

***ME* DISPLAYS**

SPECIFICATIONS

FOR

LCD MODULE

SG128128ASLB

MICRO ELECTRONICS CORPORATION

3375 Scott Blvd. Suite 222 Santa Clara CA 95054

Tel: 408-988-1101 Fax: 408-988-7626

Email: micro@microelect.com

[Http://www.microelect.com](http://www.microelect.com)

• FEATURES

Number of Dots	128 X 128
Built-in Controller	T6963C
Duty Cycle	1/128 Duty
Power Supply	5V
Options	LED/EL Backlights, TN, STN,
SG128128ASL Features	STN Gray, Transflective LED Backlight, 6:00 view direction, normal temperature

• MECHANICAL PARAMETERS

Module Size	88.0W x 88.0H x 10.8T mm
Dot Size	0.46 x 0.46 mm
Dot Pitch	0.50 x 0.50 mm

• ABSOLUTE MAXIMUM

Item	Symbol	Min.	Max	Unit
Supply Voltage for Logic	$V_{DD} - V_{SS}$	-0.3	+5.5	V
Supply Voltage for LCD Drive	$V_{DD} - V_O$	0	+24.0	V
Input Voltage	V_i	-0.3	V_{DD}	V
LED Power Dissipation	P_{AD}	-	1.20	W
LED Forward current	I_{AF}	-	570	mA
LED Reverse Voltage	V_R		8	V
Operating Temperature	T_a	0	+50	C
Storage Temperature	T_{stg}	-20	+70	C

• ELECTRICAL CHARACTERISTICS

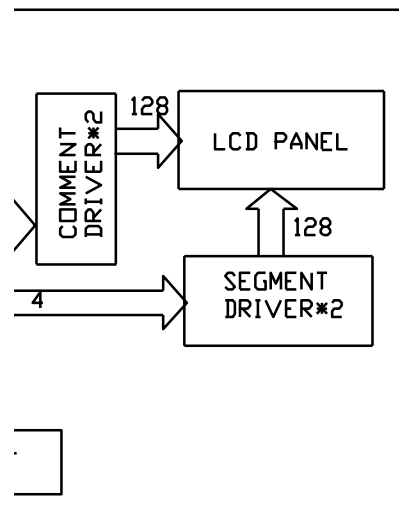
Item	Symbol	Condition	Min	Typ	Max	U
Power Supply Voltage for Logic	$V_{DD} - V_{SS}$	--	4.5	5.0	5.5	V
Power Supply Voltage for LCD	$V_{DD} - V_O$	$V_{DD}=5V$ $T_a=25C$	22.4	23.5	24.3	V
Input "High" Voltage(1)	V_{ih}	--	$0.8V_{DD}$	V_{DD}	--	V
Input "Low" Voltage(1)	V_{il}	--	V_{SS}	$0.2V_{DD}$	V_{DD}	V
Power Supply Current	I_{DD}	$V_{DD} = 5.0V$	--	16	25	mA
LED Forward Voltage	V_F	$I_F 380\text{ mA}$	-	4.2	4.6	Volt
LED Forward Current	I_F	-	-	380	-	mA
LED Reverse Current	I_R	$V_R=8V$	-	-	0.2	mA

(1) Applied to terminals CS1, CS2, DB0~DB7, R/W, D/I, E RST

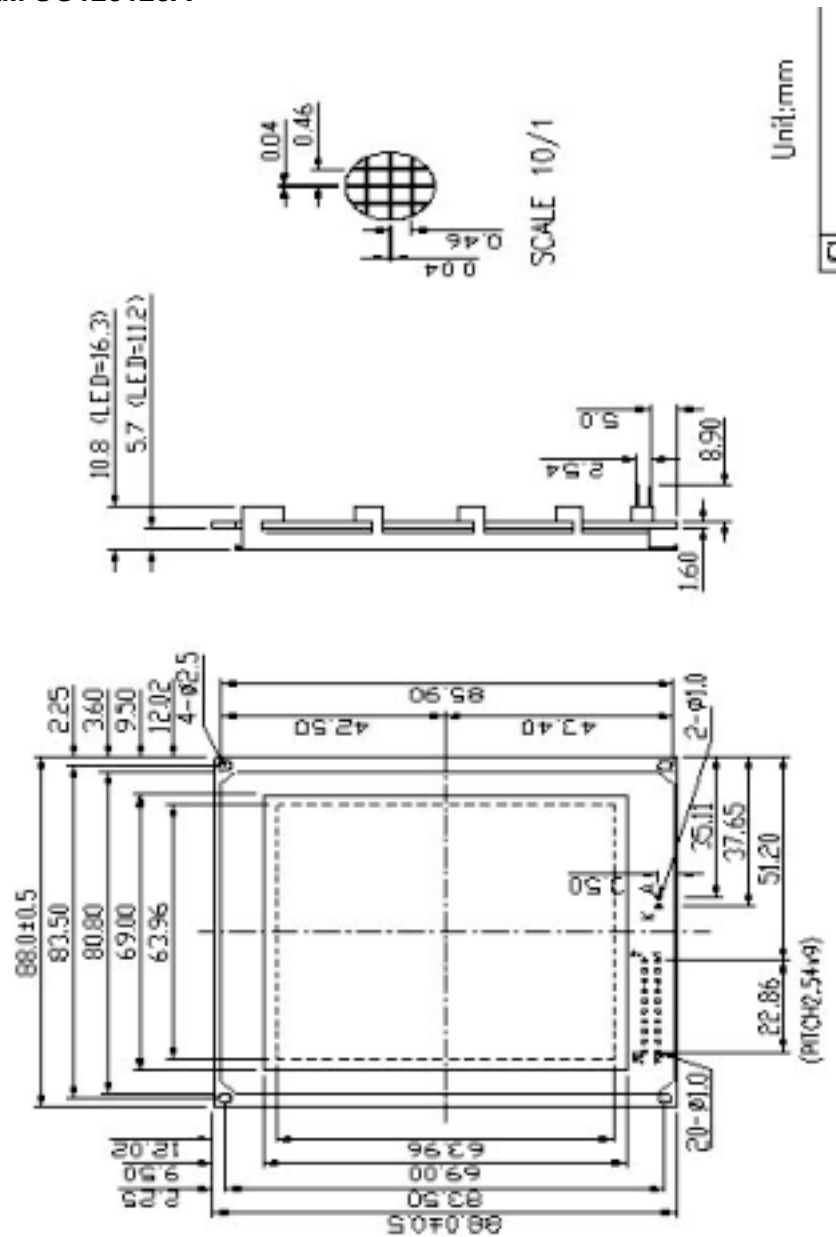
- PIN ASSIGNMENT**

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	L	H: Data, L: Instruction Code
5	/RD		Data Read Signal
6	/WR	L	Data Write Signal
7 – 14	BD0 – DB7	H/L	Data Bus Line
15	/CE	L	Enable Signal
16	/RST	H/L	Reset Signal
17	V _{EE}	--	Reset Signal
18	MD2	--	H: 32/L : 40 Select of Columns
19	FS1	--	H: 6*8/L : 8*8 Select of Font
20	NC	--	No Connection

- BLOCK DIAGRAM**



- DIAGRAM SG128128A



- 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	$t_{CDS}, t_{CDS}, t_{CDS}$	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

- TIMING DIAGRAMS

