

深圳市兴邦达显示技术有限公司

样品规格承认书 Specification

客户名称(CUSTOMER)

:

型号名称(LCM CODE (Ver.))

:

XBD572-IPS-HI010A

描述(Description)

:

5.72" a-Si TFT 液晶显示屏

客户确认:

CUSTOMER
APPROVED:

APPROVED BY

CHECK BY

PREPARED BY

LCM SPECIFICATION

1. SPECIFICATIONS

1.1 Features

Item	Standard Value
Display Type	720(R+G+B) * 1440 Dots
LCD Type	a-Si TFT, Positive, Transmissive
Viewing Direction	ALL O'clock
Backlight	14 LED White Color
Interface	MIPI interface
Controller/driver IC	JD9365DA

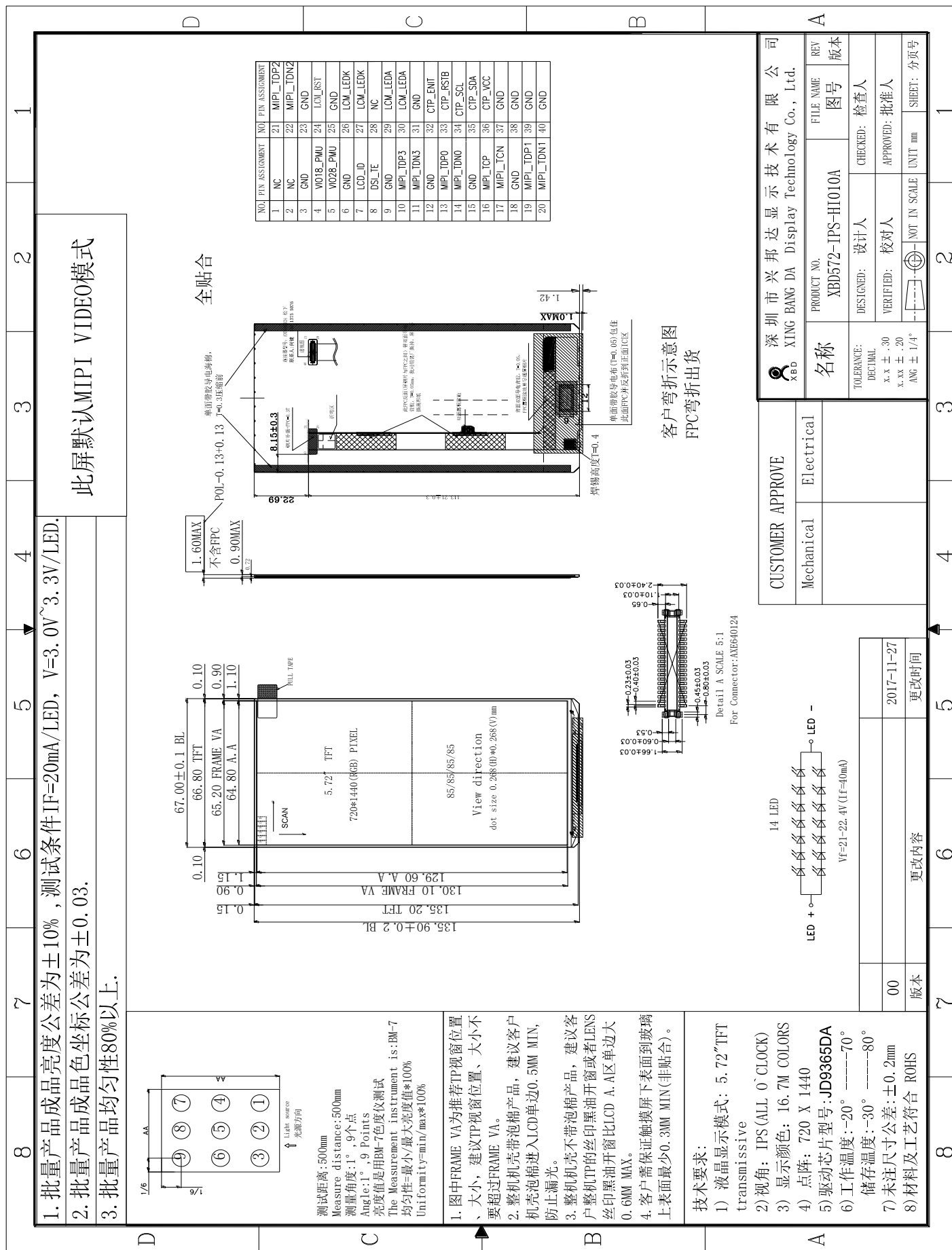
1.2 Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	67 (W) x 135.9 (L) x 1.6MAX(T)	mm
Viewing Area	65.2(W) x130.1(L)	mm
Active Area	64.8 (W) x129.6 (L)	mm
Pixel pitch	0.268(H) x 0.268 (V)	mm

Note : For detailed information please refer to LCM drawing

1.3 Absolute Maximum Ratings

Item	Symbol	Condition	Min.	Max.	Unit
Power Supply Voltage	V _{DD}	-	-0.3	4.6	V
LCD Driver Supply Voltage	V _{GH-VSS}	-	-0.3	18.5	V
Input voltage	V _{in}		-0.3	4.6	V
Operating Temperature	T _{OP}	-	-20	+70	°C
Storage Temperature.	T _{ST}	-	-30	+80	°C
Storage Humidity	H _D	Ta < 40 °C	-	90	%RH



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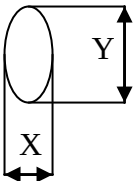
2.2 Interface Pin Description

NO	SYMBOL	FUNCTION
1-2	NC	NC
3	GND	GROUND
4	IOVCC	POWER SUPPLY FOR INTERFACE PINS(1.8/2.8V)
5	VCC/VIO28_PMU	POWER SUPPLY FOR INTERFACE PINS(2.8V)
6	GND	GROUND
7	ID	ID
8	TE	FMARK SIGNAL
9	GND	GROUND
10	D3P	MIPI-DSI DATA LANE 3 POSITIVE-END INPUT/OUTPUT PIN
11	D3N	MIPI-DSI DATA LANE 3 POSITIVE-END INPUT/OUTPUT PIN
12	GND	GROUND
13	D0P	MIPI-DSI DATA LANE 0 POSITIVE-END INPUT/OUTPUT PIN
14	D0N	MIPI-DSI DATA LANE 0 POSITIVE-END INPUT/OUTPUT PIN
15	GND	GROUND
16	CP	MIPI-DSI CLOCK LANE POSITIVE-END INPUT PIN
17	CN	MIPI-DSI CLOCK LANE POSITIVE-END INPUT PIN
18	GND	GROUND
19	D1P	MIPI-DSI DATA LANE 1 POSITIVE-END INPUT/OUTPUT PIN
20	D1N	MIPI-DSI DATA LANE 1 POSITIVE-END INPUT/OUTPUT PIN
21	D2P	MIPI-DSI DATA LANE 2 POSITIVE-END INPUT/OUTPUT PIN
22	D2N	MIPI-DSI DATA LANE 2 POSITIVE-END INPUT/OUTPUT PIN
23	GND	GROUND
24	RESET	Chip reset signal ("L" →Active)
25	GND	GROUND
26-27	LEDK	BACK LIGHT -
28	NC	NC
29-30	LEDA	BACK LIGHT +
31	GND	GROUND
32	CTP_ENIT	CTP_ENIT
33	CTP_RSTB	CTP_RSTB
34	CTP_SCL	CTP_SCL
35	CTP_SDA	CTP_SDA
36	CTP_VCC	CTP_VCC
37-40	GND	GROUND

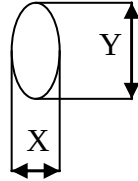
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3. INSPECTION SPECIFICATION

NO.	项目 Item	检验标准 Inspection Standard	判断 Result	备注 Note
1	整体功能 All functional defects	1) 不显示 No display 2) 显示异常 Display abnormally 3) 缺划 (横或竖, 横&竖) Missing vertical, horizontal segment 4) 短路 Short circuit 5) 背光不亮或闪烁 Backlight no lighting, flickering and abnormal lighting.	不允许 Reject	
2	缺失 Missing	少成分 Missing component	不允许 Reject	
3	外观尺寸 Outline dimension	同 CD 图 Overall outline dimension beyond the drawing is not allowed		

NO.	项目 Item	检验标准 Inspection Standard	备注 Note																	
4	清楚的黑白点 Clear Spots	$\phi = (X+Y) / 2$  A: AA 区 (显示区) B: VA 区 (可视区) C: 可视区以外(Out of VA) <table border="1"> <thead> <tr> <th rowspan="2">区域 Zone 尺寸 Size</th><th colspan="3">接受个数 Acceptable Quantity</th></tr> <tr> <th>A</th><th>B</th><th>C</th></tr> </thead> <tbody> <tr> <td>$\phi \leq 0.1\text{mm}$</td><td colspan="3">Ignore</td></tr> <tr> <td>$0.1\text{mm} < \phi \leq 0.2\text{mm}$</td><td colspan="3" rowspan="3">Ignore</td></tr> <tr> <td>$0.2\text{mm} < \phi \leq 0.25\text{mm}$</td></tr> <tr> <td>$\phi > 0.25\text{mm}$</td></tr> </tbody> </table>	区域 Zone 尺寸 Size	接受个数 Acceptable Quantity			A	B	C	$\phi \leq 0.1\text{mm}$	Ignore			$0.1\text{mm} < \phi \leq 0.2\text{mm}$	Ignore			$0.2\text{mm} < \phi \leq 0.25\text{mm}$	$\phi > 0.25\text{mm}$	
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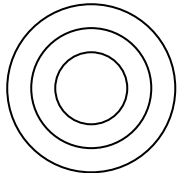
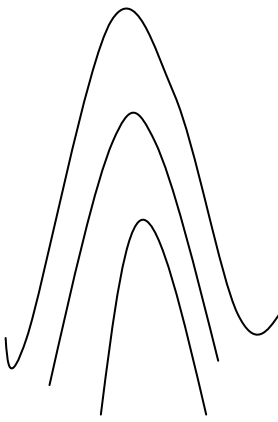
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5	不明显的黑白点 Dim Spots	$\phi = (X+Y) / 2$ A: AA 区（显示区） B: VA 区（可视区） C: 可视区以外(Out of V.A.) 																																
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6	线不良 Line defect	<table><tr><th colspan="2">尺寸 Size（mm）</th><th colspan="3">接受个数 Acceptable Quantity</th></tr><tr><th>L（Length）</th><th>W（width）</th><th>A</th><th>B</th><th>C</th></tr><tr><td>Ignore</td><td>$W \leq 0.03$</td><td colspan="3">Ignore</td><td rowspan="3">Ignore</td></tr><tr><td>$L < 5.0$</td><td>$0.03 < W \leq 0.05$</td><td colspan="3">2</td></tr><tr><td></td><td>$0.05 < W$</td><td colspan="3">以脏污论 Define as spot defect</td></tr></table>	尺寸 Size（mm）		接受个数 Acceptable Quantity			L（Length）	W（width）	A	B	C	Ignore	$W \leq 0.03$	Ignore			Ignore	$L < 5.0$	$0.03 < W \leq 0.05$	2				$0.05 < W$	以脏污论 Define as spot defect								
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7	偏光片刮伤 Polarizer Scratch	<table><tr><th colspan="2">尺寸 Size（mm）</th><th colspan="3">Acceptable Quantity</th></tr><tr><th>L（Length）</th><th>W（width）</th><th>A</th><th>B</th><th>C</th></tr><tr><td>Ignore</td><td>$W \leq 0.03$</td><td colspan="3">Ignore</td><td rowspan="4">Ignore</td></tr><tr><td>$L \leq 10$</td><td>$0.03 < W \leq 0.05$</td><td colspan="3">2</td></tr><tr><td>$L < 5.0$</td><td>$0.05 < W \leq 0.08$</td><td colspan="3">1</td></tr><tr><td></td><td>$0.08 < W$</td><td colspan="3">0</td></tr></table>	尺寸 Size（mm）		Acceptable Quantity			L（Length）	W（width）	A	B	C	Ignore	$W \leq 0.03$	Ignore			Ignore	$L \leq 10$	$0.03 < W \leq 0.05$	2			$L < 5.0$	$0.05 < W \leq 0.08$	1				$0.08 < W$	0			
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8	偏光片与玻璃间气泡 Polarize Air bubble					
		区域 Zone 尺寸 Size		接受个数 Acceptable Quantity		
				A	B	C
		$\phi \leq 0.2\text{mm}$		Ignore		Ignore
		$0.2\text{mm} < \phi \leq 0.3\text{mm}$		2		
		$0.3\text{mm} < \phi \leq 0.5\text{mm}$		1		
		$\phi > 0.5\text{mm}$		0		

牛顿环/干涉纹 Newton Ring

NO.	项目 Item	检验标准 Inspection Standard	备注 Note
9	规则 Inerratic	1. 在整个触摸屏检查区域内（可视区）超过 1/3 范围, 不可; When Newton ring dimension is more than 1/3 of sample dimension, it is regarded as a defect. 2. 直径$\leq 5\text{mm}$, 且在整个触摸屏检查区（可视区）域小于 1/3 范围, 不影响透过率及失真; 不计 When Newton ring dimension is less than 1/3 of sample dimension is not affect font effect and line distortion under a ceiling fluorescent light, it is acceptable.	
10	不规则 Atactic	1. 在照明环境下牛顿环有影响清晰度和透过率, 失真; 不可。As long as Newton ring affects font effect and line distortion under a ceiling fluorescent light, it is regarded as a defect. 在整个触摸屏检查区域（可视区）内, 超过 1/2, 不可。 $\phi \leq 10\text{mm}$; 不计。 When $\phi \leq 10\text{mm}$, it is acceptable	

4. PRECAUTION RELATING PRODUCT HANDLING

4.1 SAFETY

- 4.1.1 If the LCD panel breaks , be careful not to get the liquid crystal to touch your skin.
- 4.1.2 If the liquid crystal touches your skin or clothes , please wash it off immediately by using soap and water.

4.2 HANDLING

- 4.2.1 Avoid any strong mechanical shock which can break the glass.
- 4.2.2 Avoid static electricity which can damage the CMOS LSI—When working with the module, be sure to ground your body and any electrical equipment you may be using.
- 4.2.3 Do not remove the panel or frame from the module.
- 4.2.4 The polarizing plate of the display is very fragile. So , please handle it very carefully, Do not touch, push or rub the exposed polarizing with anything harder than an HB pencil lead (glass , tweezers , etc.)
- 4.2.5 Do not wipe the polarizing plate with a dry cloth, as it may easily scratch the Surface of plate.
- 4.2.6 Do not touch the display area with bare hands , this will stain the display area.
- 4.2.7 Do not use ketonic solvent & aromatic solvent. Use with a soft cloth soaked with A cleaning naphtha solvent.
- 4.2.8 To control temperature and time of soldering is $280 \pm 10^{\circ}\text{C}$ and 3-5 sec.
- 4.2.9 To avoid liquid (include organic solvent) stained on LCM.

4.3 STORAGE

- 4.3.1 Store the panel or module in a dark place where the temperature is $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and the humidity is below 65% RH.
- 4.3.2 Do not place the module near organics solvents or corrosive gases.
- 4.3.3 Do not crush, shake , or jolt the module.