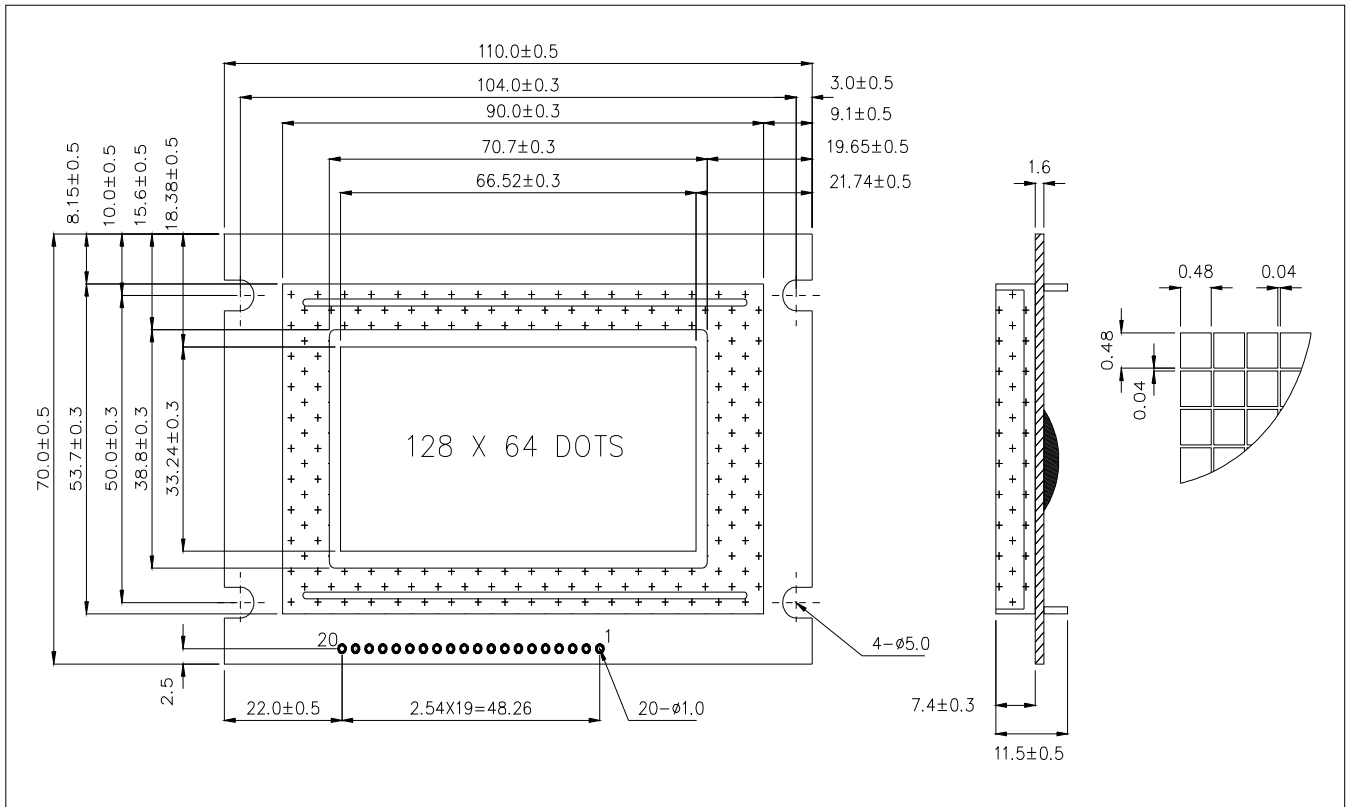
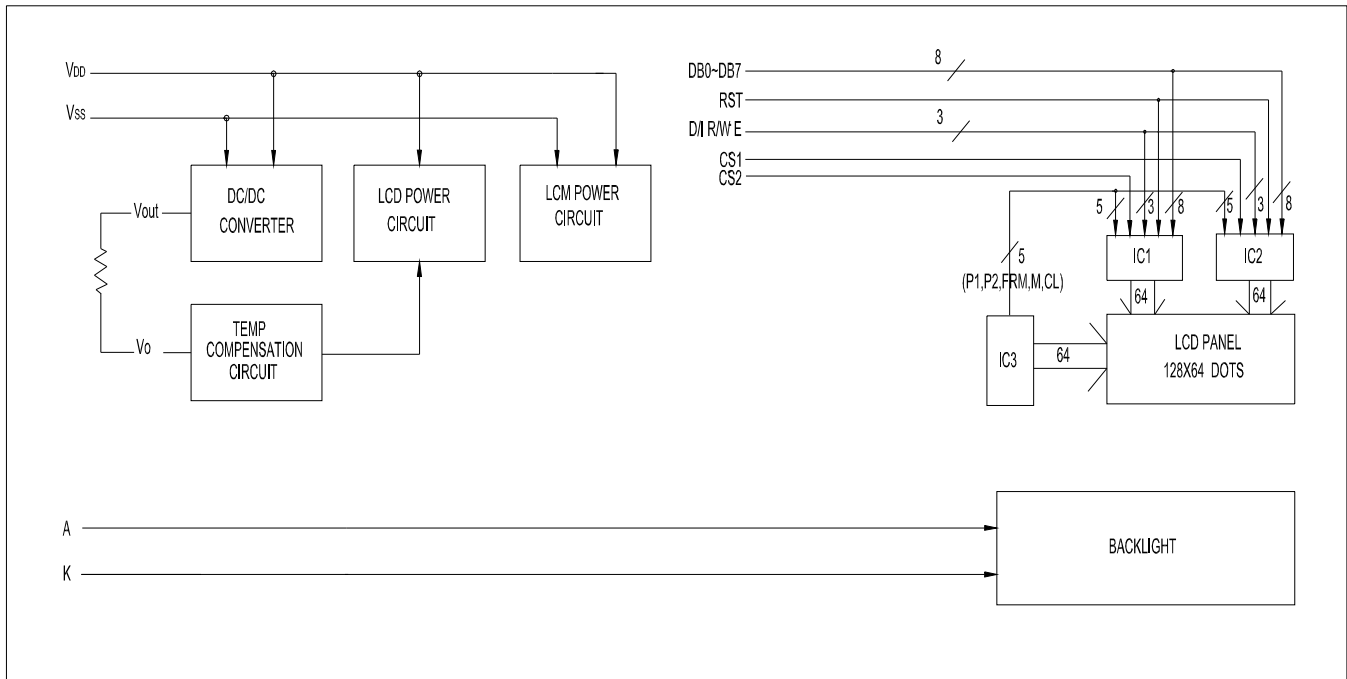


## 1.0 DIMENSIONAL DRAWING



## 2.0 BLOCK DIAGRAM



## 3.0 ELECTRICAL CHARACTERISTICS Ta=25 °C V<sub>DD</sub>=5.0V±0.25V

Item	Symbol	Test Condition	Standard Value			
			Min.	Typ.	Max.	Unit
Power Supply Voltage	V <sub>DD</sub> -V <sub>SS</sub>	25°C	4.5	5.0	5.5	V
LCD Operation Voltage	V <sub>OP</sub>		-	10.5	-	V
LCM Current Consumption	I <sub>DD</sub>		-	3.0	5.0	mA
Backlight Forward Voltage	V <sub>F</sub>		-	5.0	-	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	7.0	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.	$T_{OPR}$	-	-30	80	°C
Storage Temp.	$T_{STG}$	-	-30	85	°C

## 5.0 PIN ASSIGNMENT

PIN No.	Symbol	Description
1	GND	Power supply(GND)
2	$V_{DD}$	Power supply
3	nc	No connection
4	D/I	Register selection H: Display data, L: Instruction
5	R/W	Read/Write selection H: Read L: Write
6	E	Enable signal
7~14	DB0~DB7	Data line
15	CS1	Chip select signal for IC1
16	CS2	Chip select signal for IC2
17	RST	Reset signal
18	nc	No connection
19	LEDK	LED Back-light
20	LEDA	LED Back-light

### Remark

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