

<b>G12864 -9</b>	<b>128 DOTS×64 DOTS</b>	<b>1/64 DUTY</b>	<b>1/9 BIAS</b>
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**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

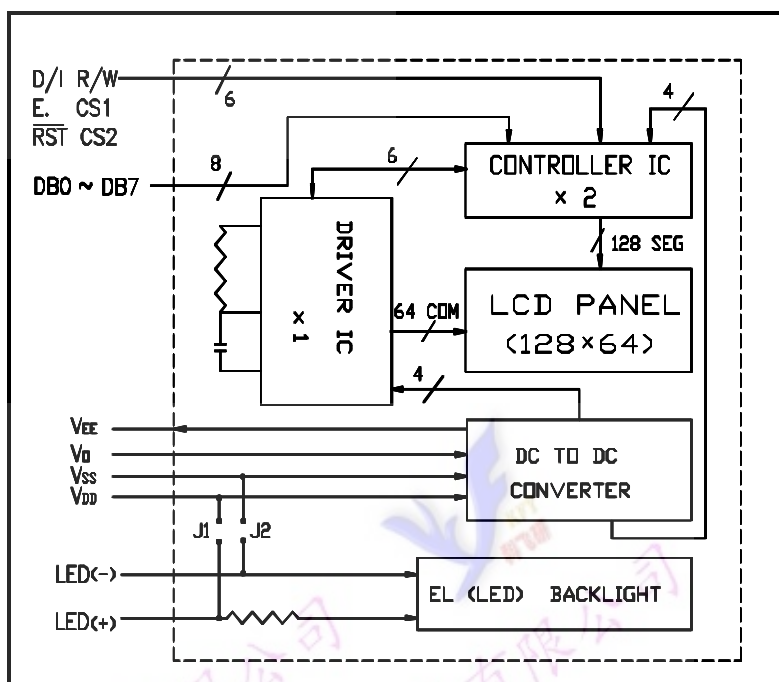
**5.INTERFACE PIN CONNECTIONS:**

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	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 = 2 5	4.5	5.0	5.5	v
SUPPLY VOLTAGE FOR LCD DRIVER	VEE-VSS	Ta = 2 5	-	-	-5.0	V
OPERATING VOL. FOR LCD MODULE	VDD-Vo	Ta = 2 5	-	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 = 2 5	-	200	-	mA
LED DISSIPATION	Pd	Ta = 2 5	-	1000	-	mW

**4. BLOCK DIAGRAM:**



**6.DIMENSIONAL DRAWING :**

