GENERAL SPECIFICATION

Item	Content
Number of Character	160x80
Module Size	100.0(W)x54.0(H)x11.2/15.3(D)mm Max
Viewing Area	72.3(W)x37.8(H)mm
Dot Size/Dot Pitch	0.39(W)x0.39(H)mm/0.42(W)x0.42(H)mm
Backlight	Without/EL/LED
Options	Gray STN/Yellow STN/Extended Temperature/Bottom/Top Viewing
Built-in Controller	**LC7981** or compatible

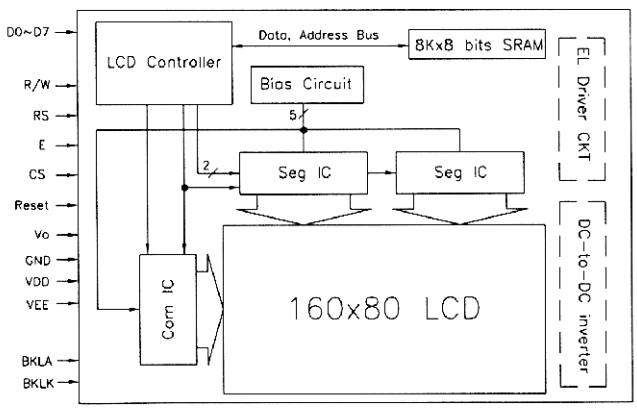
ELECTRICAL CHARACTERISTICS

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}	-	Volt	-
	V_{IH}	H level	0.8V_{DD}	V_{DD}	-		
LCM Recommend LCD Module Driving Voltage	V_{DD}-V_O	Ta=20°C	-	-	-	Volt	-
		Ta=25°C	-	11.6	-		
		Ta=70° C	-	-	-		
Power Supply Current for LCM	I_{DD}(LED B/L OFF)	V_{DD}=5.0V Ta=25°C V_{DD}-V_O=11.6V V_{LED}=4.2V	-	-	-	mA	-
	I_{EE}		-	30	40		
	I_{LED}(LED B/L ON)		-	1.5	3.0		
	V_{LED}		-	100V/-400Hz	-	V	AC

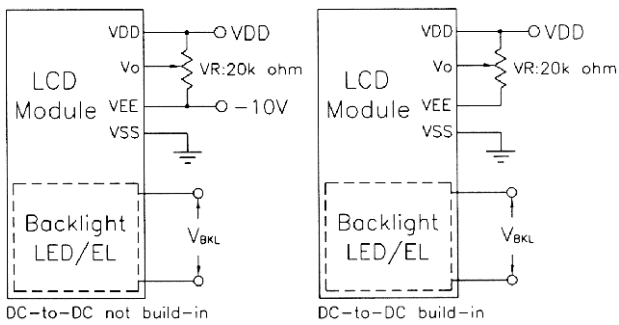
INTERFACE PIN ASSIGNMENT

Pin No.	Pin Out	Function Description
1	V_{SS}	GND
2	V_{DD}	Logic supply voltage
3	V_O	Power supply for LCD panel, tuning from V_{DD}-V_{EE}
4	RS	Registerselect,InstructionregisterforRS=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 written at the fall of E and Data can be read while E=1
7~14	DB0~DB7	Data bus, 3-state I/O common terminal.
15	CS	Chip-select, Active low.
16	RES	Reset, active Low
17	V_{EE}	LCD driver supply voltage
18	BKLA	Anode of LED backlight
19	BKLK	Cathode of LED backlight
20	NC	No connection

BLOCK DIAGRAM



POWER SUPPLY



V_{BKL}: LED, 4.2VDC or 5V with current-limiting Resistors
EL, 100VAC/400Hz

MECHANICAL