



DATE: 6.11.15	DRAWN BY: MJK
PAGE: 1 OF 3	CHKD BY:
SCALE: N/A	APRVD BY:
UNIT: mm [INCH]	

PIN CONFIGURATION		
PIN NO.	SYMBOL	FUNCTION
1	CD2N	VOLTAGE CONVERTER
2	CD2P	
3	CD1N	
4	CD1P	
5	NVADD	SUPPLY POWER OF NEGATIVE ANALOG CURCUITS
6	CA2N	VOLTAGE CONVERTER
7	CA2P	
8	CA1N	
9	CA1P	
10	AVDD	SUPPLY POWER OF POSITIVE ANALOG CURCUITS
11	CB1N	VOLTAGE CONVERTER
12	CB1P	
13	MV3	LCD POWER SUPPLY VOLTAGE
14	V3	
15	MV2	
16	MV1	
17	V1	
18	V2	
19	VC	
20	VSSA	ANALOG GROUND
21	VSSI	DIGITAL GROUND
22	VD1	POWER OF INTERNAL DIGITAL CIRCUIT
23	VDD1	DIGITAL POWER SUPPLY VOLTAGE
24	VDDA	ANALOG POWER SUPPLY VOLTAGE
25	SDA	DATA SETUP/HOLD TIME
26	SCL	SERIAL CLOCK INPUT
27	A0	REGISTER SELECT SIGNAL
28	RSTB	RESET
29	CSB	CHIP SELECT
30	EXTB	ENABLE THE EXTENSION OPERATION MODE FOR PROM OPERATION
31	VPP	PROGRAMMING SUPPLY FOR PROM
32	NC	NO CONNECTION
33	A	SUPPLY VOLTAGE FOR BACKLIGHT (+)
34	K	SUPPLY VOLTAGE FOR BACKLIGHT (-)

DC CHARACTERISTICS					
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
SUPPLY VOTAGE FOR LOGIC	V _{DD}	4.75	5.0	5.25	V
SUPPLY CURRENT FOR LOGIC	I _{DD}	-	4.22	-	μA
OPERATING VOLTAGE FOR LCD (*)	V ₀	15.67	16.5	17.33	V
'HIGH' LEVEL INPUT VOLTAGE	V _{IH}	0.8VDD	-	VDD	V
'LOW' LEVEL INPUT VOLTAGE	V _{IL}	VSS	-	0.2VDD	V

NOTE (*): THERE IS TOLERANCE IN OPTIMUM LCD DRIVING VOLTAGE DURING PRODUCTION AND IT WILL BE WITHIN THE SPECIFIED RANGE

SIDE BACK LIGHT						
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITION
WHITE	I _{BL}	-	40	60	mA	V _{BL} =3.3V

ABSOLUTE MAXIMUM RATINGS			
SYMBOL	PARAMETER	FUNCTION	SYMBOL
V _{DD}	SUPPLY VOLTAGE	-0.3 TO +3.6	V
V _I	INPUT VOLTAGE	V _{SS} -0.3 TO V _{DD} +0.3	V
T _A	OPERATING TEMPERATURE RANGE	-20° TO +70°	°C
T _{STG}	STORAGE TEMPERATURE RANGE	-30° TO +80°	°C

MAXIMUM RATINGS ARE THOSE VALUES BEYOND WHICH DAMAGES TO THE DEVICE MAY OCCUR. FUNCTIONAL OPERATION SHOULD BE RESTRICTED TO THE LIMITS IN THE ELECTRICAL CHARACTERISTICS TABLES OR PIN DESCRIPTION SECTION.

THIS DEVICE CONTAINS CIRCUITRY TO PROTECT THE INPUTS AGAINST DAMAGE DUE TO HIGH STATIC VOLTAGES OR ELECTRIC FIELDS; HOWEVER, IT IS ADVISED THAT NORMAL PRECAUTIONS BE TAKEN TO AVOID APPLICATION OF ANY VOLTAGE HIGHER THAN MAXIMUM RATED VOLTAGES TO THIS HIGH IMPEDANCE CIRCUIT. THIS DEVICE MAY BE LIGHT SENSITIVE. CAUTION SHOULD BE TAKEN TO AVOID EXPOSURE OF THIS DEVICE TO ANY LIGHT SOURCE DURING NORMAL OPERATION. THIS DEVICE IS NOT RADIATION PROTECTED.

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= ^{+DECIMAL PRECISION}_{-0.00} MAX.= ^{+0.00}_{-DECIMAL PRECISION}

