

GENERAL SPECIFICATION

Item	Content
Number of Character	240x128
Module Size	144.0(W)x104.0(H)x10.0/14.1(D)mm Max
Viewing Area	114.0(W)x64.0(H)mm
Dot Size/Dot Pitch	0.43(W)x0.43(H)mm/0.45(W)x0.45(H)mm
Backlight	Without/EL/LED
Options	Gray STN/Yellow STN/Black & White/Normal/Extended Temperature/Top/Bottom Viewing
Built-in Controller	T6963C

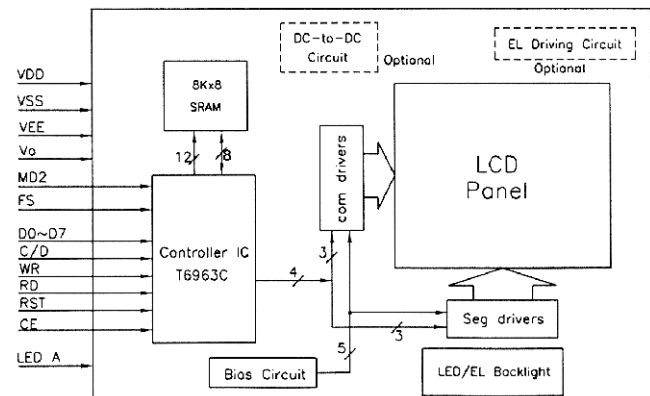
INTERFACE PIN ASSIGNMENT

Pin No.	Pin Out	Function Description
1	V _{SS}	GND
2	V _{DD}	Logic supply voltage
3	V _O	Bias voltage for LCD panel
4	C/D	Command/Data register select
5	RD	Read data
6	WR	Write data
7-14	DB0-DB7	3-state I/O Data Bus
15	CE	Chip enable
16	RES	Reset
17	V _{EE}	LCD driver supply voltage
18	MD2	H=32, L=40
19	FS	Font select. H=6x8 dot matrix, L=8x8 dot matrix
20	NC/LED _A	No connection for reflective type or with EL NC/LED A backlight, anode of LED backlight, see the jumper explanation below.

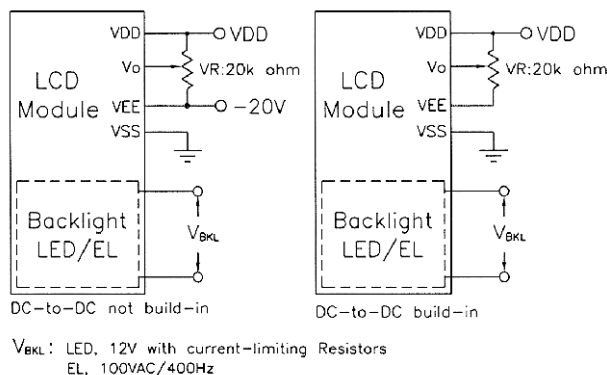
ELECTRICAL CHARACTERISTICS

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} V _{IH}	L level H level	V _{SS} 0.8V _{DD}	0.2V _{DD} V _{DD}	-		-	
LCM Recommend LCD Module Driving Voltage	V _{DD} -V _{EE}	Ta=0°C Ta=25°C Ta=50°C	- 18.0 -	- 18.3 -	- 18.6 -	Volt	-	
Power Supply Current for LCM	I _{DD}	V _{DD} =5.0V Ta=25°C	-	15	18		mA	-
	I _{EE}	V _{DD} -V _{EE} =18.3V FLM=64Hz	-	3.0	3.5			
	I _{LED}	V _{LED} =10.5V	-	440	660			

BLOCK DIAGRAM



POWER SUPPLY



MECHANICAL

