DMG-S12864-9	128 DOTS×64 DOTS	1/64 DUTY	1/9 BIAS

FEATURE:

LCD TYPE	STN/FSTN
LCM BACKLIGHT TYPE	LED BACKLIGHT
LCM CONTROLLER IC	BUILT IN S6B0108 OR EQUIVALENT
POWER SUPPLY FOR LCM	DC +5.0V OR +3.3V
LED BACKLIGHT INPUT	DC +5.0V OR +3.3V
EL BACKLIGHT INPUT	---
EL INVERTER	---
FL BACKLIGHT INPUT	-
FL INVERTER	-
LCM DIMENSION	75.0×52.7× 10.0(13.5) mm
LCM VIEWING AREA	60.0× 32.0 mm
LCD DOT SIZE	0.40× 0.40 mm
LCD DOT PITCH	0.43× 0.43 mm

3.ABSOLUTE MAXIMUM RATINGS:

ITEM	SYM	MIN	TYP	MAX	UNIT
OPERATING TEMP.	TOP	-20	-	+70	℃
STORAGE TEMP.	TST	-30	-	+80	℃
INPUT VOLTAGE	VI	VSS	-	VDD	V
SUPPLY VOL. FOR LOGIC	VDD-VSS	-	-	7.0	V
SUPPLY VOL. FOR LCD	VDD-VEE	-	-	10.0	V

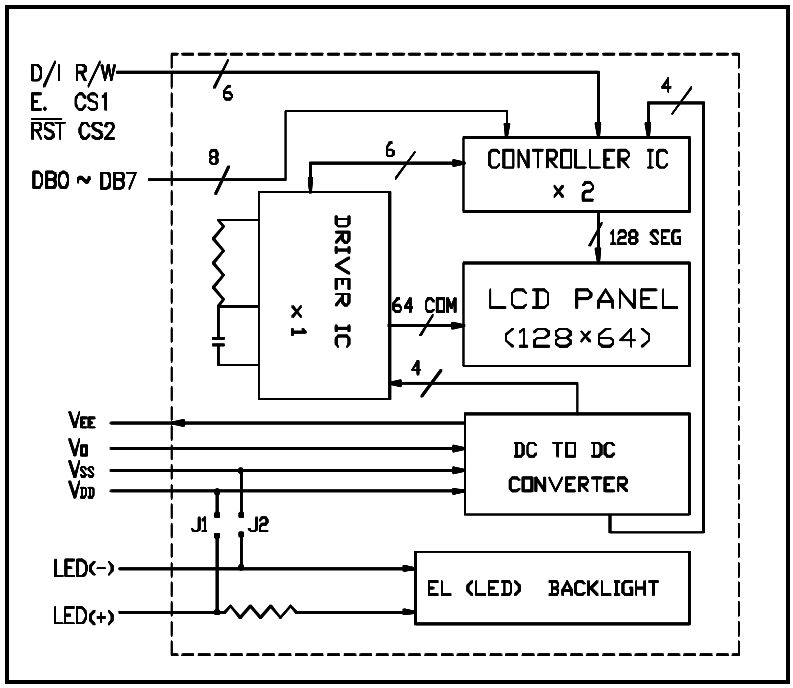
5.INTERFACE PIN CONNECTIONS:

NO	SYM	LEVEL	FUNCTION
1	VDD	-	+5V
2	VSS	-	GND
3	VO	-→	CONTRAST ADJ.
4	DB0	H/L	DATA BIT0
5	DB1	H/L	DATA BIT1
6	DB2	H/L	DATA BIT2
7	DB3	H/L	DATA BIT3
8	DB4	H/L	DATA BIT4
9	DB5	H/L	DATA BIT5
10	DB6	H/L	DATA BIT6
11	DB7	H/L	DATA BIT7
12	CS1	H/L	CHIP SELECT SIGNAL FOR IC1
13	CS2	H/L	CHIP SELECT SIGNAL FOR IC2
14	$\overline{RST}$	L	RESET SIGNAL
15	R/W	H/L	H:READ(LCD →MPU) L:WRITE(MPU→ LCD)
16	D/I	H/L	H:DATA, L:INSTRUCTION CODE
17	E	H.H L	ENABLE SIGNAL
18	VEE	-	NEGATIVE VOLTAGE OUTPUT (-5.0V)
19	A(+)	+5.0V	BACKLIGHT(+)
20	K(-)	0V	BACKLIGHT(-)

2.ELECTRICAL CHARACTERISTICS:

ITEM	SYM	CONDITION	MIN	TYP	MAX	UNIT
SUPPLY VOLTAGE FOR LOGIC	VDD-VSS	Ta= 25℃	4.5	5.0	5.5	V
SUPPLY VOLTAGE FOR LCD DRIVER	VEE-VSS	Ta= 25℃	-	-	-5.0	V
OPERATING VOL. FOR LCD MODULE	VDD-VO	Ta= 25℃	-	8.0	-	V
INPUT HIGH VOL	VIH	—	0.7VDD	-	VDD	V
INPUT LOW VOL.	VIL	—	0	-	0.3VDD	V
SUPPLY CURRENT FOR LOGIC	IDD	VDD=5.0V	-	-	6.0	mA
SUPPLY CURRENT FOR LCD	ILCD	VO=-3.0V	-	-	12.0	mA
LED CURRENT	IF	Ta= 25℃	-	200	-	mA
LED DISSIPATION	PD	Ta= 25℃	-	1000	-	mW

4. BLOCK DIAGRAM:



6.DIMENSIONAL DRAWING :