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128 x 64 GRAPHIC LCD MODULE, STN GRAY, TRANSFLECTIVE, WHITE LED BACKLIGHT, 6:00 VIEW.

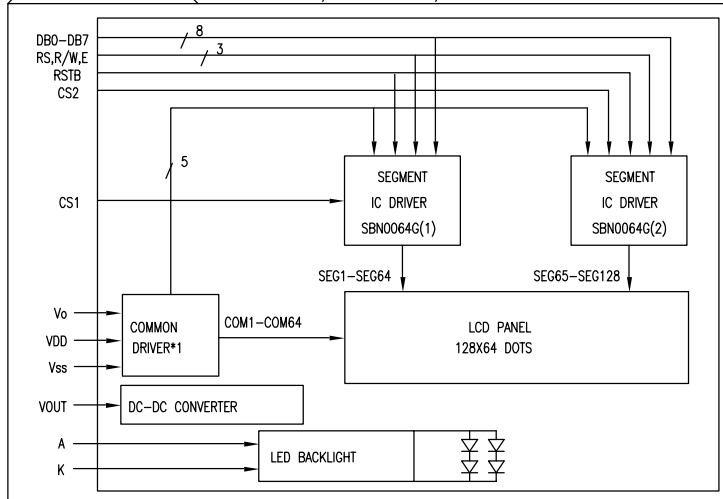
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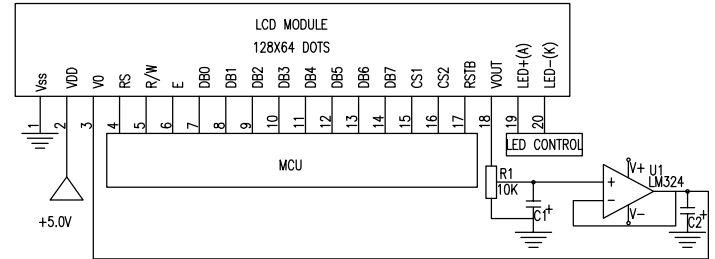
DATE:	11.24.09	DRAWN BY:	JN
PAGE:	1 OF 2	CHKD BY:	JD
SCALE:	N/A	APRVD BY:	SA
UNIT:	mm [INCH]		(PK)

BLOCK DIAGRAM 128 x 64, 1/64 DUTY, 1/9 BIAS



NOTES:

1. R1 IS THE CONTRAST RESISTOR.
2. VOUT=-10.0V
3. ADJUST R1 TO GET GOOD CONTRAST. TYP: VO IS -7.9V.



ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	$T_a=25^{\circ}C$	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	$V_{DD}-V_o$	-	0	15	V
INPUT VOLTAGE	V_I	$T_a=25^{\circ}C$	V_{SS}	V_{DD}	V
OPERATING TEMPERATURE	T_{opr}	-	-30	+85	$^{\circ}C$
STORAGE TEMPERATURE	T_{stg}	-	-30	+85	$^{\circ}C$

PIN CONFIGURATION

PIN NO.	SYMBOL	FUNCTION
1	V_{SS}	POWER SUPPLY
2	V_{DD}	
3	V_o	
		GND (0V)
		5V
		FOR LCD DRIVE
4	RS	REGISTER SELECT RS=0...INSTRUCTION REGISTER RS=1...DATA REGISTER
5	R/W	READ/WRITE R/W=0...READ R/W=1...WRITE
6	E	CHIP ENABLE SIGNAL
7-14	DB0-DB7	DISPLAY DATA SIGNAL
15	CS1	CHIP SELECT SIGNAL FOR SBN0064G(1)
16	CS2	CHIP SELECT SIGNAL FOR SBN0064G(2)
17	RSTB	CONTROL RESET (MODULE RESET)
18	VOUT	OUTPUT VOTAGE FOR LCD DRIVING,-10.0V.
19	LED- (A)	ANODE OF LED
20	LED- (K)	CATHODE OF LED
21	N/C	NO CONNECTION
22	N/C	NO CONNECTION

ELECTRICAL CHARACTERISTICS

$V_{DD}=4.7V$ to $5.3V$, $T_A=25^{\circ}C$

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT	
			MIN.	TYP.	MAX.		
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	-	4.5	5.0	5.5	V	
SUPPLY VOLTAGE FOR LCD DRIVE	$V_{DD}-V_o$	$V_{DD}=5V$	12.6	12.9	13.2	V	
SUPPLY CURRENT FOR LOGIC	I_{DD}	$V_{DD}=5V$	-	8.2	13.0	mA	
LED BACKLIGHT	VOLTAGE	$I_f=30mA$	-	6.4	7.2	V	
	CURRENT	-	-	30	-	mA	
	POWER CUNSUMPTION	-	-	192	-	mW	
	LUMINOUS	-	70	-	-	cd/m ²	
	COLOR	X	WHITE	.260	-	.330	
	COORDINATE	Y		.260	-	.330	

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