

# 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.

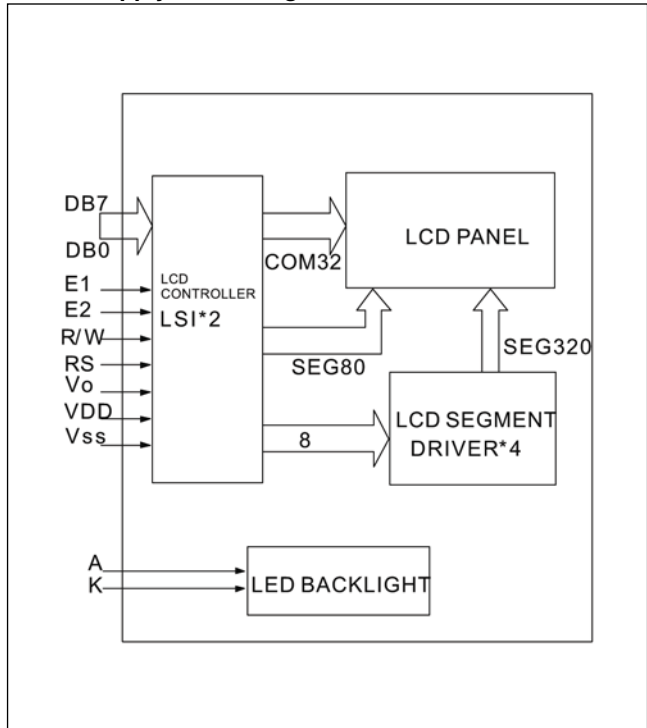


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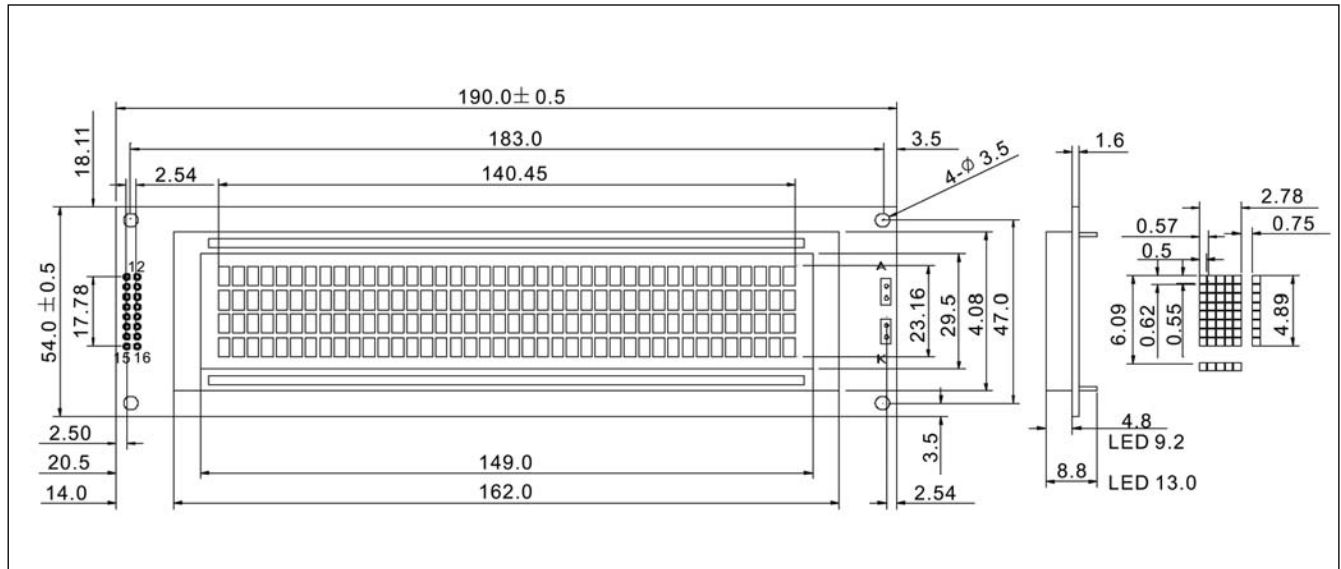
## Connector Pin Assignment

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

## Power Supply Block Diagram



## Dimensional Outline





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