

液晶显示模组规格书

LCD MODULE SPECIFICATION

MODEL NO(模组型号):

YC-177CL2002W40-80D00-A00

拟制			审核			批准		
DESIGNED	CHECKED	APPROVED	DESIGNED	CHECKED	APPROVED	DESIGNED	CHECKED	APPROVED



ISO9001:2008 版
质量体系认证



修改记录 Records of Revision

日期 DATE	版本 VERSION	修改摘要 SUMMARY	拟制 DESIGNED	备注 REMARK
2016-03-07	00	初版发行	HZL	

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1. 产品特征 Product Features

项目 (Item)	描述(Description)
(1) 显示类型 (Display Type)	1.77 inch TFT Normally white
(2) 分辨率 (Resolution)	128*RGB*160
(3) 显示色彩 (color)	65K/262K
(4) 视角 (View Angle)	12 O'CLOCK
(5) 驱动IC (Driver IC)	GC9102D
(6) 接口类型 (Interface Types)	MCU_8 Bit
(7) 背光模式 (Backlight)	并联 2 颗灯
(8) 触摸屏 (Touch Panel)	无

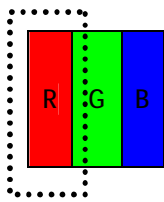
2. 物理规格 Physical Specifications

项目 (Item)	规格 (Specification)	单位 (Units)
(1) 外形尺寸(Outline Dimension)	34.70*46.70*2.35	mm
(2) 显示区尺寸(Active Area Dimension)	28.03*35.04	mm
(3) 解析度(Resolution Dimension)	128*RGB*160	/
(4) 像素点尺寸(Pixel Pitch Dimension)	0.073*0.219	mm
(5) 结构类型(Structure Type)	COG+FPC+BL (note)	/

Note: COG: Chip On Glass (LCD+IC); BL: Backlight; TP: Touch Panel

3. 产品图纸 Product Drawings

(见下页)

3.0	偏光片划伤 Polarizer scratch	<table border="1"> <tr> <th>Width(mm)</th> <th>Length(mm)</th> <th>允许数量 Acceptable Qty</th> </tr> <tr> <td>$W \leq 0.03$</td> <td>忽略 Ignore</td> <td>忽略 Ignore</td> </tr> <tr> <td>$0.03 < W \leq 0.05$</td> <td>$L \leq 2$</td> <td>2</td> </tr> <tr> <td>$0.05 < W \leq 0.10$</td> <td>$L \leq 1$</td> <td>1</td> </tr> <tr> <td colspan="2">$W > 0.10\text{mm}$ or $L > 2\text{mm}$</td> <td>0</td> </tr> </table>	Width(mm)	Length(mm)	允许数量 Acceptable Qty	$W \leq 0.03$	忽略 Ignore	忽略 Ignore	$0.03 < W \leq 0.05$	$L \leq 2$	2	$0.05 < W \leq 0.10$	$L \leq 1$	1	$W > 0.10\text{mm}$ or $L > 2\text{mm}$		0	
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	偏光片气泡 Polarizer Bubble	<table border="1"> <tr> <th>Zone Size (mm)</th> <th>允许数量 Acceptable Qty</th> </tr> <tr> <td>$\Phi \leq 0.1$</td> <td>忽略 Ignore</td> </tr> <tr> <td>$0.1 < \Phi \leq 0.2$</td> <td>2</td> </tr> <tr> <td>$0.2 < \Phi \leq 0.3$</td> <td>1</td> </tr> <tr> <td>$0.3 < \Phi$</td> <td>0</td> </tr> </table>	Zone Size (mm)	允许数量 Acceptable Qty	$\Phi \leq 0.1$	忽略 Ignore	$0.1 < \Phi \leq 0.2$	2	$0.2 < \Phi \leq 0.3$	1	$0.3 < \Phi$	0						
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$0.3 < \Phi$	0																	
4.0	贴片电子元器件 SMT	根据<电子组件接受 IPC-A-610C 2 级标准>。组件丢失或功能缺陷是主要的缺陷，其他是次要缺陷。According to the <Acceptability of electronic assemblies> IPC-A-610C class 2 standard. Component missing or function defect are Major defect, the others are Minor defect.																
5.0	TFT	<table border="1"> <thead> <tr> <th>区分 distinguish</th> <th>类型 type</th> <th>允许数量 Acceptable Qty</th> </tr> </thead> <tbody> <tr> <td rowspan="2">亮点 Bright dot</td> <td>任何颜色 Any color window</td> <td>0</td> </tr> <tr> <td>相邻的亮点 Adjacent Bright dot</td> <td>0</td> </tr> <tr> <td rowspan="2">黑点 Dark dot</td> <td>黑点 Dark dot</td> <td>1</td> </tr> <tr> <td>相邻黑点 Adjacent Dark dot</td> <td>0</td> </tr> </tbody> </table> <p>Note: the red (R), green (G), blue (B) 3 points constitute a pixel</p>	区分 distinguish	类型 type	允许数量 Acceptable Qty	亮点 Bright dot	任何颜色 Any color window	0	相邻的亮点 Adjacent Bright dot	0	黑点 Dark dot	黑点 Dark dot	1	相邻黑点 Adjacent Dark dot	0	 <p>Dot</p>		
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9.1.5 功能性标准 Criteria (functional items)

项目 Items	标准 Criteria
无显 No display	不允许; Not allowed
显示异常 Display abnormally	不允许; Not allowed
缺画 Missing vertical, horizontal	不允许; Not allowed
组件分离 Segment	不允许; Not allowed
短路 Short circuit	不允许; Not allowed
背光不亮 Back-light no lighting,	不允许; Not allowed
背光闪烁或异常 Flickering and abnormal lighting	不允许; Not allowed
信号交叉串扰 Cross-Talk	不允许; Not allowed
噪声 Noise	不允许; Not allowed

	2.Air discharge method $\pm 8KV, 150pF/330\Omega$ 10times	5pcs	表现或电气性能。 2. 在可以接受时，所有有缺陷的现象在ESD复位后消失。 1. After testing, there are no any defective appearances or electrical properties. 2. It can be acceptable when all defective ESD disappears in the RESET.
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9.3 安全说明 Safety instructions

- 9.3.1 如果液晶面板断裂，小心不要让任何液晶物质进入到口中；
If the LCD panel breaks, be careful not to get any liquid crystal substance in your mouth.
- 9.3.2 如果液晶物质触及你的皮肤或衣物，请立即用肥皂和水清洗干净；
If the liquid crystal substance touches your skin or clothes, please wash it off immediately by using soap and water.

9.4 模组使用注意事项 Handling Precautions

- 9.4.1 客户在做结构设计时，请保证机壳开窗尺寸比触摸屏 V.A 单边少 0.3mm，泡棉开窗尺寸比触摸屏 V.A 单边大 0.2mm；
Customers do structural design, please ensure the cabinet window size smaller than the touch screen VA unilateral 0.3mm. Foam window size larger than 0.2mm unilateral touchscreen V.A
- 9.4.2 防止静电损坏集成电路
Avoid static electricity damaging the LSI.
- 9.4.3 不要从模块中拆下玻璃面板或铁框支架
Do not remove the panel or frame from the module .
- 9.4.4 显示屏的偏光片是很脆弱的。所以请注意要非常小心，避免损坏；
The polarizing plate of the display is very fragile . So, please handle it very carefully.
- 9.4.5 不要用于布擦拭偏光片，因为很容易刮伤到它的表面；
Do not wipe the polarizing plate with a dry cloth, as it may easily scratch the surface of the plate.
- 9.4.6 显示颜色和背景色调有可能随着储存温度范围的变化而发生改变；
The color tone of display and background of LCM has the possibility to be changed in the storage temperature range.
- 9.4.7 注意工作使用环境，产品可能会被静电所损坏；
Pay attention to the working environment, as the element may be destroyed by static electricity.
--确保使用作业人员身体可靠的接地；
Be sure to ground human body and electric appliance during work.
--避免在干燥的环境中作业，减少静电的损害；
Avoid working in a dry environment to minimize the generations of static electricity.
--在作业过程中，快速剥离保护膜时可能会引起静电；
Static electricity may be generated when the protective film is fast peeled off.
- 9.4.8 当焊接 LCM 端子时，确保使用交流电源的烙铁不漏电；
When soldering the terminal of LCM, make certain the AC power source of soldering iron does not leak.
- 9.4.9 潮湿的环境可能引起玻璃 ITO 的腐蚀，在使用中，请确保湿度在 50%以下。
Humid environment may cause a bad ITO glass corrosion, in use, make sure the humidity is below 50%.
- 9.4.10 如果液晶显示模组的表面被污染，可以使用柔软的无尘布在表面上轻轻的擦拭。如果是严重的污染，可以用无尘布蘸上酒精轻轻擦拭。特别是不可使用可能损坏偏光片的溶剂（例如：水/酮）
If the display surface becomes contaminated ,breathe on the surface and gently wipe it with a soft-dry- clean cloth .If it is heavily contaminated ,moisten cloth with the following solvent(ex:Ethyl alcohol).Solvents other than those above-mentioned may damage the polarizer(Especially ,do not use them .ex: Warter / Ketone)

