

## GENERAL SPECIFICATION

Item	Content
Number of Character	20x2
Module Size	182.0(W)x40.0(H)x9.5/15.0(D)mm Max
Viewing Area	149.0(W)x23.0(H)mm
Character Size	6.0(W)x9.66(H)mm
Dot Size/Dot Pitch	1.12(W)x1.12(H)mm/1.22(W)x1.22(H)mm
Backlight	Without/LED
Options	Gray STN/Yellow STN/Extended Temperature/Bottom/Top Viewing

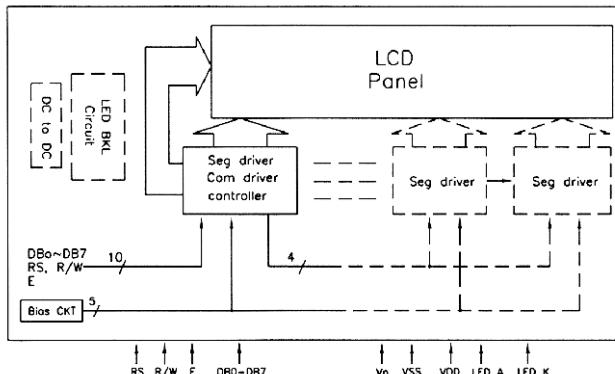
## INTERFACE PIN ASSIGNMENT

Pin No.	Pin Out	Function Description
1	V <sub>ss</sub>	Ground
2	V <sub>dd</sub>	Logic Circuit Power Supply
3	V <sub>o</sub>	Power Supply for LCD Panel
4	RS	Data/Instruction Register Select
5	R/W	Read/Write Select
6	E	Enable Signal
7-14	DB0~DB7	3-State I/O Data Bus
15	BKL1	Power Supply for Backlight. 100V/400Hz AC for EL, 4.2V or 120-180mA DC for LED backlight. Don't care if no backlight
16	BKL2	

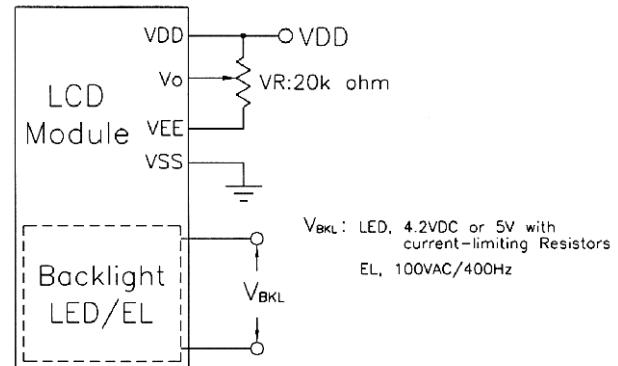
## ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Note
Power Supply for Logic	V <sub>dd</sub> -V <sub>ss</sub>		-	2.7	4.5	5.5	Volt
Input Voltage	V <sub>il</sub>	L level	V <sub>ss</sub>	0.2V <sub>dd</sub>	-	Volt	-
	V <sub>ih</sub>	H level	0.8V <sub>dd</sub>	V <sub>dd</sub>	-	Volt	-
LCM Recommend LCD Module Driving Voltage	V <sub>dd</sub> =5V V <sub>dd</sub> -V <sub>o</sub> =4.0V	Ta=0°C	-	-	-	Volt	-
		Ta=25°C	3.8	4.0	4.4	Volt	-
		Ta=50°C	-	-	-	Volt	-
Power Supply Current for LCM	I <sub>dd</sub> (B/L OFF)	V <sub>dd</sub> =5V V <sub>dd</sub> -V <sub>o</sub> =4.0V Ta=25°C	-	1.5	2.0	mA	-
	I <sub>led</sub>		-	130	160	mA	-

## BLOCK DIAGRAM



## POWER SUPPLY



## MECHANICAL

