

SG12832A (8 CHARACTERS X 2 LINES)

FEATURES

- ◆ BUILT-IN CONTROLLER (ST7920 OR EQUIVALENT)
- ◆ +5 V POWER SUPPLY
- ◆ 1/16 DUTY CYCLE
- ◆ 8-BIT PARALLEL INTERFACE
- ◆ 4.2 V LED FORWARD VOLTAGE

INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	Vss	0V	Supply Ground
2	VDD	5V	Supply Voltage
3	Vo	-	Contrast Adj.
4	RS	H/L	Register Select
5	R/W	H	Read/Write
6	E	H	Enable Signal
7~14	DB0~DB7	H/L	Data Bus Line
15	A	4.2V	LED Power (+)
16	K	0V	LED Power (-)

MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	66.0 x 26.0 x 8.5 (12.0 LED)	mm
Viewing Area (W x H)	51.0 x 14.8	mm
Active Area (W x H)	47.32 x 12.12	mm
Dot Size (W x H)	0.33 x 0.34	mm
Dot Pitch (W x H)	0.37 x 0.38	mm

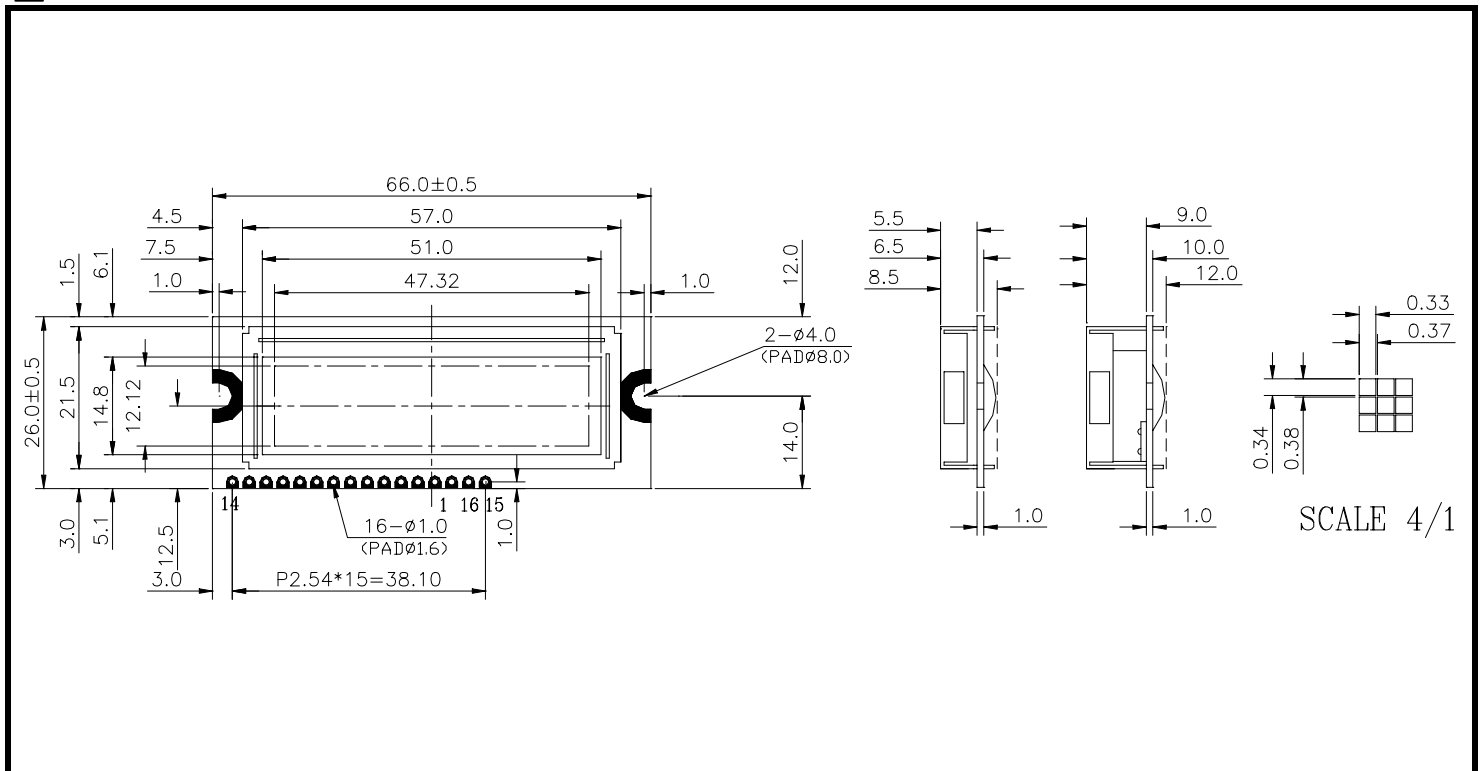
ABSOLUTE MAXIMUM RATINGS

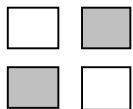
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	VDD-Vss	0	-	7	V
Supply Voltage For LCD Drive	VDD-Vo	0	-	12	V
Input Voltage	Vi	Vss	-	VDD	V

ELECTRICAL CHARACTERISTICS

ITEM		SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic		VDD-VSS	-	4.5	5	5.5	V
Supply Voltage For LCD		VDD-Vo	VDD=5V Ta=25℃	4.4	4.8	5.2	V
Supply Current		IDD	VDD=5V	-	2.5	4.5	mA
Input	"HIGH" Level	VIH	-	2.2	-	VDD	V
Voltage	"LOW" Level	VIL	-	-	-	0.6	V
Output	"HIGH" Level	VOH	-	2.4	-	-	V
Voltage	"LOW" Level	VOL	-	-	-	0.4	V

EXTERNAL DIMENSIONS





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TIMING CHARACTERISTICS

ITEM		SYMBOL	MIN.	TYP.	MAX.	UNIT.
E Cycle Time		t_{CYCE}	1200	-	-	ns
Enable Pulse Width	"High Level"	P_{WEH}	140	-	-	ns
Enable Rise/Fall Time		t_{ER}, t_{EF}	-	-	25	ns
Address Set-up Time	RS,R/W to E	t_{AS}	10	-	-	ns
Address Hold Time		t_{AH}	20	-	-	ns
Data Sep-up Time		t_{DSW}	40	-	-	ns
Data delay Time		t_{DDR}	-	-	100	ns
Data Hold Time	Write	t_H	20	-	-	ns
Data Hold Time	Read	t_{DHR}	20	-	-	ns

FIG.1 WRITE OPERATION

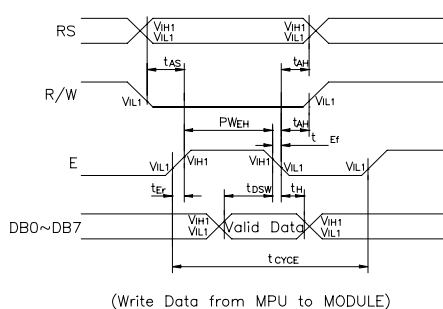
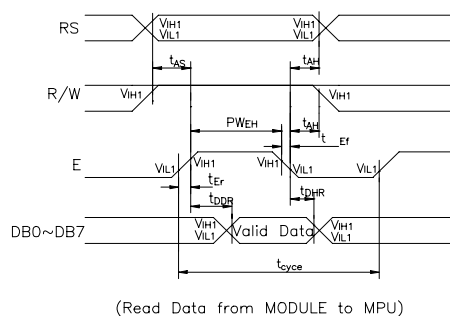


FIG.2 READ OPERATION



BLOCK DIAGRAM

