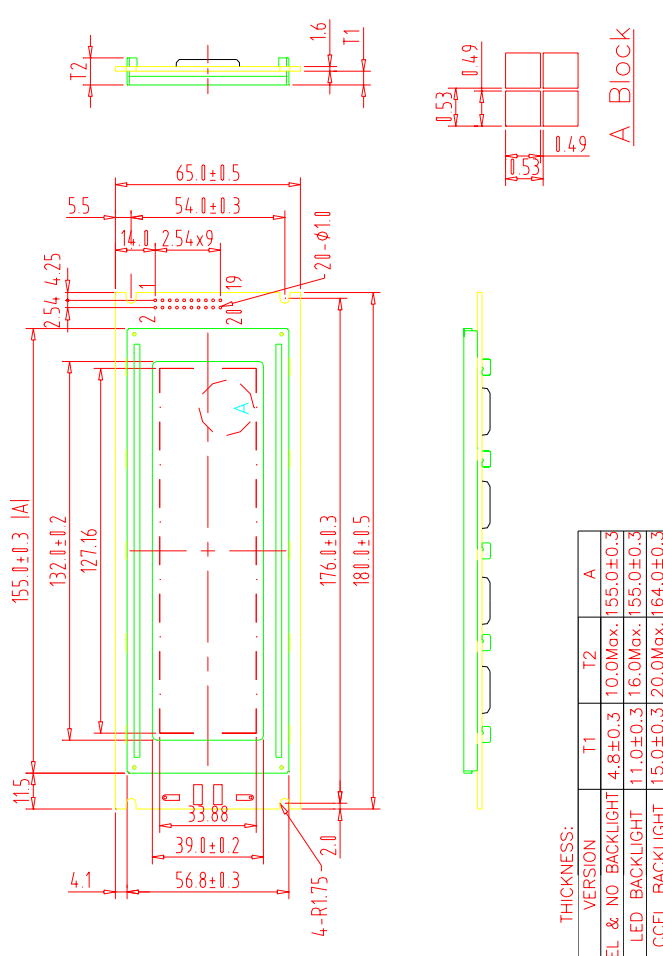


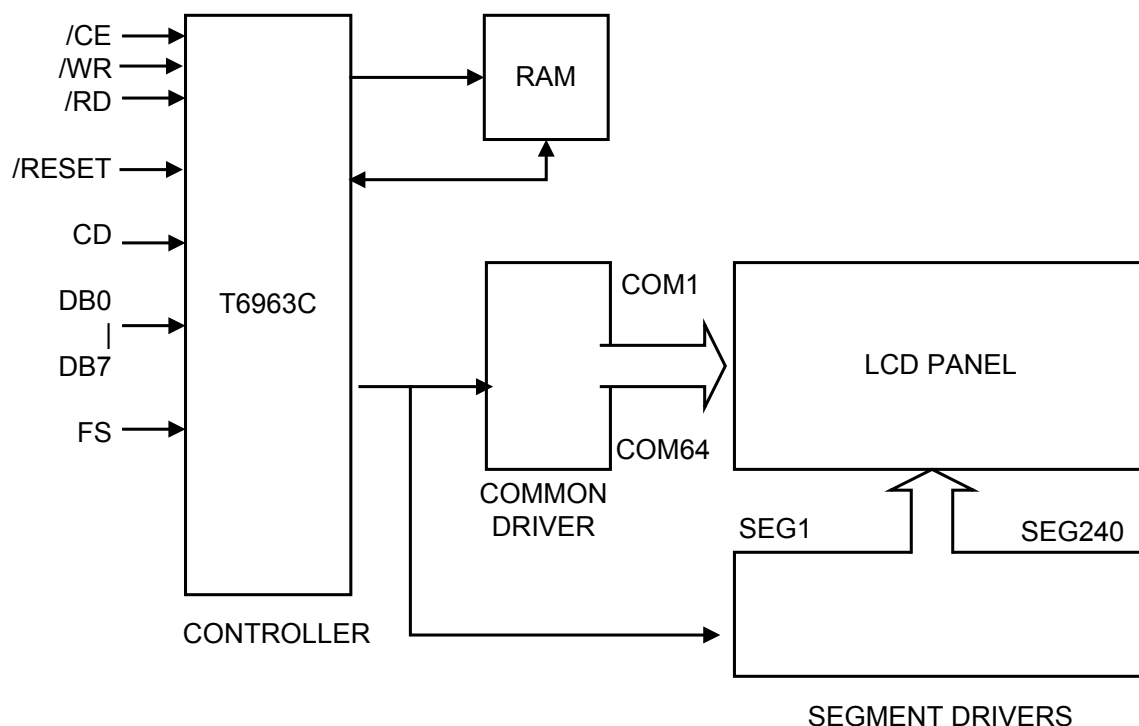
1 OUTLINE DIMENSION



2 PIN CONNECTIONS

NO.	SYMBOL	FUNCTION
1	FGND	Frame Ground
2	VSS	Digital Ground (0V)
3	VDD	Power Logic Supply Voltage(+5V)
4	VO	LCD Power Supply
5	/WR	Write data when WR = L
6	/RD	Read data when RD = L
7	/CE	Chip Enable
8	C/D	WR = L --- C/D = H : Command Write C/D = L : Data Write RD = L --- C/D = H : Status Read C/D = L : Data Read
9	NC	No connection
10	/RESET	H --- Normal L --- Initialize T6963C
11 - 18	DB0 - DB7	Data Bus Line
19	FS	Pin for selection of font H --- Font 6x8 L --- Font 8x8
20	VEE	Negative Output Voltage (-10V)

3 BLOCK DIAGRAM & INTERFACE



4ELECTRO-OPTICAL CHARACTERISTICS

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
----- Electronic Characteristics -----							
Logic Circuit Supply Voltage	VDD-VSS	--	4.5	5.0	5.5	V	
LCD Driving Voltage (Normal Temp. type)	VDD-VO	0 °C	--	--	--	V	
		25 °C	--	13.5	--		
		50 °C	--	--	--		
Input Voltage	VIH	--	0.7 VDD	--	VDD	V	
	VIL	--	VSS	--	0.3 VDD	V	
Logic Supply Current	IDD	VDD = 5V	--	8	--	mA	
----- Temperature Characteristics -----							
Normal temp. type	TOP	Operating Temp.	0		50	°C	
	TSTG	Storage Temp.	-10		60	°C	
Extended temp. type	TOP	Operating Temp.	-20		70	°C	
	TSTG	Storage Temp.	-30		80	°C	
----- LED Back-light Characteristics -----							
Forward Voltage	VF	--	3.8	4.2	4.5	V	
Forward Current	IF	VF=4.05V	--	600	--	mA	
Bare LED Luminous intensity		VF=4.05V	--	110	--	cd/m ²	
LCM Luminous intensity		VF=4.05V	--	30	--	cd/m ²	