

PART NUMBER LCT-H320240M57W

REV.

INTER	INTERFACE PIN CONNECTION							
PIN	SYMBOL	FUNCTION						
1	VCOM	COMMON FLECTRODE DRIVING SIGNAL.						
2	OSD HS	OSD HSYNC OUTPUT.						
3	OSD VS	OSD VSYNC OUTPUT.						
4	OSD CLK	OSD CLOCK OUTPUT.						
5	OSD-R	OSD RED DATA INPUT. NORMALLY PULL LOW.						
6	OSD-G	OSD GREEN DATA INPUT. NORMALLY PULL LOW.						
7	OSD_B	OSD BLUE DATA INPUT. NORMALLY PULL LOW.						
8	OSD_EN	OSD ENABLE INPUT. NORMALLY PULL LOW.						
9	DVCC	DIGITAL POWER FOR SOURCE DRIVER. 3V~3.6V.						
10	ZX1	ZOOM IN/OUT MODE SETTING PIN.						
11	ZX2	ZOOM IN/OUT MODE SETTING PIN.						
12	ZX3	ZOOM IN/OUT MODE SETTING PIN.						
13	DEN	INPUT DATA ENABLE CONTROL. NORMALLY PULL LOW.						
14	IVS	VERTICAL SYNC INPUT IN DIGITAL RGB MODE						
15	IHS	HORIZONTAL SYNC INPUT IN DIGITAL RGB MODE						
16	CLK	CLOCK SIGNAL. LATCHING DATA AT THE RISING EDGE.						
17~24	D00~D07	DIGITAL DATA INPUT.						
25	AVSS	ANALOG GROUND.						
26	AVDD	ANALOG POWER. 4.5V~5.5V.						
	D10~D17	DIGITAL DATA INPUT.						
35~42	D20~D27	DIGITAL DATA INPUT.						
43	QXH	REFERENCE SIGNAL FOR VIDEO DECODER TO ARRANGE DATA SEQUENCE.						
44	NPC	NTSC OR PAL MODE AUTO DETECTION RESULT.						
45	POL	POLARITY SELECT FOR THE LINE INVERSION CONTROL SIGNAL.						
46	SPDA	SERIAL PORT DATA INPUT/OUTPUT.						
47	SPCK	SERIAL PORT CLOCK. NORMALLY PULL HIGH.						
48	SPENA	SERIAL PORT DATA ENABLE SIGNAL. NORMALLY PULL HIGH.						
49	IF1	CONTROL THE INPUT DATA FORMAT.						
50	IF2	CONTROL THE INPUT DATA FORMAT.						
51	LRC	THE SHIFT DIRECTION OF DEVICE INTERNAL SHIFT REGISTER SETTING PIN.						
52	UD	UP/DOWN SCAN SETTINGS.						
53	RESETB	HARDWARE GLOBAL RESET. LOW ACTIVE. NORMALLY PULL HIGH.						
54	DGND	DIGITAL GROUND FOR SOURCE DRIVER.						
55	VGH	POWER SUPPLY FOR LCM GATE HIGH (+15V)						
56	VEE	POWER SUPPLY FOR LCM GATE LOW (-7V)						
57	DVDD	DIGITAL POWER SUPPLY FOR GATE DRIVER.						
58	DVSS	DIGITAL GROUND FOR GATE DRIVER.						
59	NC	NO CONNECTION.						
60	NC	NO CONNECTION.						

COLOR DATA INPUT ASSIGNMENT																				
									D	ATA	SIG	VAL								GRAY
COLOR	DISPLAY			R	ED					GR	EEN				-	BLUE				SCALE
		R0	R1	R2	R3	R4	R5	G0	G1	G2	G3	G4	G5	В0	B1	B2	В3	B4	B5	LEVEL
	BLACK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	BLUE	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	-
	GREEN	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	-
BASIC	CYAN	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	-
COLOR	RED	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	-
	MAGNETA	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	-
	YELLOW	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	-
	WHITE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-
	BLACK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R0
	DARK	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R1
GRAY	↑	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R2
SCALE		:	:	:	:	:	:	:	;	:	:	:	:	:	:	:	:	:		R3~R60
OF RED		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	00 <i>1</i> √C <i>1</i>
OF KED	↓	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	R61
	LIGHT	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	R62
	RED	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	R63
	BLACK	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	GO
	DARK	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	G1
GRAY	↑	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	G2
SCALE		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	G3~G60
0F		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	65~660
GREEN	↓	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	G61
	LIGHT	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	G62
	GREEN	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	G63
	BLACK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	В0
	DARK	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	B1
GRAY	↑	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	B2
SCALE		:	:	:	:	:	:	:	;	:	:	:	:	:	:	:	:	:	:	B3~B60
0F		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	טטם∽נט
BLUE	↓	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	B61
	LIĞHT	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	B62
	BLUE	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	B63

NOTE: DEFINITION OF GRAY

RN: RED GRAY, GN: GREEN GRAY, BN: BLUE GRAY (N=GRAY LEVEL) INPUT SIGNAL: 0=LOW LEVEL VOLTAGE, 1=HIGH LEVEL VOLTAGE

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REV. LCT-H320240M57W

5.7" ACTIVE MATRIX FULL COLOR TFT PANEL 6:00 VIEW, LED BACKLIGHT, -20°C TO +70°C OPERATING TEMP

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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.

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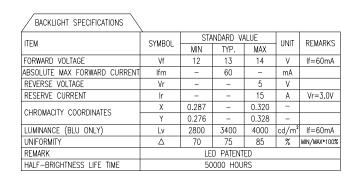
ELECTRICAL CHARASTERISTICS

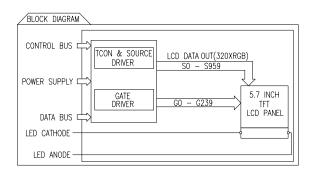
ITFM	SYMBOL	STA	NDARD V	UNIT	REMARKS	
LILEM .	SIMDOL	MIN	TYP.	MAX	OINII	IVEIMAIVIVO
	DVDD	2.7	3.3	5.5	٧	
POWER VOLTAGE	AVDD	3.8	5	5.5	٧	
	DVCC	3	3.3	3.6	٧	
GATE ON VOLTAGE	VGH	7	15	VEE+40	٧	
GATE OFF VOLTAGE	VGL	-20	-10	-5	٧	
INPUT HIGH VOLTAGE	VIH	0.7*VDDI0	-	VDD	٧	
INPUT LOW VOLTAGE	VIL	Vss	-	0.3xVDD	٧	
OUTPUT HIGH VOLTAGE	VOH	VDD-0.3	-	V_{DD}	٧	IOH=200uA
OUTPUT LOW WOLTAGE	VOL	Vss	-	VSS+0.3	٧	IOL=200uA
OUTPUT VOLTAGE DEVIATION	VVD	_	± 20	-	m۷	
DC OFFSET	Vos	-	-	± 20	m۷	

ABSOLUTE	MAYIMLIM	BYLINGS,
ADJULUIL	INICAMINA	IMIIIIOO

ABSULUTE MAXIMUM RATINGS						
ITEM	SYMBOL	TEST	STA	UNIT		
ITEM	SIMBUL	CONDITION	MIN	TYP.	MAX	UNII
POWER VOLTAGE	DVDD	DVSS=0	-0.3	_	7.0	٧
	AVDD	AVSS=0	-0.3	-	7.0	٧
	DVCC	DGND=0	-0.3	-	7.0	٧
GATE ON VOLTAGE	VGH	GND=0	-0.3	-	32	٧
GATE OFF VOLTAGE	VGL	J GIND-0	-22	-	0.3	٧
INPUT VOLTAGE	VIN	-	-0.3	_	DVCC+0.3	٧
LOGICAL OUTPUT VOLTAGE	VOUT	-	-0.3	-	7.0	٧

IT IS A NORMAL CHARACTERISTIC THAT THE LCD COLOR AND CONTRAST WILL CHANGE (SOME TIMES UNEVENNES CAN BE SEEN) UNDER LOW TEMPERATURE AND HIGH TEMPERATURE ENVIRONMENT. WHEN THE APPLICATION TEMPERATURE RETURNS BACK TO ROOM TEMPERATURE, LCD COLOR AND CONTRAST WILL REVERSE BACK TO ITS ORIGINAL COLOR AND CONTRAST WITHIN 24 HOURS AND ITS FUNCTIONALITY IS NOT AFFECTED.





S AND ITS FUNCTIONALITY IS NOT AFFECTED.

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OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT
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LCT-H320240M57W OPTICAL CHARASTERISTICS STANDARD VALUE ITFM SYMBOL CONDITION LINIT NOTE MIN TYP. MAX 30 ٧ NOTE(3): DEFINITION OF VIEWING ANGLE **0=4=**0°C RESPONSE TIME Tf 35 50 12' D'CLOCK CONTRAST RATIO CR **0+**0°C 150 250 ٧ 2 RIGHT **6**=0°C 45 DEG VIEWING ANGLE LEFT **≠**180°C 45 DEG UPPER **♦=**90°C 15 DEG LOWER **4**=270°C 35 DEG LUMINANCE OF WHITE 5 200 250 Cd/m² 1 (CENTER POINT OF LCM) COLOR CROMACITY Rx 0.610 0.640 0.670 4 (CIE1931) Ry 0.314 0.344 0.374 0.268 Gx 0.298 "SIMULATION Gy 0.553 0.583 0.613 REFERENCE "SIMULATION DATA REFERENCE ONLY" Вx 0.107 0.137 0.167 ONLY" Ву 0.083 0.103 0.123 0.312 Wx 0.282 0.342 **4**−270°C 0.359 0.299 | 0.329 Wy 6' D'CLOCK OPTIMUM VIEWING DIRECTION 6 O'CLOCK NOTE(4): AFTER STABILIZING AND LEAVING THE PANEL ALONE AT GIVEN NOTE(1): DEFINITION OF RESPONSE TIME TEMPERATURE FOR 30MIN, THE MEASUREMENT SHOULD BE EXECUTED. MEASURMENT SHOULD BE EXECUTED IN STABLE, WINDLESS, AND DARK ROOM 30 MINS AFTER LIGHTING THE BACK-LIGHT. THIS SHOULD BE MEASURED IN THE BLACK (TFT ON) DISPLAY DATA WHITE (TFT OFF) WHITE (TFT OFF) ENVIRONMENT CONDITION: Ta=25±2°C BACK-LIGHT ON CONDITION 100% PROTECTOR 90% OPTICAL RESPONSE FIELD 10% 0% TIME BM-7:50cm NOTE(2): DEFINITION OF CONTRAST RATIO TFT-LCD MODULE LCD PANEL CR=BRIGHTNESS AT ALL PIXELS "WHITE" / BRIGHTNESS AT ALL PIXELS "BLACK" NOTE(5): MEASURED AT CENTER POINT VERTICALLY WITH BACKLIGHT ON." *UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= +DECIMAL PRECISION MAX.= $\frac{10.00}{-0.000}$ MAX.= $\frac{10.000}{-0.000}$ MAX.= $\frac{10.00}{-0.000}$ MAX.= $\frac{10.000}{-0.000}$ MAX.= CONFIDENTIAL INFORMATION THE INFORMATION CONTINUED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC. THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTINUED HEREIN CONDIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES. 290 E. HELEN ROAD PART NUMBER REV. PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw LCT-H320240M57W RELIABILITY NOTE 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. 5.7" ACTIVE MATRIX FULL COLOR TFT PANEL

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6:00 VIEW, LED BACKLIGHT, -20°C TO +70°C OPERATING TEMP

UNCONTROLLED DOCUMENT

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STANDARD SPECIFICATION FOR REABILITY

STANDARD SPECIFICATION OF REARILITY TEST

STANDARD SPECIFICATION OF REABILITY TEST										
NO	TEST ITEM	CONTENT OF TEST	TEST CONDITION	APPLICABLE STANDARD						
1	HIGH TEMPERATURE STORAGE	ENDURANCE TEST APPLYING THE HIGH STORAGE TEMPERATURE FOR A LONG TIME.	80+/-3°C 240HRS							
2	LOW TEMPERATURE STORAGE	ENDURANCE TEST APPLYING THE HIGH STORAGE TEMPERATURE FOR A LONG TIME.	-30+/-3°C 240HRS							
3	HIGH TEMPERATURE OPERATION	ENDURANCE TEST APPLYING THE ELECTRIC STRESS (VOLTAGE & CURRENT) AND THE THERMAL STRESS TO THE ELEMENT FOR A LONG TIME.								
4	LOW TEMPERATURE OPERATION	ENDURANCE TEST APPLYING THE ELECTRIC STRESS UNDER LOW TEMPERATURE FOR A LONG TIME.	-20+/-3°C 240HRS							
5	HIGH TEMPERATURE/ HUMIDITY OPERATION	ENDURANCE TEST APPLYING THE ELECTRIC STRESS (VOLTAGE & CURRENT) AND TEMPERATURE / HUMIDITY STRESS TO THE ELEMENT FOR A LONG TIME.	40°C, 90%RH 120HRS	MIL-202E-103B JIS-C5023						
6	TEMPERATURE CYCLE	ENDURANCE TEST APPLYING THE LOW AND HIGH TEMPERATURE CYCLE. -20°C 25°C 70°C 30 MIN 5 MIN 1 CYCLE	-20°C/ 70°C 10 CYCLES							
	MECHANICAL TEST									
7	DROP TEST	ENDURANCE TEST APPLYING THE DROP DURING TRANSPORTATION	PACKED,100cm FREE FALL(6 SLIDES, 1 CORNER, 3 EDGES)							

REMARKS:

1. FOR OPERATION TEST, ABOVE SPECIFICATION IS APPLICABLE WHEN TEST PATTERN IS CHANGING DURING ENTIRE OPERATION TEST.
2. INSPECTIONS AFTER RELIABILITY TESTS ARE PERFORMED WHEN THE DISPLAY TEMPERATURE RESUMES BACK TO ROOM TEMPERATURE.
3. IT IS A NORMAL CHARACTERISTIC THAT SOME DISPLAY ABNORMALITY CAN BE SEEN DURING REABILITY TEST. IF THE DISPLAY

ABNORMALITY CAN RESUME BACK TO NORMAL CONDITION AT ROOM TEMPERATURE WITHIN 24 HOURS, THERE IS NO PERMANENT DESTRUCTION OVER THE DISPLAY. THE DISPLAY STILL POSSESSES ITS FUNCTIONALITY AFTER REABILITY TESTS.

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QUALITY ASSURANCE

ACCEPTABLE QUALITY LEVEL (AQL)

EACH LOT SHOULD SATISFY THE QUALITY LEVEL DEFINED AS FOLLOWS:

A. INSPECTION METHOD: MIL-SDT-105E LEVEL II NORMAL ONE TIME SAMPLING.

	CATEGORY	AQL	DEFINITION						
ı	MAJOR	0.25%	FUNCTIONAL DEFECTIVE AS PRODUCT.						
	MINOR	1.00%	SATIFY ALL FUNCTIONS AS PRODUCT BUT NOT SATISFY COSMETIC STANDARD.						

COSMETIC SCREENING CRITERIA

NO	DEFECT	JUDGMENT CRITERIA	CATEGORY
1	SPOTS/DUST /BUBBLE (ROUND TYPE)	SIZE, D(mm) ACCEPTABLE QUANTITY IN ACTIVE AREA DS0.15 DISREGARD 0.15<03 3 0>0.20 0	MINOR
2	DUST/ SCRATCHES/ BLACK STREAK (LINE TYPE)	ACCEPTABLE QUANTITY	MINOR
3	ALLOWABLE DENSITY	ABOVE DEFECTS SHOULD BE SEPARATED MORE THAN 5mm EACH OTHER.	MINOR
4	RAINBOW	OBVIOUS UNVEN COLOR (RAINBOW) SHALL NOT BE NOTICEABLE.	MINOR
5	DISPLAY CONDITION	DIM DISPLAY ON THE PATTERNS, EXTRA PATTERN AND SHORT CIRCUIT ARE NOT ACCEPTABLE.	MAJOR
6	NO DISPLAY OR MISSING DISPLAY	THE PATTERNS OF DISPLAY SHALL LIGHT UP AS REQUIRED. NO DISPLAY OR MISSING DISPLAY ARE NOT ACCEPTABLE.	MAJOR

NOTE: D= (LONG LENGTH + SORTH LENGTH)/2

FAILURE JUDGMENT CRITERIA

AFTER REABILITY TEST ABOVE, TEST SAMPLE SHALL BE LET RUN TO ROOM TEMPERATURE AND HUMIDITY AT LEAST 4 HOURS BEFORE FINAL TESTS ARE CARRIED OUT

CRITERION ITEM	FAILURE JUDGMENT CRITERIA
ELECTRICAL CHARACTERISTIC ELEC	CTRICAL SHORT AND OPEN.
MECHANICAL CHARACTERISTIC OUT	OF MECHANICAL SPECIFICATION.
OPTICAL CHARACTERISTIC OUT	OF APPERANCE STANDARD.

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OR Creating LED and LCD Solutions Together*

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PRECAUTIONS FOR USING LCD MODULE

LCT-H320240M57W

PART NUMBER

HANDLING PRECAUTIONS

- 1. THE DISPLAY PANEL IS MADE OF GLASS AND POLARIZER. DO NOT SUBJECT IT TO MECHANICAL SHOCK BY DROPPING OR IMPACT WHICH MAY CAUSE CHIPPING ESPECIALLY ON THE EDGES.
- 2. DO NOT TOUCH, PUSH OR RUB THE EXPOSED POLARIZERS WITH ANYTHING HARDER THAN AN HB PENCIL LEAD (GLASS, TWEEZERS, ETC.). THE POLARIZER COVERING THE DISPLAY SURFACE OF THE LCD MODULE IS SOFT AND EASILY SCRATCHED. HANDLE THIS POLARIZER CAERFULLY.
- ALCOHOL. AVOID USING SOLVENTS LIKE ACETONE (KETENE), WATER, TOLUENE, ETHANOL TO CLEAN THE
- 4. PLEASE KEEP THE TEMPERATURE WITHIN SPECIFIED RANGE FOR USE AND STORAGE. POLARIZATION DEGRADATION, BUBBLE GENERATION OR POLARIZER PEEL-OFF MAY OCCUR WITH HIGH TEMPERATURE AND HIGH HUMIDITY.
- DO NOT APPLY EXCESSIVE FORCE TO THE DISPLAY SURFACE OR THE ADJOINING AREAS SINCE THIS MAY CAUSE THE COLOR TONE TO VARY.
- 6. INSTALL THE LCD MODULE BY USING THE MOUNTING HOLES. WHEN MOUNTING THE LCD MODULE MAKE SURE IT IS FREE OF TWISTING, WARPING AND DISTORTION.
 7. EXERCISE CARE TO MINIMIZE CORROSION OF THE ELECTRODE. CORROSION OF THE ELECTRODES IS
- ACCELERATED BY WATER DROPLETS, MOISTURE CONDENSATION OR A CURRENT FLOW IN A HIGH-HUMIDITY ENVIRONMENT.
- 8. NC TERMINAL SHOULD BE OPEN. DO NOT CONNECT ANYTHING.
- IF THE LOGIC CIRCUIT POWER IS OFF, DO NOT APPLY THE INPUT SIGNALS.
- AVOID CONTACTING OIL AND FATS.
- 11. CONDENSATION ON THE SURFACE AND CONTACT WITH TERMINALS DUE TO COLD WILL DAMAGE, STAIN OR DIRTY THE POLARIZERS. AFTER PRODUCTS ARE TESTED AT LOW TEMPERATURE THEY MUST BE WARMED UP IN A CONTAINER BEFORE COMING IN CONTACT WITH ROOM TEMPERATURE AIR.
- 12. WIPE OFF SALIVA OR WATER DROPS IMMIDEATLY, CONTACT WITH WATER OVER A LONG PERIOD OF TIME MAY CAUSE DEFORMATION OR COLOR FADING.

ELECTRO-STATIC DISCHARGE CONTROL

- SINCE THIS MODULE USES A CMOS LSI, THE SAME CAERFUL ATTENTION SHOULD BE PAID TO
- ELECTROSTATIC DISCHARGE AS FOR AN ORDINARY CMOS IC.

 2. BE SURE TO GROUND THE BODY WHEN HANDLING THE LCD MODULES. TOOLS REQUIRED FOR ASSEMBLING, SUCH AS SOLDERING IRONS, MUST BE PROPERLY GROUNDED.

 3. TO REDUCE THE AMOUNT OF STATIC ELECTRICITY GENERATED, DO NOT CONDUCT ASSEMBLING AND OTHER
- WORK UNDER DRY CONDITIONS. TO REDUCE THE GENERATION OF STATIC ELECTRICITY, BE CARFUL THAT THE AIR IN THE WORK IS NOT TOO DRIED. A RELATIVE HUMIDITY OF 50%-60% IS RECOMMENDED.

 4. THE LCD MODULE IS COATED WITH A FILM TO PROTECT THE DISPLAY SURFACE. EXERCISE CARE WHEN
- PEELING OFF THIS PROTECTIVE FILM SINCE STATIC ELECTRICITY MAY BE GENERATED.
- 5. WHEN SOLDERING THE TERMINAL OF LCM, MAKE CERTAIN THE AC POWER SOURCE FOR THE SOLDERING IRON DOES NOT LEAK

PRECAUTION OF SOLDERING TO THE LCM

- 1. OBSERVE THE FOLLOWING WHEN SOLDERING LEAD WIRE, CONNECTOR CABLE AND ETC. TO THE LCD MODULE.
- SOLDERING IRON TEMPERATURE: 300~350°C.
- SOLDERING TIME: ≤3 SEC.
- SOLDER: FLITECTIC SOLDER

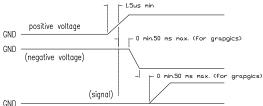
30. IF THE DISPLAY SURFACE BECOMES CONTAMINATED, BREATHE ON THE SURFACE AND GENTLY WIPE IT WITH ABOVE IS A RECOMMENDED APPROACH. DUE TO DIFFERENT SOLDER COMPOSITION AND PROCESSING METHOD, A SOFT DRY CLOTH. IF IT IS HEAVILY CONTAMINATED, MOSTEN CLOTH WITH ISOPROPYL ALCOHOL OR ETHYL. IT IS RECOMMENDED THAT CUSTOMER TO STUDY AND FINE TUNING THEIR SOLDERING PROCESS PARAMETERS ACCORDINGLY

2 IF SOLDERING FLUX IS LISED, BE SURE TO REMOVE ANY REMANING FLUX AFTER FINISHING TO SOLDERING OPERATION. (THIS DOSE NOT APPLY IN THE CASE OF A NON-HALOGEN TYPE OF FLUX) IT IS RECOMMENDED THAT YOU PROTECT THE LCD SURFACE WITH A COVER DURING SOLDERING TO PREVENT ANY DAMAGE DUE TO FLUX SPATTERS.

PRECAUTION FOR OPERATION

- 1. VIEWING ANGLE VARIES WITH THE CHANGE OF LIQUID CRYSTAL DRIVING VOLTAGE (Vo). ADJUST Vo TO SHOW THE BEST CONTRAST
- 2. DRIVING THE LCD IN THE VOLTAGE ABOVE THE LIMIT SHORTERNS ITS LIFETIME.
- RESPONSE TIME IS GREATLY DELAYED AT TEMPERATURE BELOW THE OPERATING TEMPERATURE RANGE. HOWEVER, IT WILL RECOVER WHEN IT RETURNS TO THE SPECIFIED TEMPERATURE RANGE.
- HOWEVER, IT WILL RECOVER WHEN IT RETURNS TO THE SPECIFIED FEMTERATURE RANGE.

 4. IF THE DISPLAY AREA IS PUSHED HARD DURING OPERATION, THE DISPLAY WILL BECOME ABNORMAL.
 HOWEVER, IT WILL RETURN TO NORMAL IF IT IS TURNED OFF AND THEN BACK ON.
- 5. WHEN TURNING THE POWER ON, INPUT EACH SIGNAL AFTER THE POSITIVE/NEGATIVE VOLTAGE BECOMES STABLE (BELOW FIGURE IS A GENERAL ILLUSRATION WHERE TYPICAL VALUE DEPENDS ON INDIVIDUAL PRODUCT



T LEAK.

UNCONTROLLED DOCUMENT

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

REV. PART NUMBER LCT-H320240M57W

5.7" ACTIVE MATRIX FULL COLOR TFT PANEL 6:00 VIEW, LED BACKLIGHT, -20°C TO +70°C OPERATING TEMP

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RELIABILITY NOTE

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.

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REV.

PART NUMBER LCT-H320240M57W

Rohs Compliant Product

1. CADMIUM AND CADMIUM COMPOUNDS LESS THAN 100PPM 2. HEXAVALENT CHROMIUM COMPOUNDS LESS THAN 1000PPM LESS THAN 1000PPM 3. LEAD AND LEAD COMPOUNDS 4. MERCURY AND MERCURY COPMPOUNDS LESS THAN 1000PPM 5. POLYBROMINATED BIPHENYLS (PBBs) LESS THAN 1000PPM 6. POLYBROMINATED DIPHENYL ETHERS (PBDEs) LESS THAN 1000PPM

PACKAGING STANDARD

PRODUCT NO.	LCT-H320240M57W	RELEASE DATE	04/APR. 2007
PRODUCT NAME.	TFT MODULE	PREPARE BY:	
SUPPLIER	JETUP ELECTRONIC (SHENZHEN) CO LTD	RECYCLE	NO
QUANTITY/ EACH BOX	168 PCS.	BOX MATERIAL	PAPER CARTON
OUTER CARTON BOX SIZE	465mm x 405mm x 305mm	BOX TYPE	NEW
QUANTITY/ INER BOX QUANTITY/ OUTER BOX	12 X 7 X 2 = 168 PCS.	WEIGHT	8.6 KG

THERE ARE 12 PCS LCD PER EACH ANTI-STATIC PLASTIC PLATE. THERE ARE 7 LAYER PLASTIC PLATES PER EACH INNER CARTON BOX. THERE ARE 2 INNER CARTON BOX PER EACH OUTER CARTON BOX.

STORAGE

- 1. WHEN STORING LCDS AS SPARES FOR SOME YEARS, THE FOLLOWING PRECAUCTIONS ARE NECESSARY.
- 2. STORE THEM IN A SEALED POLYETHYLENE BAG, IF PROPERLY SEALED, THERE IS NO NEED FOR DESICCANT.

 3. STORE THEM IN A DARK PLACE. DO NOT EXPOSE TO SUNLIGHT OR FLUORESCENT LIGHT, KEEP THE TEMPERATURE BETWEEN 0°C AND 35°C.
- 4. ENVIRONMENTAL CONDITIONS:
- 5. DO NOT LEAVE THEM FOR MORE THAN 168HRS. AT 60°C.
- 6. SHOULD NOT BE LEFT FOR MORE THAN 48HRS. AT -20°C.

<u>SAFETY</u>

1. ITS RECOMMENDED TO CRUSH DAMAGED OR UNNECESSARY LCD INTO PIECES AND WASH THEM OFF WITH SOLVENTS SUCH AS ACETONE AND ETHANOL, WHICH SHOULD LATER BE BURNED.

2. IF ANY LIQUID LEAKS OUT OF DAMAGED GLASS CELL AND COMES IN CONTACT WITH THE HANDS, WASH

OFF THOROUGHLY WITH SOAP AND WATER.

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6:00 VIEW, LED BACKLIGHT, -20°C TO +70°C OPERATING TEMP

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