| | "Low" Level | V_{OL} | - | - | - | 0.4 | V |

Product specifications contained herein may be changed without prior notice. It is therefore advisable to contact Purdy Electronics before proceeding with the design of equipment incorporating this product.

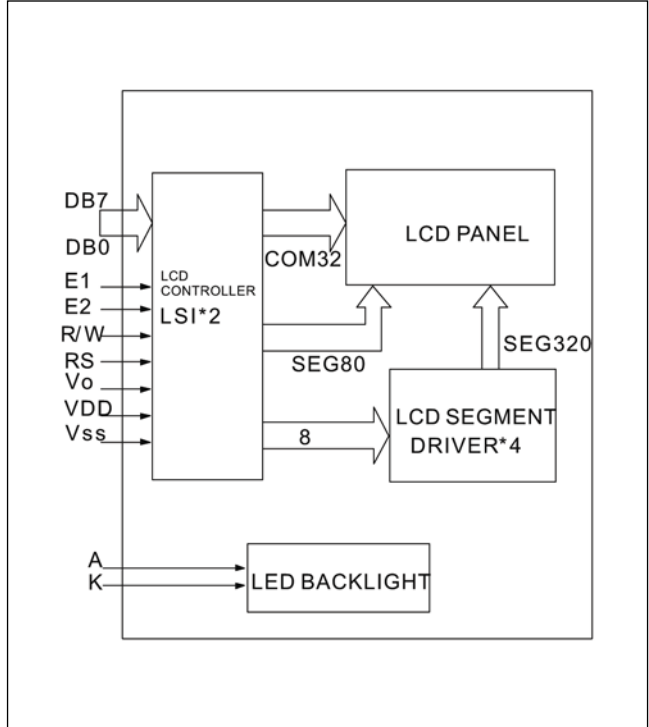


AND791GST/GST-LED Intelligent Character Display

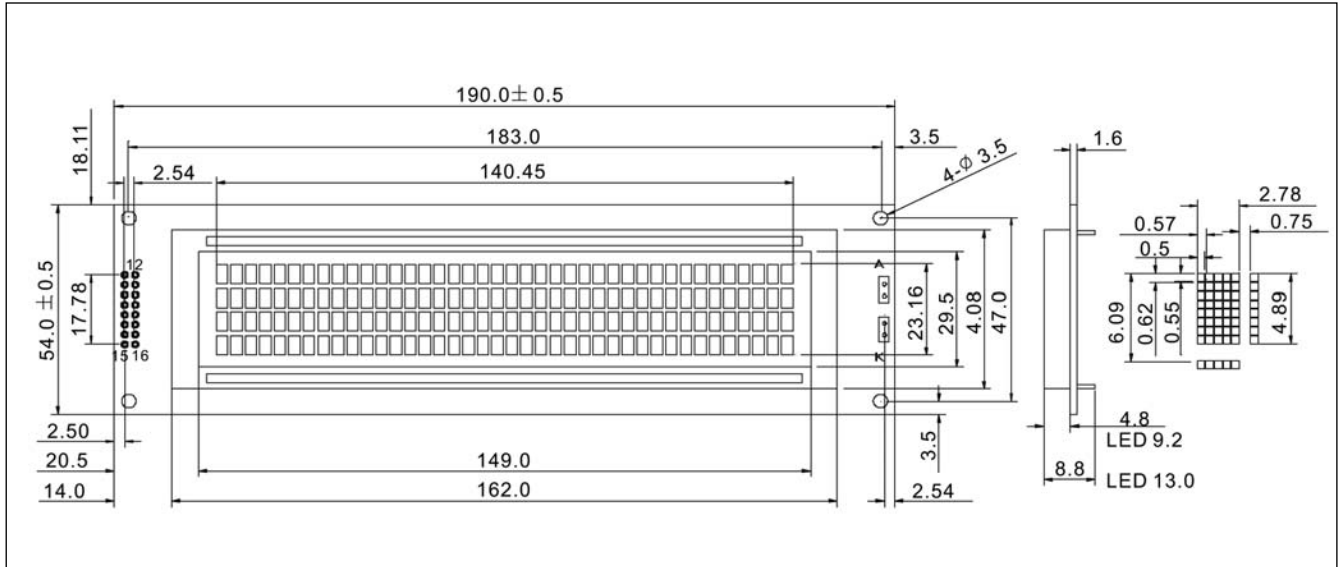
Connector Pin Assignment

| Pin No. | Signal | Function |
|---------|-----------------|---------------------|
| 1 | DB ₇ | Data Bit 7 |
| 2 | DB ₆ | Data Bit 6 |
| 3 | DB ₅ | Data Bit 5 |
| 4 | DB ₄ | Data Bit 4 |
| 5 | DB ₃ | Data Bit 3 |
| 6 | DB ₂ | Data Bit 2 |
| 7 | DB ₁ | Data Bit 1 |
| 8 | DB ₀ | Data Bit 0 |
| 9 | E ₁ | Enable IC1 |
| 10 | R/W | Read/Write |
| 11 | RS | Register Select |
| 12 | V _O | Contrast Adjustment |
| 13 | V _{SS} | 0V |
| 14 | V _{DD} | 5V |
| 15 | E ₂ | Enable IC2 |
| 16 | NC | No Control |

Power Supply Block Diagram



Dimensional Outline





AND791GST/GST-LED Intelligent Character Display
