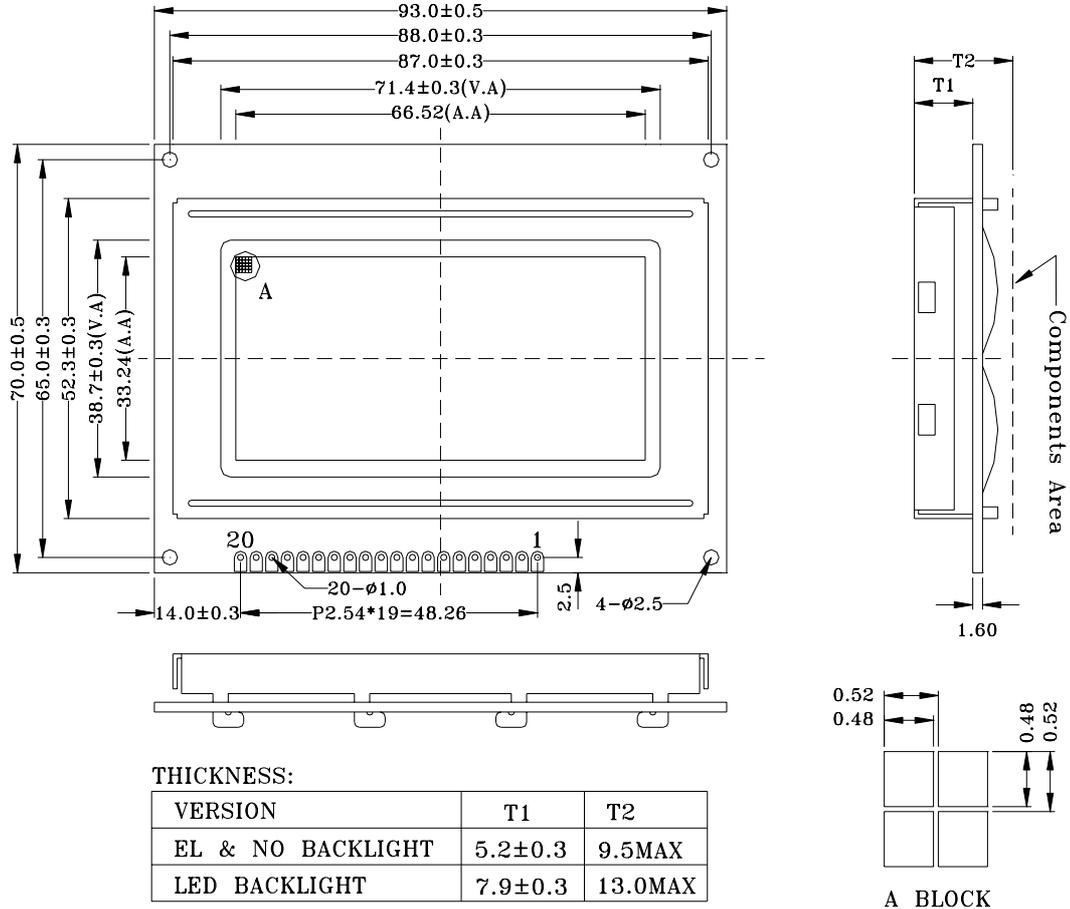


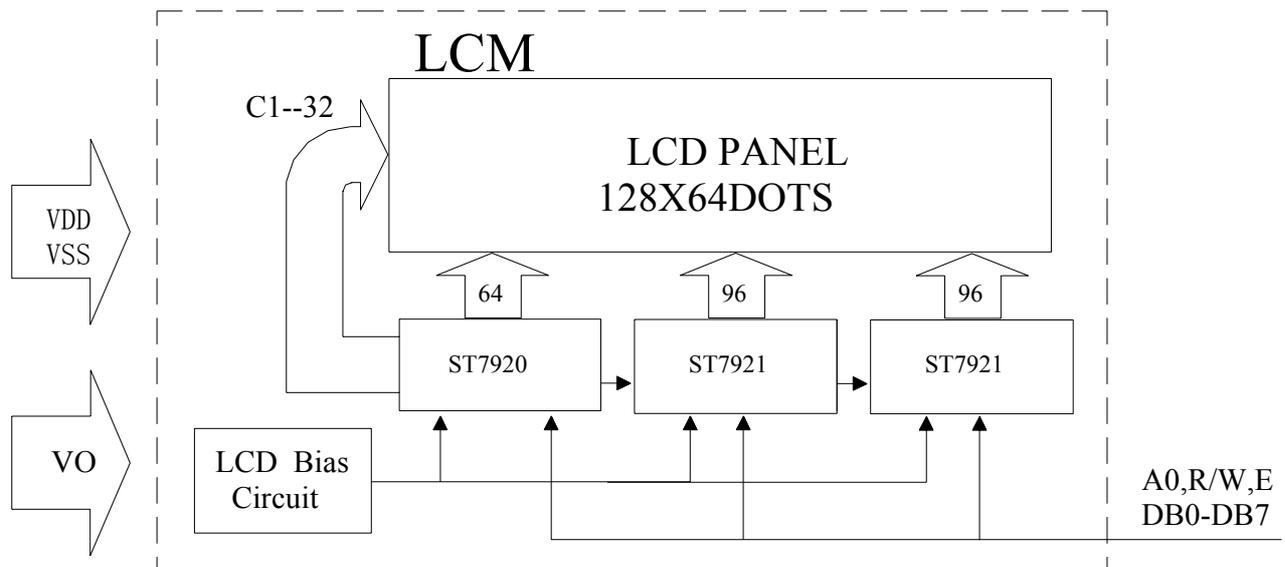
1 OUTLINE DIMENSION



2 PIN CONNECTIONS

NO.	SYMBOL	FUNCTION
1	VSS	Ground (0V)
2	VDD	Supply Voltage for Logic (+5V or +3.0V)
3	VO	Contrast Adjustment
4	A0	Data/Instruction Select
5	R/W	Read/Write Select
6	E	Enable Signal
7-14	DB0-DB7	Data Bus
15	PSB	H: Parallel Mode L: Serial Mode
16	NC	No Connect
17	/RST	Reset Signal
18	NC	No Connect
19-20	LEDA,K	LED Supply Voltage (5V)

3 BLOCK DIAGRAM & INTERFACE



4 ELECTRO-OPTICAL CHARACTERISTICS

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
----- Electronic Characteristics -----							
Logic Circuit Supply Voltage	VDD-VSS	--	2.7	5.0	5.5	V	
LCD Driving Voltage (Normal Temp. type)	VDD-VO	0 °C	--	--	--	V	
		25 °C	--	5.0	--		
		50 °C	--	--	--		
Input Voltage	VIH	--	0.7 VDD	--	VDD	V	
	VIL	--	VSS	--	0.3 VDD	V	
Logic Supply Current	IDD	VDD = 5V	--	1	2	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	--	390	--	mA	
Bare LED Luminous intensity		VF=4.05V	--	110	--	cd/m ²	
LCM Luminous intensity		VF=4.05V	--	30	--	cd/m ²	

* LED Dice number = 2x39=78