

SG160128A (160 DOTS X 128 DOTS)

! FEATURES

- " BUILT-IN CONTROLLER (T6963C OR EQUIVALENT)
- " +5 V POWER SUPPLY
- " 1/128 DUTY CYCLE
- " 8-BIT PARALLEL INTERFACE

! MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	129.0 x 102.0 x 16.2 (19.2LED)	mm
Viewing Area (W x H)	101.0 x 82.0	mm
Active Area (W x H)	92.76 x 74.2	mm
Dot Size (W x H)	0.54 x 0.54	mm
Dot Pitch (W x H)	0.58 x 0.58	mm

! INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	FGND	-	Frame Ground
2	Vss	0V	Power Supply Ground
3	Vcc	5V	Power Supply Voltage
4	Vo	-	Contrast Adjustment Voltage
5	VEE	-	Power Supply Voltage For LCD
6	/WR	L	Write Signal
7	/RD	L	Read Signal
8	/CE	L	Enable Signal
9	C/D	H/L	H : Instruction Code , L : Data Code
10	/HALT	L	Stop The Oscillatuion Of Clock
11	/RESET	L	Reset Signal
12~19	DB0~DB7	H/L	Data Bus Line
20	A	4.2V	LED Power Supply (+)

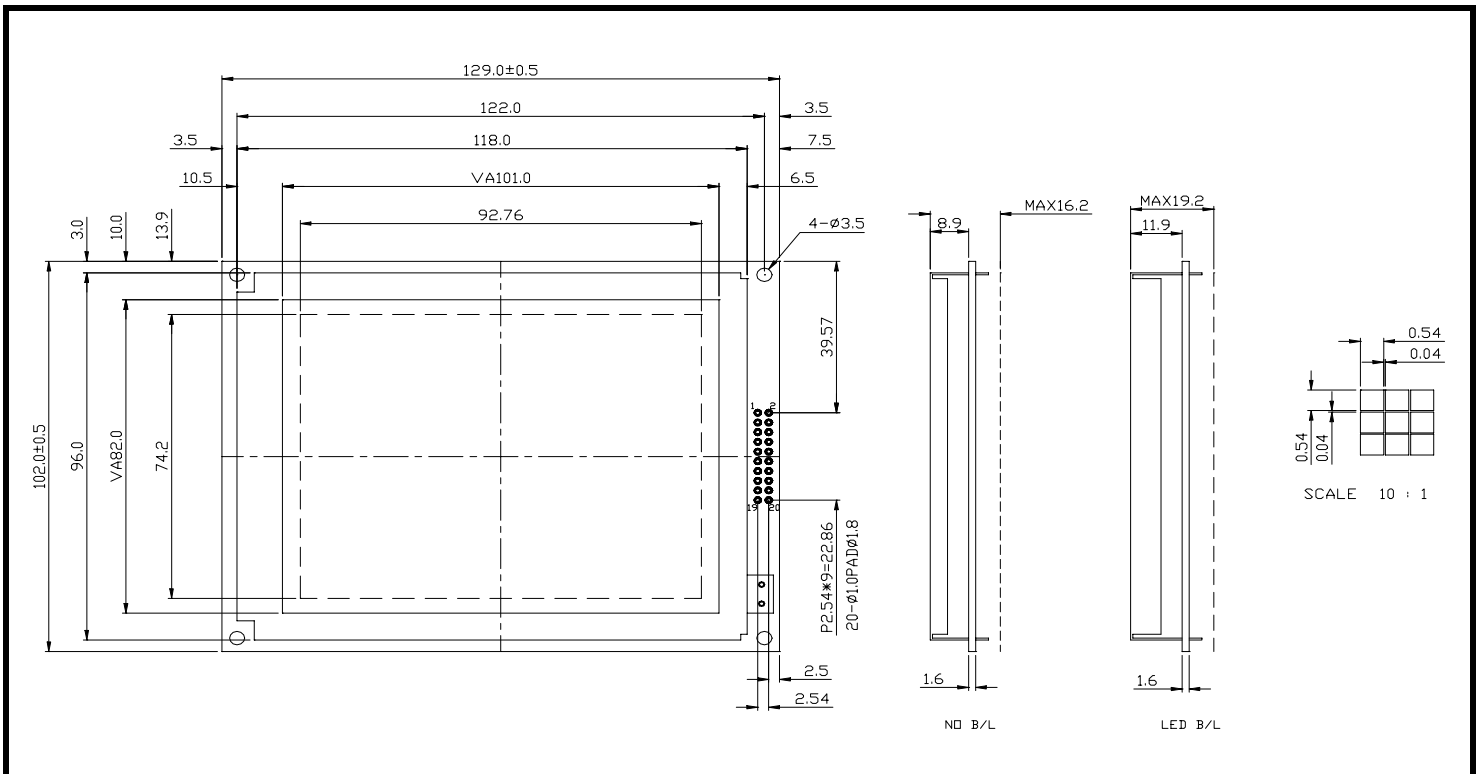
! ABSOLUTE MAXIMUM RATINGS

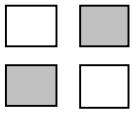
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD} -V _{SS}	0	-	7	V
Supply Voltage For LCD Drive	V _{DD} -V _o	0	-	28	V
Input Voltage	V _I	V _{SS}	-	V _{DD}	V

! ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage For Logic	V _{DD} -V _{SS}	-	4.5	5	5.5	V	
LCD Supply Voltage	V _{DD} -V _o	V _{DD} =5V Ta=25#	16.9	18	19.2	V	
Supply Current	I _{DD}	V _{DD} =5V	-	17.5	23	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



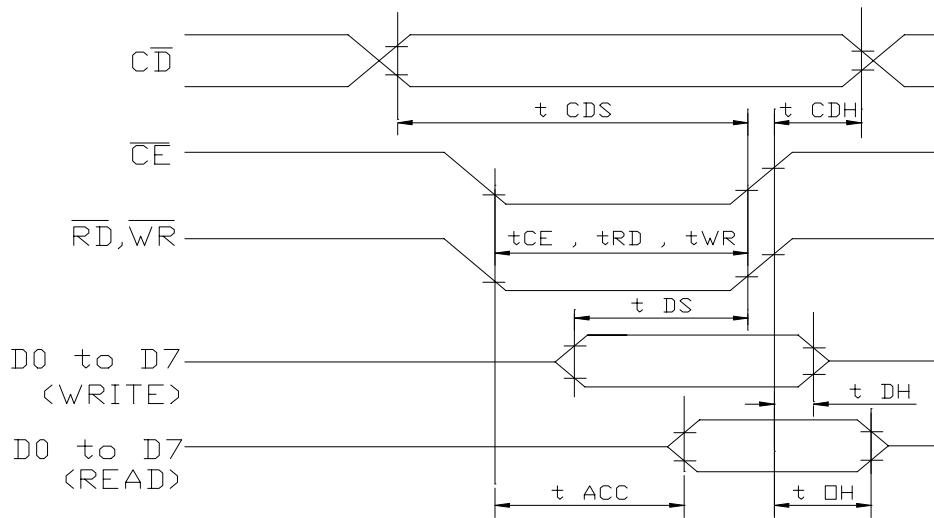


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TIMING CHARACTERISTICS

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

