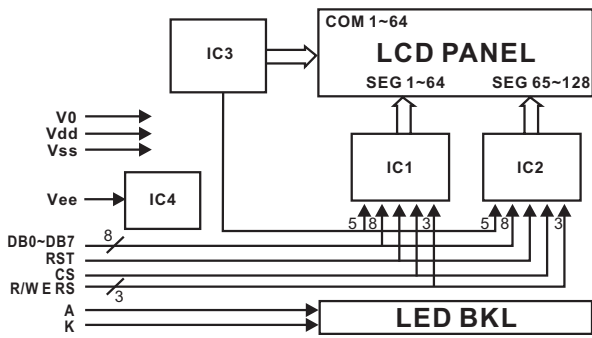


ITEM	T1	T2
LED backlight	8.8	12.5
EL / without backlight	6.2	10.0

**BLOCK DIAGRAM**



**FEATURE**

1. 128X64 dots graphic LCD module
2. Built-in controller (KS0108B)
3. +5V power supply
4. STN LCD panel, 1/64 duty cycle

**MECHANICAL SPECIFICATIONS**

PARAMETER	VALUE	UNIT
DOT NUMBER	128W X 64H	—
OVERALL SIZE	75.00W X 52.70H	mm
VIEWING AREA	60.00W X 32.50H	mm
HOLE - HOLE	70.00W X 49.70H	mm
DOT SIZE	0.39W X 0.39H	mm
DOT PITCH	0.04W X 0.04H	mm

**PIN ASSIGNMENT**

PIN	SYMBOL	FUNCTION
1	Vdd	Power Supply
2	Vss	GND
3	V0	Contrast Adjust
4 to 11	DB0 to DB7	H/L Data bus line
12	CS1	Chip select for IC1
13	CS2	Chip select for IC2
14	RST	Reset signal
15	R/W	H/L Read/write
16	D/I	H/L H: Data, L: Instruction code
17	E	H/L Enable signal
18	Vee	Negative voltage output
19(A)	LED+	Power supply for BKL(4.2V)
20(K)	LED-	Power supply for BKL(GND)

**ABSOLUTE MAXIMUM RATINGS**

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY (LOGIC)	Vdd	-0.3	7.0	V
POWER SUPPLY (LCD)	V0	Vdd -19.0	Vdd +0.3	V
INPUT VOLTAGE	Vin	-0.3	Vdd +0.3	V

**ELECTRONICAL CHARACTERISTICS**

ITEM	SYMBOL	CONDITION	STANDARD			UNIT
			MIN	TYP	MAX	
Input voltage	Vdd	+5V	4.7	5.0	5.5	V
Supply current	Idd	Vdd=5V	---	8	---	mA
Recommended LCD driving voltage for normal temp version module	Vdd-V0	0 °C	---	9.8	---	V
		25 °C	---	9.5	---	
		50 °C	---	9.3	---	
LED forward voltage	V <sub>F</sub>	25 °C	---	4.2	4.5	V
LED forward current	I <sub>F</sub>	25 °C	---	240	---	mA