

SCG002A (16 CHARACTERS X 2 LINES)

FEATURES

- BUILT-IN CONTROLLER (NT7651 OR EQUIVALENT)
- +3 V POWER SUPPLY
- 1/16 DUTY CYCLE
- 8-BIT PARALLEL INTERFACE

MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size (W x H x T)	58.0 x 24.6 x 2.95	mm
Viewing Area (W x H)	54.0 x 14.4	mm
Active Area (W x H)	49.96 x 10.4	mm
Dot Size (W x H)	0.48 x 0.59	mm
Dot Pitch (W x H)	0.52 x 0.63	mm

INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	SCL	H/L	IIC Bus Serial Clock Input
2	RESET	H	Reaset Input
3	SDA	H/L	IIC Bus Serial Data Input/Output
4	V _{DD}	3.0V	Power Supply Voltage
5	V _{SS}	0V	Power Supply Ground
6	VLCD	H	Lcd Driver Supply Voltage

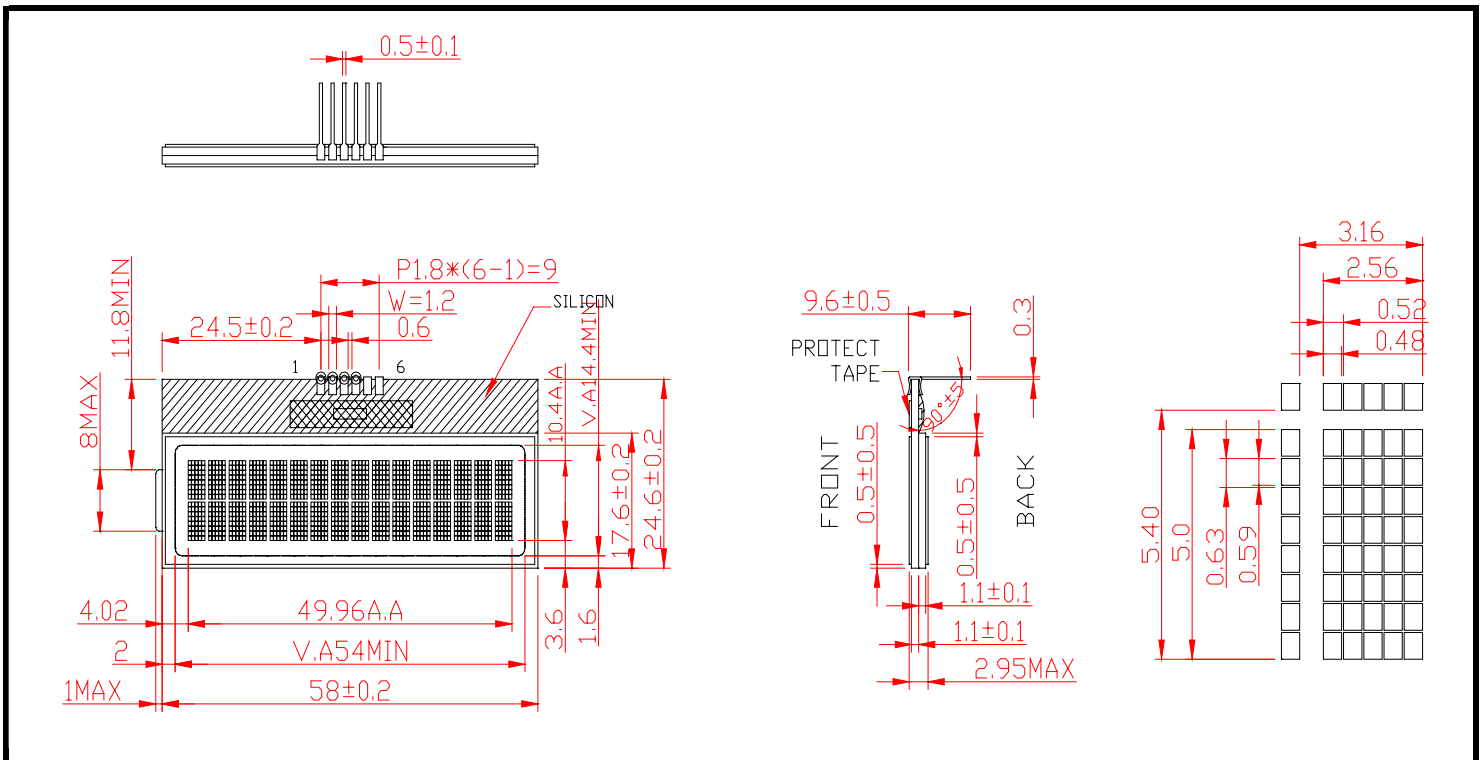
ABSOLUTE MAXIMUM RATINGS

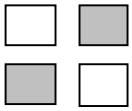
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD} -V _{SS}	0	-	6.5	V
Supply Voltage For LCD Drive	V _{DD} -V _o	0	-	7.5	V
Input Voltage	V _i	V _{SS}	-	V _{DD}	V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage For Logic	V _{DD} -V _{SS}	-	2.4	3	3.6	V	
Supply Voltage For LCD	V _{DD} -V _o	V _{DD} =3V Ta=25	4	4.4	5	V	
Supply Current	I _{DD}	V _{DD} =3V	-	0.7	1	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

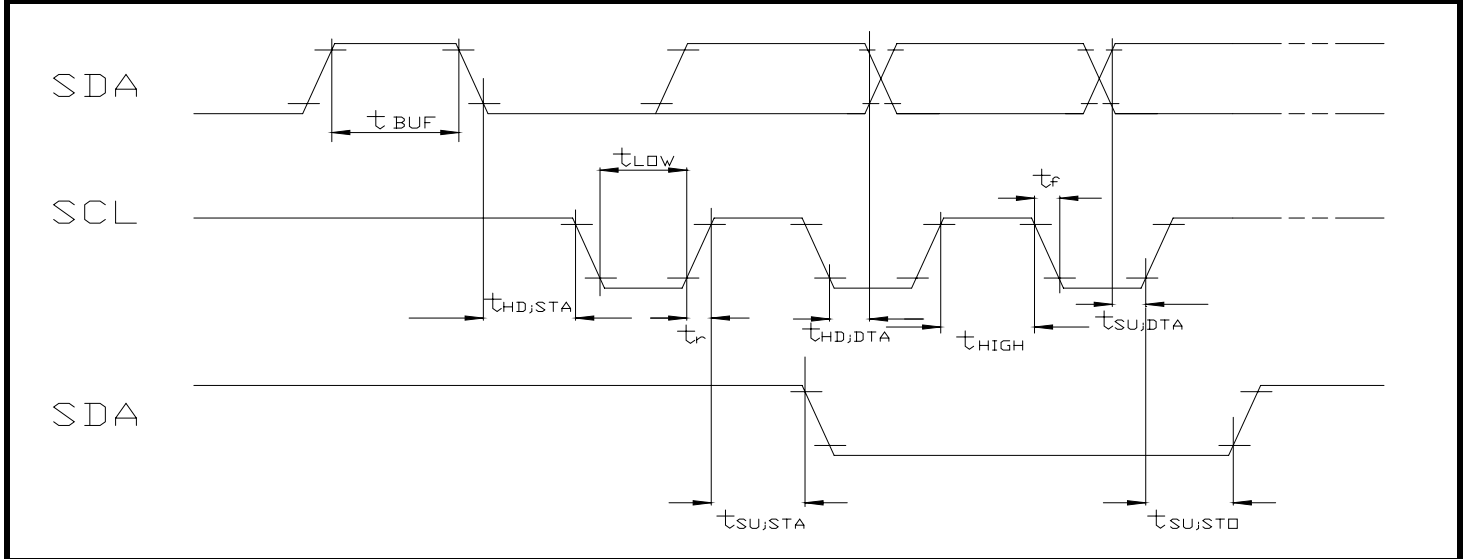




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TIMING CHARACTERISTICS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT.
SCL clock frequency	f_{SCL}	-	-	400	KHZ
Bus free time between a STOP and START	t_{BUF}	1.3	-	-	us
START condition delay time	$t_{HD;STA}$	0.6	-	-	us
Set-up time for a repeated START condition	$t_{SU;STA}$	0.6	-	-	us
SCL LOW time	t_{LOW}	1.3	-	-	us
SCL HIGH time	t_{HIGH}	0.6	-	-	us
SCL and SDA rise time	t_r	-	-	300	ns
SCL and SDA fall time	t_f	-	-	300	ns
Capacitive bus line load	C_B	-	-	400	pF
Data set-up time	$t_{SU;DAT}$	100	-	-	ns
Data hold time	$t_{HD;DAT}$	0	-	-	ns
Set-up time for STOP condition	$t_{SU;STO}$	0.6	-	-	us
Tolerable spike width on bus	t_{sw}	-	-	50	ns



BLOCK DIAGRAM

