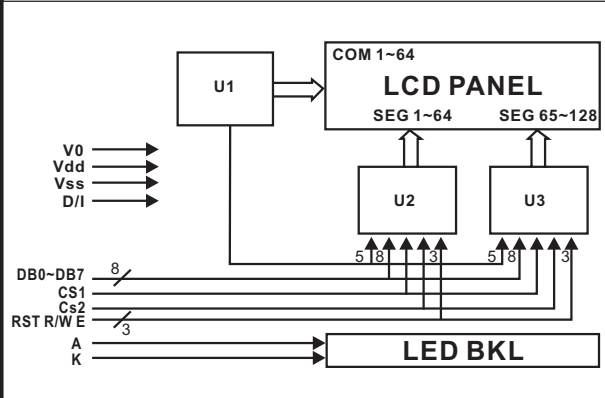


**BLOCK DIAGRAM**



**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**

DOT NUMBER	128W X 64H	—
OVERALL SIZE	63.20W X 52.20H	mm
VIEWING AREA	54.00W X 36.00H	mm
HOLE - HOLE	57.20W X 51.00H	mm
DOT SIZE	0.35W X 0.45H	mm
DOT PITCH	0.04W X 0.04H	mm

**PIN ASSIGNMENT**

PIN	SYMBOL	FUNCTION
1	FG	Frame ground
2	Vss	GND
3	V0	Operating voltage for LCD
4 to 11	DB0 to DB7	H/L Data bus line
12	CS2	When CS1=H,CS2=L,select U2
13	CS1	When CS1=L,CS2=H,select U3
14	/RST	Reset signal
15	R/W	Read / Write
16	D/I	H/L H:Data, L:Instruction code
17	E	Chip enable signal
18	GND	Ground
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	---	2.0	---	mA
Recommended LCD driving voltage for normal temp version module	Vdd-V0	0 °C	---	8.8	---	V
		25 °C	---	8.5	---	
		50 °C	---	8.2	---	
LED forward voltage	V <sub>F</sub>	25 °C	---	4.2	4.6	V
LED forward current	I <sub>F</sub>	25 °C	---	360	---	mA