

SG320240B (320 DOTS X 240 DOTS)

FEATURES

- ◆ NO BUILT-IN CONTROLLER
- ◆ 2.7~5.5V POWER SUPPLY
- ◆ 1/240 DUTY CYCLE
- ◆ 4-BIT PARALLEL INTERFACE

INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	DB0	H/L	Data Bit0
2	DB1	H/L	Data Bit1
3	DB2	H/L	Data Bit2
4	DB3	H/L	Data Bit3
5	/DISPOFF	H/L	Display OFF . Active LOW .
6	FLM	H	Frame Start Signal
7	NC	-	No Connection .
8	CL1	H→L	Common Driver Data Shift Signal
9	CL2	H→L	Clock Pulse For Segment Shift Register
10	VDD	5V	Power Supply Voltage
11	VSS	0V	Power Supply Ground
12	VEE	-	Power Supply Voltage For LCD
13	Vo	-	Contrast Adjustment Voltage
14	FGND	-	Frame Ground

MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	160.0 x 109.0 x 11.0	mm
Viewing Area (W x H)	121.0 x 92.0	mm
Active Area (W x H)	115.17 x 86.37	mm
Dot Size (W x H)	0.33 x 0.33	mm
Dot Pitch (W x H)	0.36 x 0.36	mm

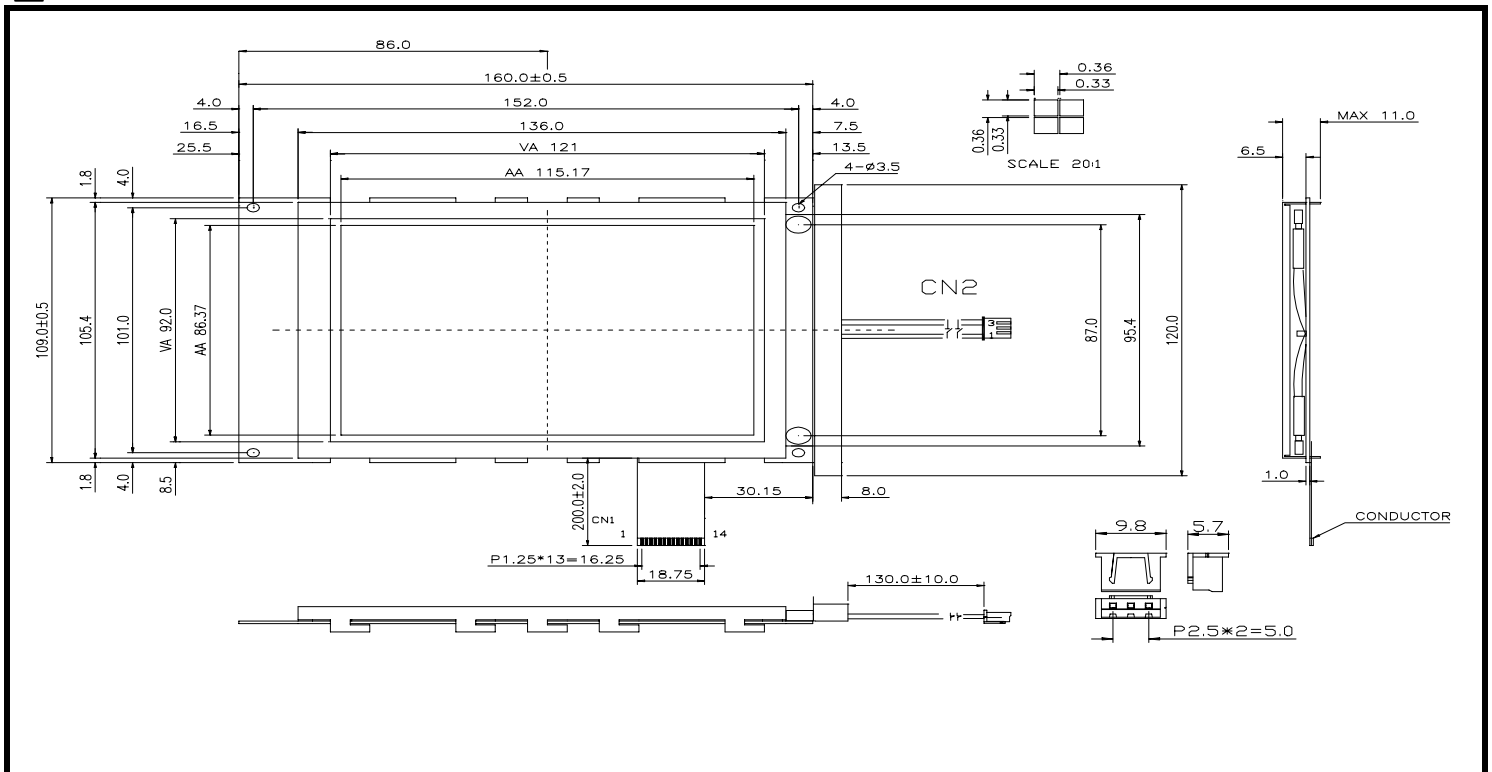
ABSOLUTE MAXIMUM RATINGS

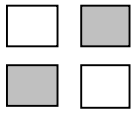
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	VDD-VSS	0	-	7	V
Supply Voltage For LCD Drive	VDD-Vo	0	-	30	V
Input Voltage	Vi	VSS	-	VDD	V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage For Logic	VDD-VSS	-	2.7	5	5.5	V	
LCD Supply Voltage	VDD-Vo	VDD=5V Ta=25°C	22.4	23.5	24.3	V	
Supply Current	IDD	VDD=5V	-	16	25	mA	
Input Voltage	"HIGH" Level	V _{IH}	-	2.2	-	VDD	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

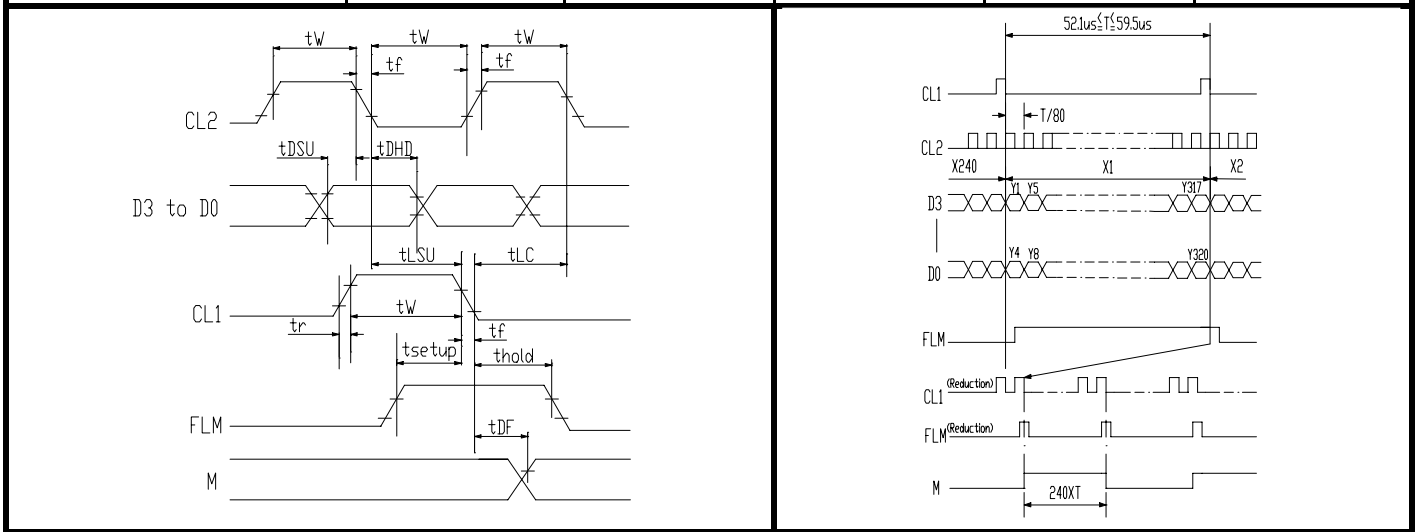




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TIMING CHARACTERISTICS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT.
Frequency Of Maximum Clock	f_{CP}	-	-	8	MHZ
CL1, CL2, Pulse Width	t_w	45	-	-	ns
Rise, Fall Time	t_r, t_f	-	-	15	ns
Data Setup Time	t_{DSU}	20	-	-	ns
Data Hold Time	t_{DHD}	20	-	-	ns
CL1 Setup Time	t_{LSU}	80	-	-	ns
CL1→ CL2 Time	t_{LC}	80	-	-	ns
FLM Setup Time	t_{setup}	100	-	-	ns
FLM Hold Time	t_{hold}	100	-	-	ns
M Delay Time	t_{DF}	-	-	300	ns



BLOCK DIAGRAM

