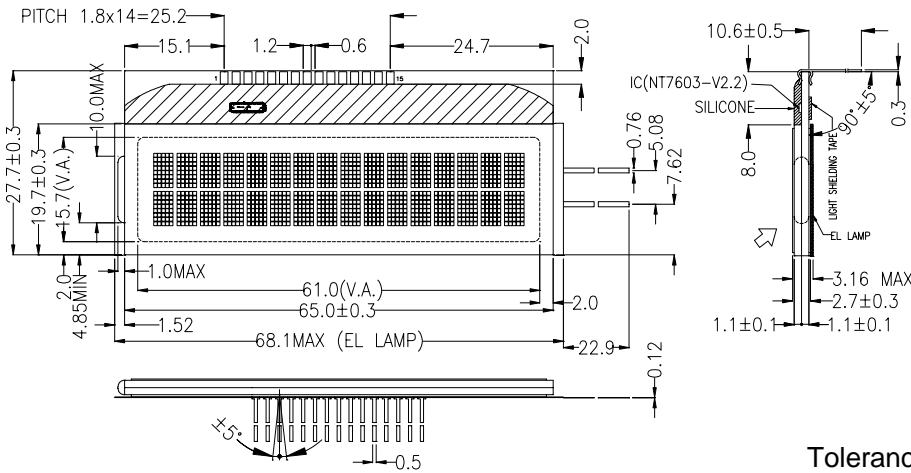
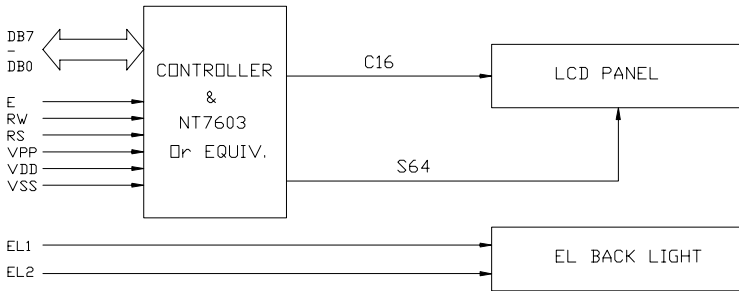


**OUTLINE DIMENSION**

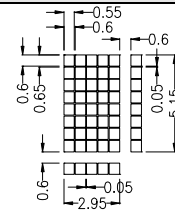


Tolerance: ±0.20mm, unless otherwise specified.

**BLOCK DIAGRAM**



**DISPLAY PATTERN**



**MECHANICAL SPECIFICATION**

Item	Dimensions(W)X(H)	Unit
Overall Size	65.0 x 27.7	MM
View Area	61.0 x 15.7	MM
Character	2.95 x 5.15	MM
Dot Size	0.55 x 0.60	MM
Dot Pitch	0.60 x 0.65	MM

**PIN ASSIGNMENT**

Pin no	Symbol	Function
1	GND	GND:0V
2	V5	Power supply for LCD driver
3	Vcc	+5V
4	RS	Register select signal 0:Instruction register(write), Busy flag, address counter (read) 1:Data register (write, read)
5	R/W	Read/Write control signal 0:Write 1:Read
6	E	Read/Write start signal
7-10	DB0-DB3	Lower 4 tri-state bi-directional data bus for transmitting data between MPU and NT7603. Not used during 4-bit operation.
11-14	DB4-DB4	Higher 4 tri-state bi-directional data bus for transmitting data between MPU and NT603. DB7 is also used as a busy flag.
15	NC	No connector

**ABSOLUTE MAXIMUM RATING**

Item	Symbol	Condition	Min	Max	Unit
Supply for logic voltage	V <sub>DD</sub>	25°C	-0.3	7.0	V
Power supply voltage	V <sub>1</sub> -V <sub>5</sub>	25°C	GND	V <sub>DD</sub> +0.3	V
Input voltage	V <sub>I</sub>	25°C	-0.3	V <sub>DD</sub> +0.3	V

**ELECTRICAL CHARACTERISTICS**

Item	Symbol	Condition	Min	Typical	Max	Unit
Supply voltage for logic	V <sub>CC</sub>	---	2.8	5.0	5.5	V
Supply current for logic	I <sub>OP</sub>	---	---	1.0	1.5	mA
Operation voltage for LCD	V <sub>LCD</sub>	---	3.0	---	V <sub>CC</sub>	V
Input voltage " H " level	V <sub>IH</sub>	---	0.8	---	V <sub>CC</sub>	V
Input voltage " L " level	V <sub>IL</sub>	---	-0.3	---	0.2 V <sub>CC</sub>	V
Supply voltage for EL	V <sub>F</sub>	---	---	85	100	V
Supply Frequency EL	Freq	---	---	600	1000	Hz

**REMARKS:**

- LCD type: STN.
- Back light type: EL back light feature.