

PIN CO	ONFIGURATION						
PIN NO.	SYMBOL	FUNCTION					
1	CD2N						
2	CD2P	Toltage converter					
3	CD1N	VOLIAGE CONVERTER					
4	CD1P						
5	NVADD	SUPPLY POWER OF NEGATIVE ANALOG CURCUITS					
6	CA2N						
7	CA2P	VOLTAGE CONVERTER					
8	CA1N	VOLIAGE CONVERTER					
9	CA1P						
10	AVDD	SUPPLY POWER OF POSITIVE ANALOG CURCUITS					
11	CB1N	VOLTAGE CONVEDTED					
12	CB1P	VOLTAGE CONVERTER					
13	MV3						
14	V3						
15	MV2						
16	MV1	CD POWER SUPPLY VOLTAGE					
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 (-)					

ABSOLUTE MAXIMUM RATINGS						
SYMBOL	PARAMETER	FUNCTION	SYMBOL			
VDD	SUPPLY VOLTAGE	-0.3 TO +3.6	٧			
٧ı	INPUT VOLTAGE	V _{SS} -0.3 TO V _{DD} +0.3	٧			
Ta	OPERATING TEMPERATURE RANGE	-20° TO +70°	.c			
TSTG	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 IMPENDANCE 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.

DC CHARACTERISTICS					
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
SUPPLY VOTAGE FOR LOGIC	Voo	4.75	5.0	5.25	٧
SUPPLY CURRENT FOR LOGIC	loo	-	4.22	-	μA
OPERATING VOLTAGE FOR LCD (*)	Vo	15.67	16.5	17.33	٧
'HIGH' LEVEL INPUT VOLTAGE	VIH	0.8VDD	-	VDD	٧
'LOW' LEVEL INPUT VOLTAGE	VIL	VSS	-	0.2VDD	٧

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	IBL	-	40	60	mA	VBL = 3.3V

*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 ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= +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 ARE: X=±1 (±0.039), X.X=±0.5 (±0.010), X.XX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= +DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.010), X.XX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= +DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.010), X.XX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.000), X.XX=±0.127 (



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128X64 C.O.G. GRAPHIC LCD MODULE, EBTN, WHITE LED BLKT, 1/64 DUTY, 1/9 BIAS, SERIAL INTERFACE

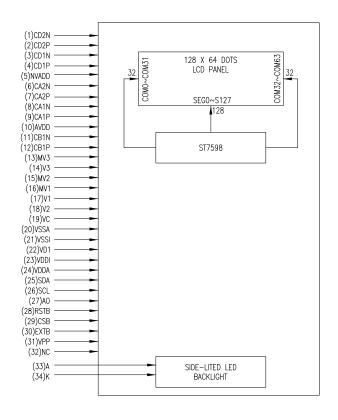
THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

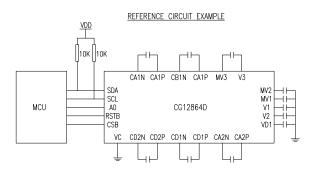
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DATE: 6.11.15 DRAWN BY: MJK PAGE: 2 OF 3 CHKD BY: SCALE: N/A APRVD BY: mm [INCH] (Pb) UNIT:

REV.





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