

GENERAL SPECIFICATION

Item	Content
Number of Character	240x64
Module Size	180.0(W)x65.0(H)x23.0(D)mm Max
Viewing Area	132.0(W)x39.0(H)mm
Dot Size/Dot Pitch	0.51(W)x0.51(H)mm/0.53(W)x0.53(H)mm
Backlight	CCFL
Options	Black & White Positive/Negative/Gray STN/Yellow STN/Normal/Wide Temperature/Top/Bottom Viewing
Built-in Controller	LC7981 (Sanyo)

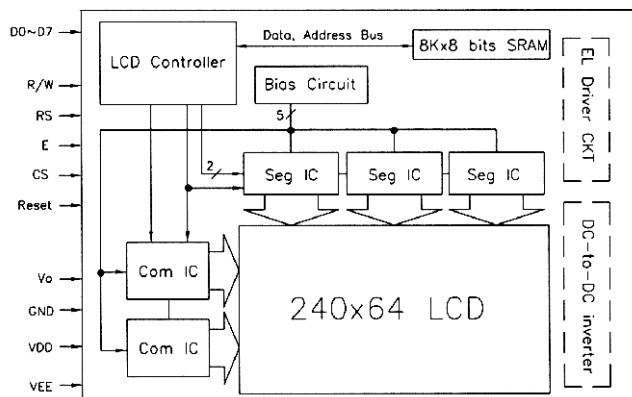
INTERFACE PIN ASSIGNMENT

Pin No.	Pin Out	Function Description
1	V _{SS}	GND
2	V _{DD}	Logic supply voltage
3	V _O	Power supply for LCD panel, tuned from V _{DD} -V _{EE}
4	RS	Register select, Instruciton register for RS=1, Data register for RS=0
5	R/W	Read/Write. R/W=1: MPU<->LCM, Read R/W=0: MPU->LCM, Write
6	E	Enable, Data is writtne at the fall of E and Data can be read while E=1
7-14	DB0-DB7	3-state I/O Data Bus
15	CS	Chip-select, active Low
16	RES	Reset, Active Low
17	V _{EE}	LCD driver supply voltage
18	NC	No connection
19	NC	No connection
20	NC	No conneciton

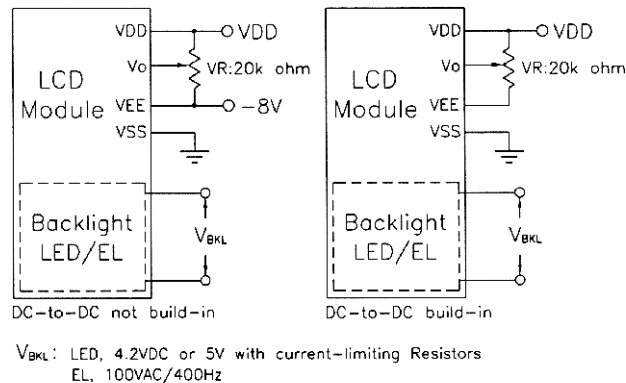
ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typ	Max.	Unit	note
Power Supply for Logic	V _{DD} -V _{SS}	-	4.5	5.0	5.5	Volt	-
Input Voltage	V _{IL}	L level	V _{SS}	0.2V _{DD}	-		
	V _{IH}	H level	0.8V _{DD}	V _{DD}	-		
LCM Recommend LCD Module Driving Voltage	V _{DD} -V _{EE}	Ta=0°C	9.6	9.8	10.0	Volt	-
		Ta=25°C	9.3	9.5	9.7		
		Ta=50°C	8.8	9.0	9.2		
Power Supply Current for LCM	I _{DD}	V _{DD} =5.0V Ta=25°C	-	12	15	mA	-
	I _{EE}	V _{DD} -V _{EE} =9.5V	-	1.5	3.0		
	I _{LED}	FLM=64Hz	-	660	990		
	V _{EL}	V _{LED} =4.2V	-	100V/-400HZ	-		

BLOCK DIAGRAM



POWER SUPPLY



MECHANICAL

