

## UNCONTROLLED DOCUMENT PART NUMBER REV. 1 CM - X04002DXXREV. E.C.N. NUMBER AND REVISION COMMENTS DATE PIN CONFIGURATION BLOCK DIAGRAM \ 1/16 DUTY, 1/5 BIAS IPIN NO. SYMBOL LEVEL FUNCTION DB 7 GND (OV) Vss 1 \_ DRIVER 4 2 POWER SUPPLY 5V DB 0 VDD VDD-Vo: LCD DRIVING VOLTAGE \_ 8 3 FOR LCD DRIVE Vo \_ LCD VR: 10KΩ -20KΩ SEG 40 ы В REGISTER SELECT SIGNAL CONTROLLER R∕Ŵ V<sub>DD</sub> RS LSI 4 RS H/L H: DATA INPUT V<sub>DD</sub>-Vo Vss -COM 16 L: INSTRUCTION INPUT T +5V Vo LCD PANEL V<sub>DD</sub>-H: DATA READ (MODULE-->MPU) R/W H/L 5 ٧o L: DATA WRITE (MODULE<--MPU) Vss (GND) ົາຂີ່ 6 Ε H.H->L ENABLE DB0~DB7 DATA BUS-SOFTWARE SELECTABLE 4 OR 8 BIT MODE. 7~14 H/L LED BACKLIGHT ANODE 15 Α \_ DRIVER \_ CATHODE LED BACKLIGHT 16 Κ A٠ LED BACKLIGHT Κ ELECTRICAL CHARACTERISTICS V<sub>DD</sub>=4.7V to 5.3V, T<sub>A</sub>=25°C STANDARD VALUE SYMBOL CONDITION ITEM UNIT MIN. TYP. MAX. ABSOLUTE MAXIMUM RATINGS SUPPLY VOLTAGE FOR LOGIC V<sub>DD</sub>-Vss 5.0 ٧ \_ \_ STANDARD VALUE TEST V<sub>DD</sub>=5V SUPPLY CURRENT FOR LOGIC 2.0 3.0 IDD \_ mΑ ITEM SYMBOL UNIT CONDITION MIN MAX 2.2 ۷ HIGH ۷<sub>IH</sub> \_ V<sub>DD</sub> \_ INPUT VOLTAGE SUPPLY VOLTAGE FOR LOGIC VDD-Vss Ta=25°C 4.7 5.3 ۷ ٧II ۷ LOW \_ 0 0.6 \_ SUPPLY VOLTAGE FOR LCD DRIVE 4.2@50°C VDD-Vo 4.800°C ۷ \_ ١ HIGH VOH 2.4 ۷ \_ \_ OUTPUT VOLTAGE ٧ INPUT VOLTAGE Ta=25°C V<sub>DD</sub> ٧L Vss LOW VOL \_ 0.4 ۷ \_ \_ LCM-S 0 50 •C VOLTAGE Vf \_ 4.2 4.6 ۷ \_ OPERATING TEMPERATURE Topr LCM-H -20 70 •C CURRENT lf 210 \_ \_ \_ mΑ \*LED •C LCM-S -20 70 POWER CUNSUMPTION PD 882 \_ mW \_ \_ STORAGE TEMPERATURE Tstg BACKLIGHT LCM-H °C -30 85 LUMINOUS lf=210mA cd/m² L 70 \_ \_ COLOR \_ \_ \_ \_ \_ nm **\*ONLY APPLIES TO MODULES WITH BACKLIGHT** UNCONTROLLED DOCUMENT

\*UNLESS OTHERWISE SPECIFIED TOLERANCE IS ±0.25mm (±0.010")

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5.	.55mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, 40 x 2 LCD	IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES. RELIABILITY NOTE	DRAWN BY:	CHECKED BY:	APPROVED BY: I	DATE: 9–30–9	<del>)</del> 8
	CHARACTER MODULE, 1/16 DUTY, 1/5 BIAS.	OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.	SA/BC			PAGE: 2 OF 2 SCALE: N/A	<u>}</u>

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