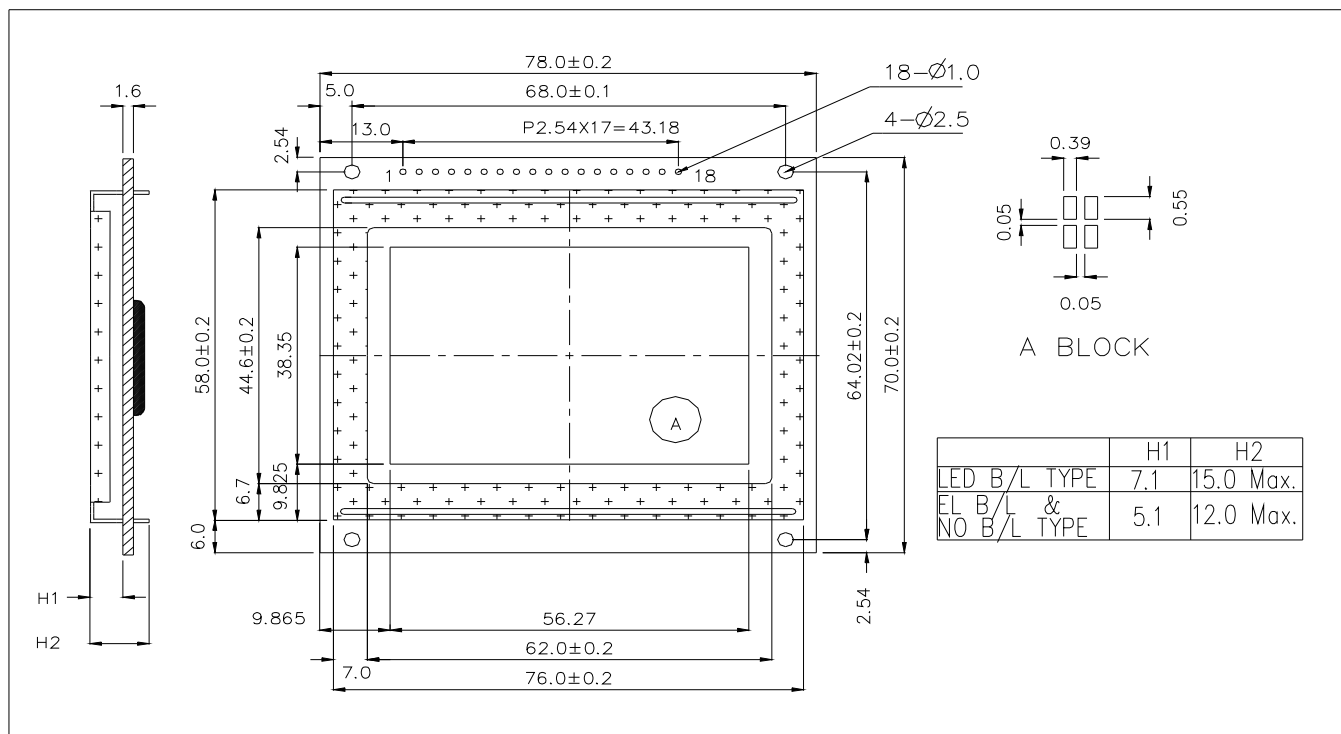
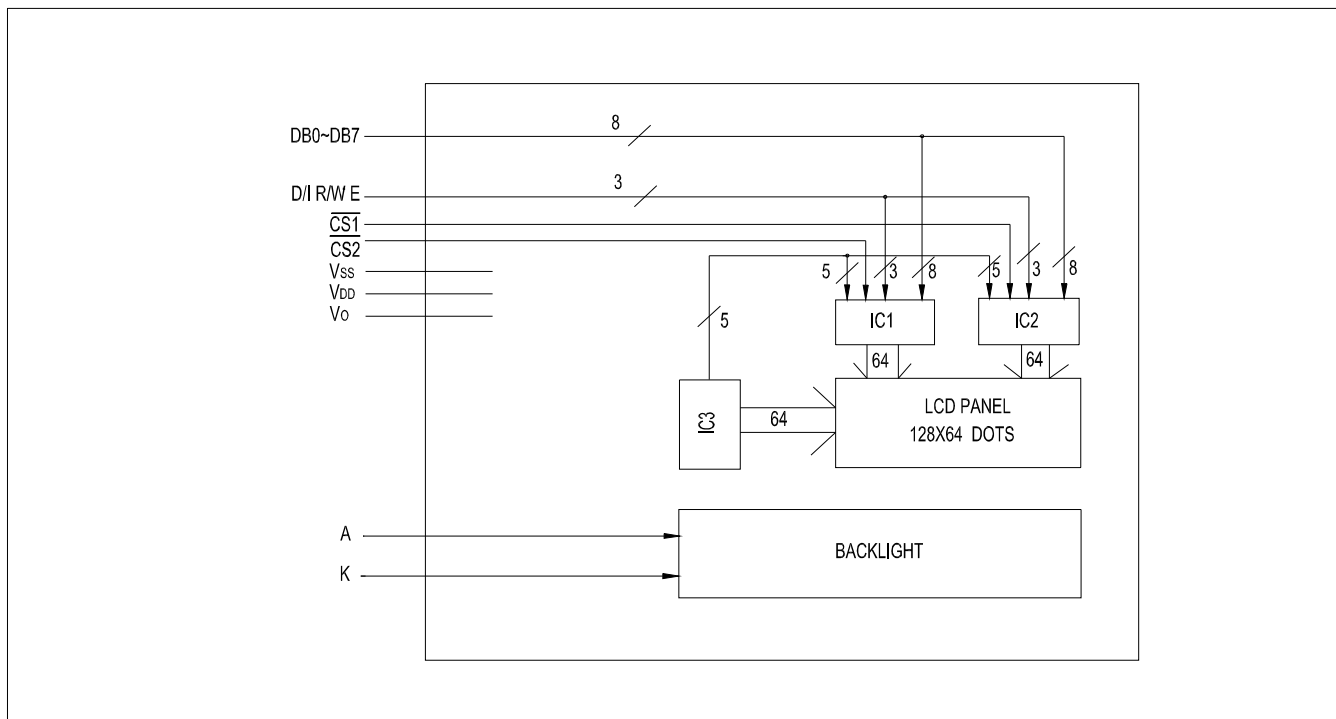


1.0 DIMENSIONAL DRAWING



2.0 BLOCK DIAGRAM



3.0 ELECTRICAL CHARACTERISTICS Ta=25 °C VDD=5.0V±0.25V

Item	Symbol	Test Condition	Standard Value			
			Min.	Typ.	Max.	Unit
Power Supply Voltage	V _{DD} -V _{SS}	25°C	4.5	5.0	5.5	V
LCD Operation Voltage	V _{OP}		-	10.5	-	V
LCM Current Consumption	I _{DD}		-	9.0	15.0	mA
Backlight Forward Voltage	V _F		-	4.5	4.25	V

4.0 ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Test Condition	Standard Value		
			Min.	Max.	Unit
Supply Voltage (Logic)	$V_{DD}-V_{SS}$	25°C	-0.3	7	V
Supply Voltage (LCD)	$V_{DD}-V_O$		-0.3	17.5	V
Input Voltage	V_{IN}		-0.3	$V_{DD}+0.3$	V
Operating Temp.	T_{OPR}	-	0	50	°C
Storage Temp.	T_{STG}	-	-20	70	°C

5.0 PIN ASSIGNMENT

PIN No.	Symbol	Description
1	/CS1	Chip select signal for IC1
2	/CS2	Chip select signal for IC2
3	GND	Power supply(GND)
4	V_{DD}	Power supply
5	V_O	Power supply for LCD
6	D/I	Register selection H: Display data; L: Instruction
7	R/W	Read/Write selection H: Read; L: Write
8	E	Enable signal
9~16	D0~D7	Data bus
17	LEDK	LED Back-light
18	LEDA	LED Back-light

Remark

1. LCD option: STN, FSTN .
2. Standard module.
3. Backlight option: LED,EL backlight feature, other specs not available on catalog is under request.