

SG12864F (128 DOTS X 64 DOTS)

FEATURES

- ◆ BUILT-IN CONTROLLER (T6963C OR EQUIVALENT)
- ◆ +5 V POWER SUPPLY
- ◆ 1/64 DUTY CYCLE
- ◆ 8-BIT PARALLEL INTERFACE

MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	87.0 x 70.0 x 8.8 (12.7 LED)	mm
Viewing Area (W x H)	72.0 x 40.0	mm
Active Area (W x H)	66.52 x 33.24	mm
Dot Size (W x H)	0.48 x 0.48	mm
Dot Pitch (W x H)	0.52 x 0.52	mm

INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	0V	Power Supply Ground
2	V _{DD}	5V	Power Supply Voltage
3	V _o	-	Contrast Adjustment Voltage
4	C/D	H/L	H : Instruction Code, L : Data Code
5	/RD	L	Write Signal
6	/WR	L	Read Signal
7-14	DB0-DB7	H/L	Data Bus Line
15	/CE	L	Enable Signal
16	/RST	L	Reset Signal
17	V _{out}	-	Power Supply Voltage For LCD
18	MD	H/L	H : 32/ L : 40 Select Of Columns
19	FS	H/L	H : 6*8 , L : 8*8 Select Of Columns
20	/HLT	L	Stop The Oscillaution Of Clock

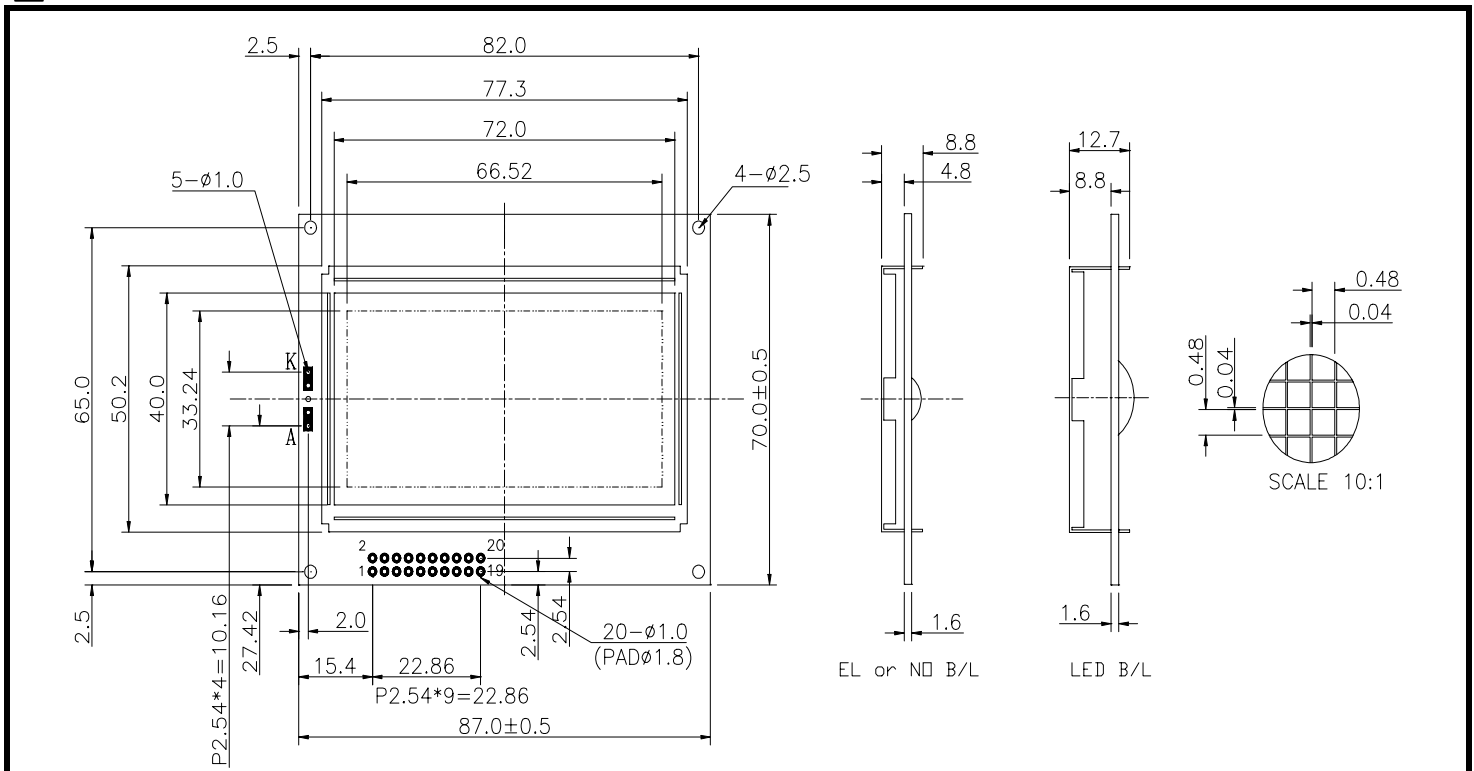
ABSOLUTE MAXIMUM RATINGS

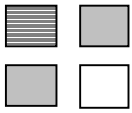
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD} -V _{SS}	0	-	7	V
Supply Voltage For LCD Drive	V _{DD} -V _o	0	-	14	V
Input Voltage	V _I	V _{SS}	-	V _{DD}	V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD} -V _{SS}	-	4.5	5	5.5	V
Supply Voltage For LCD	V _{DD} -V _o	V _{DD} =5V Ta=25°C	7.6	8.3	9.2	V
Supply Current	I _{DD}	V _{DD} =5V	-	4.5	10	mA
Input Voltage	"HIGH" Level	V _{IH}	-	2.2	-	V _{DD} V
	"LOW" Level	V _{IL}	-	-	-	0.6 V
Output Voltage	"HIGH" Level	V _{OH}	-	2.4	-	V
	"LOW" Level	V _{OL}	-	-	-	0.4 V

EXTERNAL DIMENSIONS



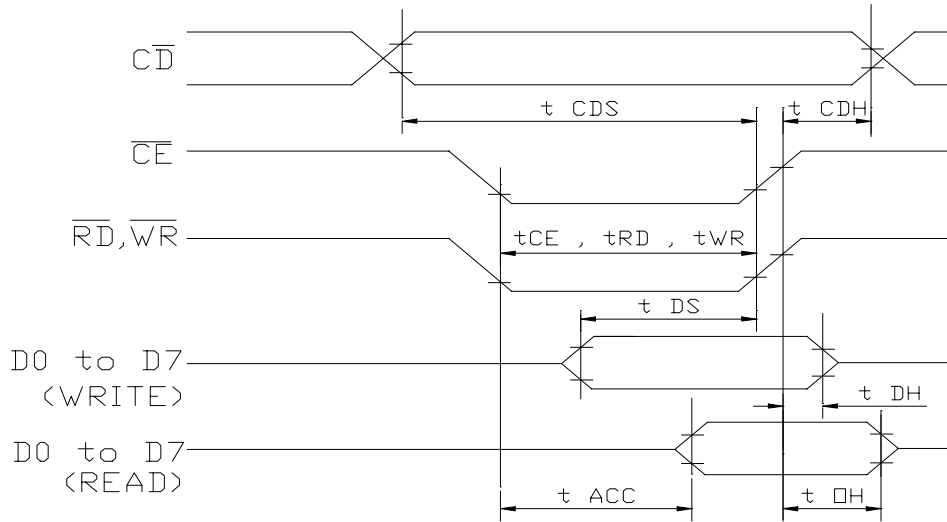


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TIMING CHARACTERISTICS

ITEM	SYMBOL	MIN.	MAX.	UNIT.
C/D Setup Time	t_{CDS}	100	-	ns
C/D Hold Time	t_{CDH}	10	-	ns
CE, RD,WR Pulse Width	t_{CE}, t_{RD}, t_{WR}	80	-	ns
Data Setup Time	t_{DS}	80	-	ns
Data Hold Time	t_{DH}	40	-	ns
Access Time	t_{ACC}	-	150	ns
Output Hold Time	t_{OH}	10	50	ns

Bus Timing



BLOCK DIAGRAM

