

## 产品规格承认书

### Product Specifications for Approval

日欣型号(NISIN Model): NS1010WX4001BZ01

客户名称(Customer) : \_\_\_\_\_

|                       |                |         |
|-----------------------|----------------|---------|
| 客户型号(Customer Model): |                |         |
| Approved by Customer  |                |         |
| 结构(Mechanica)         | 电子(Electronic) | 项目 (PM) |
|                       |                |         |

|                              |         |          |
|------------------------------|---------|----------|
| 日欣光电 (NISIN Optoelectronics) |         |          |
| Designed                     | Checked | Approved |
|                              |         |          |



修改记录

| 日期        | 版本  | 修改内容 | 页数 | 拟制 |
|-----------|-----|------|----|----|
| 2025.1.17 | V00 | 初版发行 | 所有 |    |
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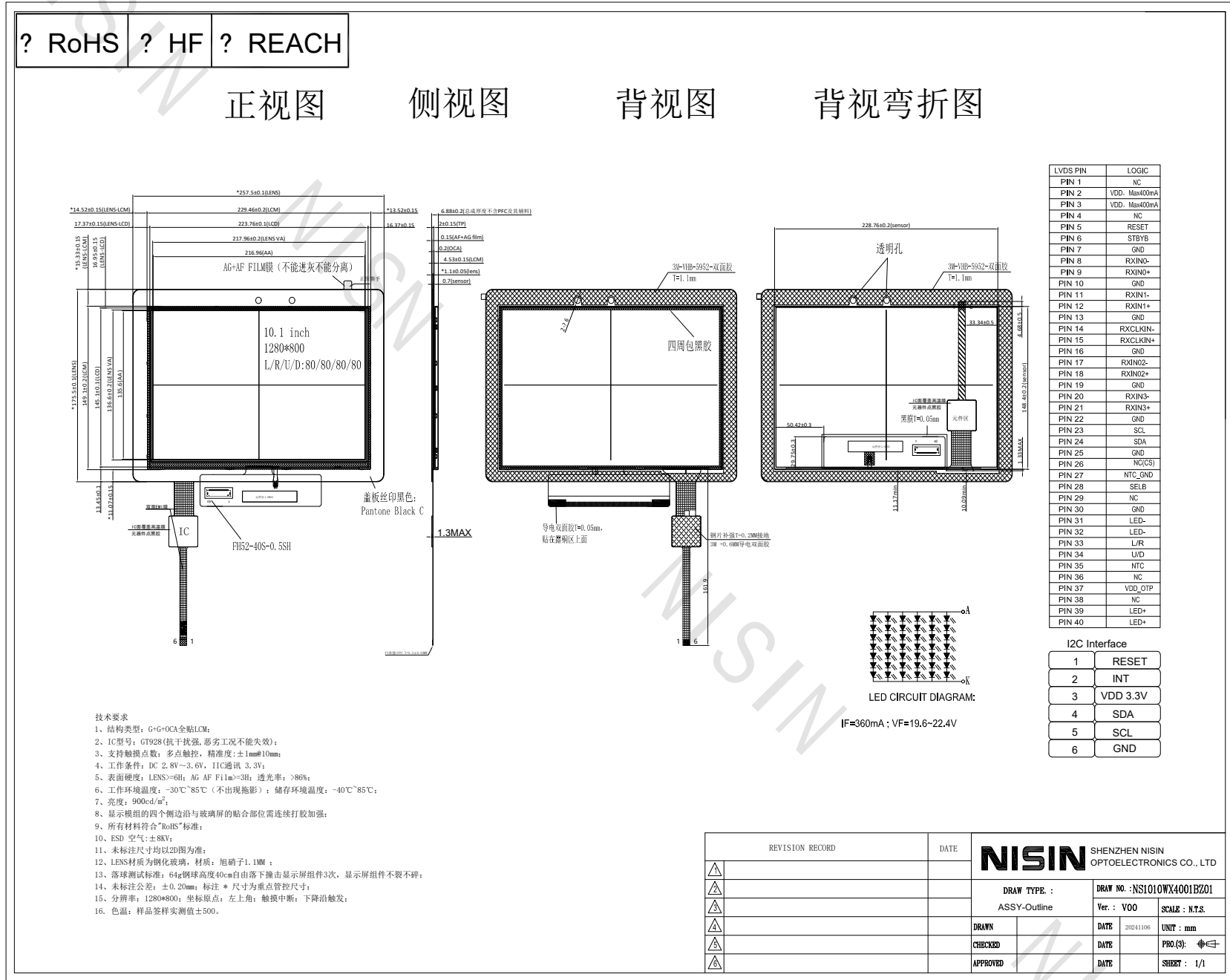
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1.产品规格（Product Specifications）

|                            |                                    |
|----------------------------|------------------------------------|
| 面板类型（Panel Type）           | TFT LCD                            |
| 面板尺寸(Panel Size)           | 10.1 inch                          |
| 显示类型（Display Type）         | Normal Black                       |
| 分辨率（Resolution）            | 1280(RGB) x 800(dot)               |
| 显示点间距（Dot Pitch）           | 0.1695mm X 0.1695mm                |
| 显示色彩（color）                | 16.7M                              |
| 视角（View Angle）             | U/D/L/R: 80/80/80/80(typ)          |
| 显示驱动 IC（Display Driver IC） | EK79202DB                          |
| 接口类型（Interface Type）       | LVDS                               |
| 触摸类型（TP Type）              | I2C                                |
| 触摸 IC（TP IC）               | GT928                              |
| 外形尺寸（Dimensions）           | 257.5(H) X 175.5 (V) X 6.88(T)(mm) |
| 显示区尺寸（Display area）        | 216.96x 135.6(mm)                  |
| 模组亮度（Module Brightness）    | 900Cd/m <sup>2</sup> （TYP）         |
| 触摸点数 Touch points          |                                    |
| 触摸按键 Touch Key Number      |                                    |
| 触摸屏固件版本                    | Version:                           |

## 2. 产品图纸 (Product Drawings)



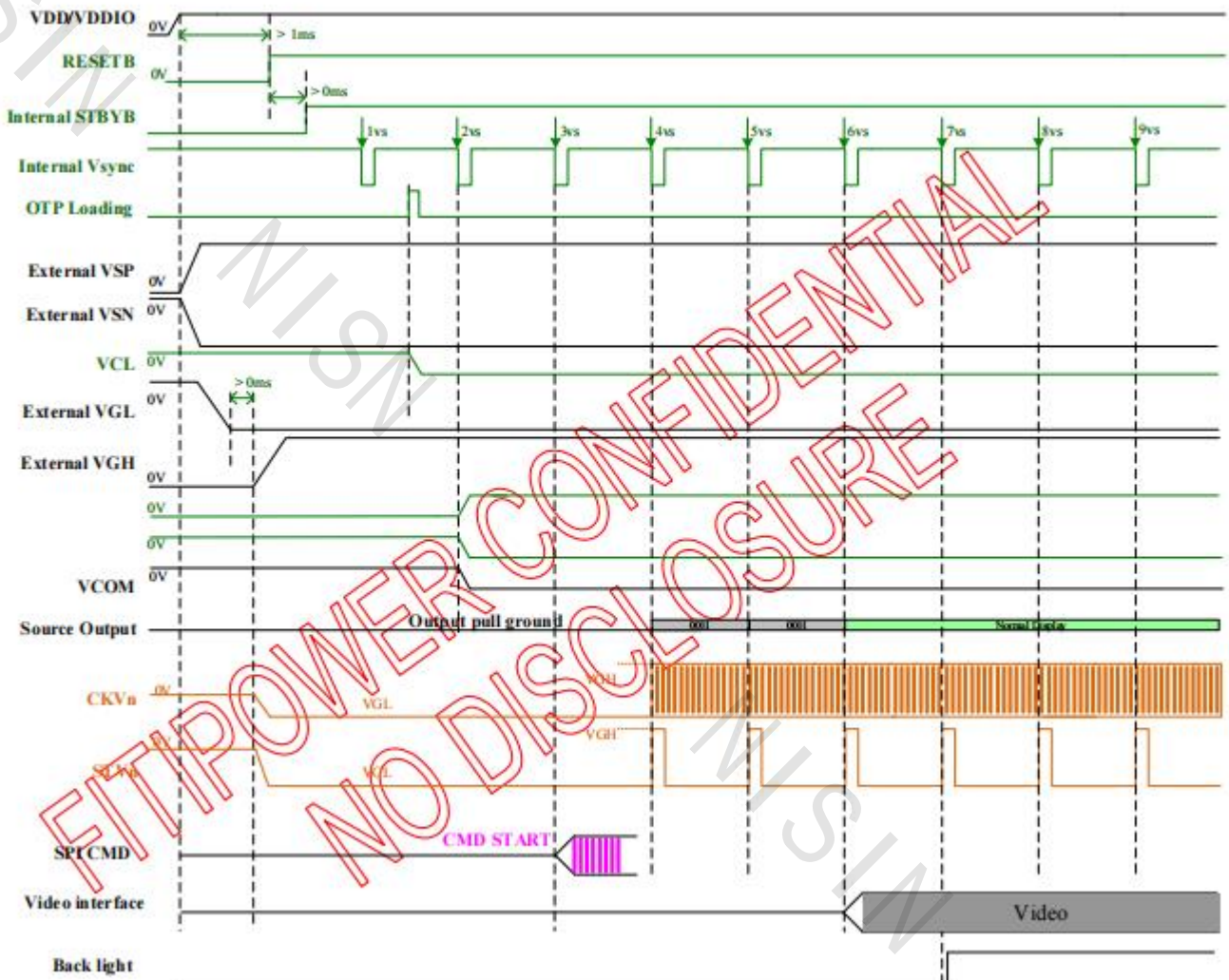
## 3.接口定义（The Interface Definition）

| Pin No. | Symbol   | I/O   | Function                                                                                                         |
|---------|----------|-------|------------------------------------------------------------------------------------------------------------------|
| 1       | NC       | -     | Keep floating                                                                                                    |
| 2       | VDD      | Power | External main and I/O power supply ; Power3V3                                                                    |
| 3       | VDD      | Power | External main and I/O power supply : Power3V3                                                                    |
| 4       | NC       | -     | Keep floating                                                                                                    |
| 5       | RESET    | Input | Global reset pin                                                                                                 |
| 6       | STBYB    | Input | Standby mode setting pin                                                                                         |
| 7       | GND      | Power | Ground                                                                                                           |
| 8       | RXIN0-   | Input | LVDS data 0-                                                                                                     |
| 9       | RXIN0+   | Input | LVDS data 0+                                                                                                     |
| 10      | GND      | Power | Ground                                                                                                           |
| 11      | RXIN01-  | Input | LVDS data 1-                                                                                                     |
| 12      | RXIN01+  | Input | LVDS data 1+                                                                                                     |
| 13      | GND      | Power | Ground                                                                                                           |
| 14      | RXCLKIN- | Input | LVDS clk -                                                                                                       |
| 15      | RXCLKIN+ | Input | LVDS clk +                                                                                                       |
| 16      | GND      | Power | Ground                                                                                                           |
| 17      | RXIN02-  | Input | LVDS data 2-                                                                                                     |
| 18      | RXIN02+  | Input | LVDS data 2+                                                                                                     |
| 19      | GND      | Power | Ground                                                                                                           |
| 20      | RXIN03-  | Input | LVDS data 3-                                                                                                     |
| 21      | RXIN03+  | Input | LVDS data 3+                                                                                                     |
| 22      | GND      | Power | Ground                                                                                                           |
| 23      | SCL      | -     | Serial interface clock input for I <sup>2</sup> C interface. IF not used, please keep floating.                  |
| 24      | SDA      | -     | Serial interface address and data input/output for I <sup>2</sup> C interface. IF not used, please keep floating |

|    |            |       |                                                                                                                 |
|----|------------|-------|-----------------------------------------------------------------------------------------------------------------|
| 25 | GND        | Power | Ground                                                                                                          |
| 26 | NC         | -     | Keep floating                                                                                                   |
| 27 | NTC_GND    | -     | IF not used, please keep floating                                                                               |
| 28 | SELB(DINT) | Input | Input input data format selection<br>DINT = 1 : 8-bit (Default)<br>DINT = 0 : 6-bit                             |
| 29 | NC         | -     | Keep floating                                                                                                   |
| 30 | GND        | Power | Ground                                                                                                          |
| 31 | LED-       | Power | Negative backlight voltage                                                                                      |
| 32 | LED-       | Power | Negative backlight voltage                                                                                      |
| 33 | L/R        | Input | Horizontal shift direction (source output) selection.<br>RL = 1: Left → Right (Default)<br>RL = 0: Right → Left |
| 34 | U/D        | Input | Vertical shift direction (gate output) selection.<br>TB = 1: Top → Bottom (Default)<br>TB = 0: Bottom → Top     |
| 35 | NTC        | -     | IF not used, please keep floating                                                                               |
| 36 | NC         | -     | Keep floating                                                                                                   |
| 37 | VDD_OTP    | -     | LCD Maker use, please keep floating                                                                             |
| 38 | NC         | -     | Keep floating                                                                                                   |
| 39 | LED+       | Power | Positive backlight voltage                                                                                      |
| 40 | LED+       | Power | Positive backlight voltage                                                                                      |

## 4.电性特性（Electrical Characteristics）

### Power on sequence





## Absolute maximum ratings

| Parameter              | Symbol | Spec. |      |            | Unit | Note |
|------------------------|--------|-------|------|------------|------|------|
|                        |        | Min.  | Typ. | Max.       |      |      |
| I/O voltage            | VDDIO  | -0.5  | -    | 4          | V    | -    |
| Interface supply power | VDD_IF | -0.5  | -    | 4          |      |      |
| Power input            | VDD    | -0.5  | -    | 4          | V    | -    |
| VSP supply power       | VSP    | -0.5  | -    | 6.6        | V    | -    |
| VSN supply power       | VSN    | -6.6  | -    | 0.3        | V    | -    |
| VGH supply power       | VGH    | -0.5  | -    | VGL_GIP+32 | V    | -    |
| VGL supply power       | VGL    | -17   | -    | 0.3        | V    | -    |
| Operating temperature  | Top    | -30   | -    | 85         | °C   | (1)  |
| Storage temperature    | Tstg   | -55   | -    | 125        | °C   | -    |

Note : 1) Do not let condensation for low temperature

| Parameter       | Symbol  | Spec. |      |      | Unit | Note                     |
|-----------------|---------|-------|------|------|------|--------------------------|
|                 |         | Min.  | Typ. | Max. |      |                          |
| VDD voltage     | VDD     |       | 3.3  | -    | V    | Analog supply voltage    |
| VDDIO voltage   | VDDIO   | -     | 3.3  | -    | V    | I/O Power supply voltage |
| VSP voltage     | VSP     | 4.5   | 5.0  | 6    | V    | VSP voltage              |
| VSN voltage     | VSN     | -6    | -5.0 | -4.5 | V    | VSN voltage              |
| VGH voltage     | VGH     | 11    | 18   | 24   | V    | VGH voltage              |
| VGL voltage     | VGL     | -17   | -12  | -6   | V    | VGL_ voltage             |
| VGL_REG voltage | VGL_REG | -15   | -10  | -4.5 | V    | VGL_REG voltage          |

## DC electrical characteristics

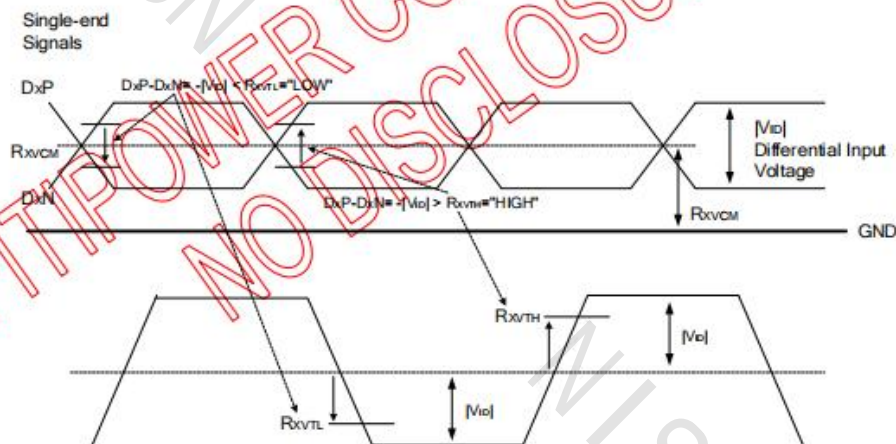
(Test condition: VDD=VDDIO=VDDIF=2.3~3.6V, TA=-30℃~+85℃, VSS=VSSA=0V)

| Parameter                      | Symbol                                     | Spec.                |       |             | Unit | Note |
|--------------------------------|--------------------------------------------|----------------------|-------|-------------|------|------|
|                                |                                            | Min.                 | Typ.  | Max.        |      |      |
| Input high level voltage       | V <sub>IH</sub>                            | 0.8 x VDDIO          |       | VDDIO       | V    |      |
| Input low level voltage        | V <sub>IL</sub>                            | VSS                  |       | 0.2 x VDDIO | V    |      |
| Input Leakage Current          | I <sub>leak</sub>                          | (-1)                 |       | (+1)        | μA   |      |
| Output high level voltage      | V <sub>OH</sub>                            | 0.8 x VDDIO          |       | VDDIO       | V    |      |
| Output low level voltage       | V <sub>OL</sub>                            | VSS                  |       | 0.2 x VDDIO | V    |      |
| VGH_REG output voltage         | VGH_REG                                    | 9                    | 16    | 22          | V    |      |
| VGL_REG output voltage         | VGL_REG                                    | -15                  | -10   | -4.5        |      |      |
| VGMP output voltage            | VGMP                                       | 3.5                  | 4.24  | 5.8         | V    |      |
| VGMN output voltage            | VGMN                                       | -5.8                 | -4.84 | -3.5        | V    |      |
| VGL output voltage             | VGL                                        | -17                  | -12   | -6          | V    |      |
| VGH output voltage             | VGH                                        | 11                   | 18    | 24          | V    |      |
| VCL output voltage             | VCL                                        | -3                   | -2.8  | -2.1        | V    |      |
| VCOM output voltage            | VCOM                                       | -2.405               | -1.5  | -0.5        | V    |      |
| Input terminal resistance      | Z <sub>IN</sub>                            |                      | 100   |             | ohm  |      |
| Source output level deviation  | Graycode = 0 ~ 14<br>Graycode = 241 ~ 255  |                      | TBD   |             | mV   |      |
|                                | Graycode = 15 ~ 31<br>Graycode = 208 ~ 240 |                      | TBD   |             | mV   |      |
|                                | Graycode = 32 ~ 207                        |                      | TBD   |             | mV   |      |
|                                |                                            |                      |       |             |      |      |
| Source output offset deviation | Graycode = 0 ~ 14<br>Graycode = 241 ~ 255  | -                    | TBD   |             | mV   |      |
|                                | Graycode = 15 ~ 31<br>Graycode = 208 ~ 240 | -                    | TBD   |             | mV   |      |
|                                | Graycode = 32 ~ 207                        | -                    | TBD   |             | mV   |      |
|                                |                                            |                      |       |             |      |      |
| Current consumption            | Analog Operating                           | IAOP                 | TBD   |             | mA   |      |
|                                | Analog Stand-by                            | I <sub>AST</sub>     | TBD   |             | mA   |      |
| Rush current                   |                                            | I <sub>vddpeak</sub> | TBD   |             | mA   |      |

## LVDS DC electrical characteristics

(VDD=VDDIO=VDDIF=2.3 to 3.6V, VSS=VSSA=VSS, IF=0V, TA=-30 to +85°C)

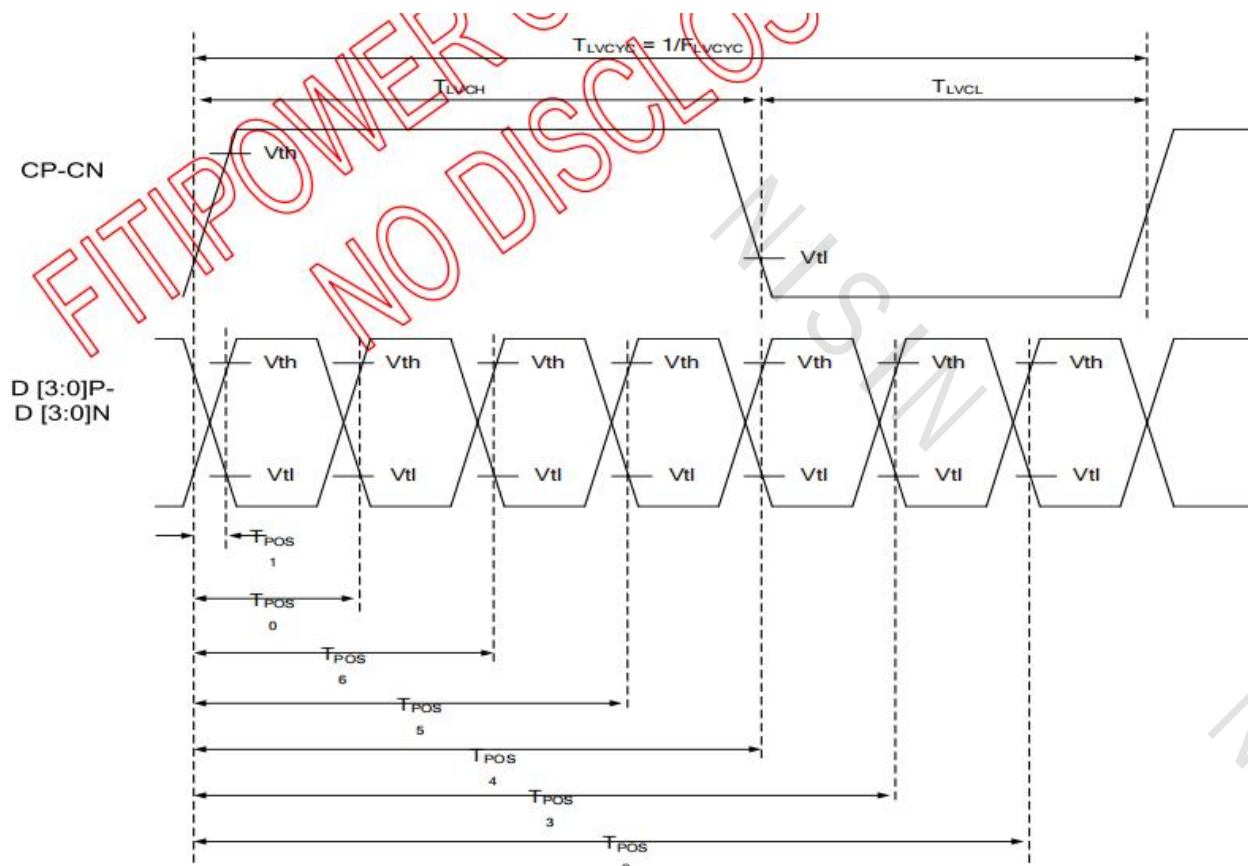
| Parameter                                 | Symbol        | Min. | Typ. | Max. | Unit | Condition                                                     |
|-------------------------------------------|---------------|------|------|------|------|---------------------------------------------------------------|
| Differential input high threshold voltage | $R_{XVTH}$    | -    | -    | +0.1 | V    | $R_{XVCM}=1.2V$                                               |
| Differential input low threshold voltage  | $R_{XVTL}$    | -0.1 | -    | -    | V    |                                                               |
| Input voltage range (singled-end)         | $R_{XVIN}$    | 0.7  | -    | 1.7  | V    |                                                               |
| Differential input common mode voltage    | $R_{XVCM}$    | 1    | 1.2  | 1.4  | V    | $ V_{IO} =0.2$                                                |
| Differential input impedance              | $Z_{ID}$      | 80   | 100  | 125  | ohm  |                                                               |
| Differential input voltage                | $ V_{IO} $    | 0.2  | -    | 0.6  | V    |                                                               |
| Differential input leakage current        | $I_{L, LVDS}$ | -10  | -    | +10  | uA   |                                                               |
| LVDS Digital Operating Current            | $I_{VDD}$     | -    | 15   | 20   | mA   | $F_{CLK}=80MHz$ , VDD=3.3V, Input pattern: 55h->Aah->55h->Aah |
| LVDS Digital Stand-by Current             | $I_{ST}$      | -    | -    | 250  | uA   | Clock & all Functions are stopped                             |





## LVDS signal characteristics

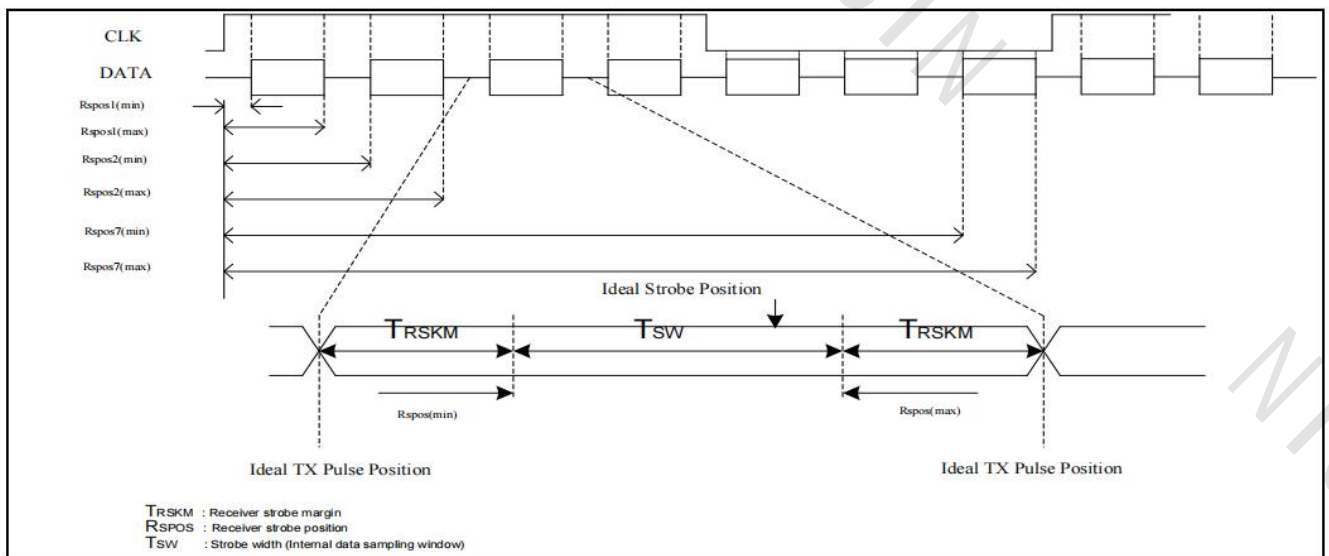
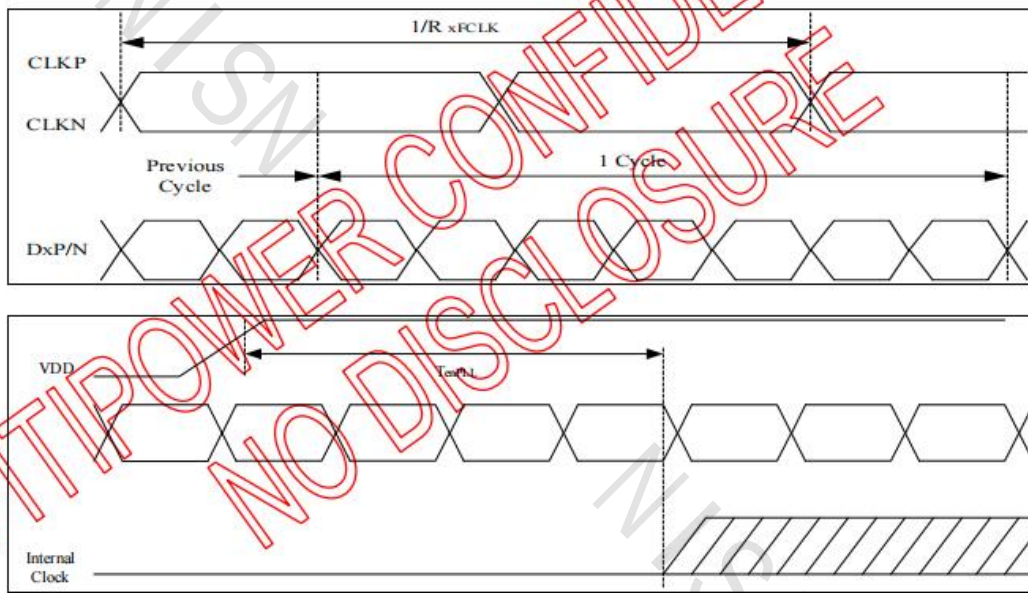
| Parameter         | Symbol        | Min. | Typ. | Max. | Unit         |
|-------------------|---------------|------|------|------|--------------|
| Clock frequency   | $F_{LV CYC}$  | 69.7 |      | 80.9 | MHz          |
| Clock period      | $T_{LV CYC}$  |      |      | -    | ps           |
| 1 data bit time   | UI            | -    | 1/7  | -    | $T_{LV CYC}$ |
| Clock high time   | $T_{LV CH}$   | 3.9  | 4    | 4.1  | UI           |
| Clock low time    | $T_{LV CL}$   | 2.9  | 3    | 3.1  | UI           |
| Position 1        | $T_{POS1}$    | -0.2 | 0    | 0.2  | UI           |
| Position 0        | $T_{POS0}$    | 0.8  | 1    | 1.2  | UI           |
| Position 6        | $T_{POS6}$    | 1.8  | 2    | 2.2  | UI           |
| Position 5        | $T_{POS5}$    | 2.8  | 3    | 3.2  | UI           |
| Position 4        | $T_{POS4}$    | 3.8  | 4    | 4.2  | UI           |
| Position 3        | $T_{POS3}$    | 4.8  | 5    | 5.2  | UI           |
| Position 2        | $T_{POS2}$    | 5.8  | 6    | 6.2  | UI           |
| Input eye width   | $T_{EYEW}$    | 0.6  |      | -    | UI           |
| Input eye border  | $T_{EX}$      | -    | -    | 0.2  | UI           |
| LVDS wake up time | $T_{EN LVDS}$ | -    | -    | 150  | us           |



## LVDS mode AC electrical characteristics

| Parameter              | Symbol      | Spec. |                     |      | Unit | Condition                                                |
|------------------------|-------------|-------|---------------------|------|------|----------------------------------------------------------|
|                        |             | Min.  | Typ.                | Max. |      |                                                          |
| Clock frequency        | $R_{xFCLK}$ | 30    | -                   | TBD  | MHz  | Refer to input timing table for each display resolution  |
| Input data skew margin | $T_{RSKM}$  | 500   | -                   | -    | ps   | $ VID  = 200mV$<br>$RxVCM = 1.2V$<br>$R_{xFCLK} = 81MHz$ |
| Clock high time        | $T_{LVCH}$  | -     | $4/(7 * R_{xFCLK})$ | -    | ns   |                                                          |
| Clock low time         | $T_{LVCL}$  | -     | $3/(7 * R_{xFCLK})$ | -    | ns   |                                                          |
| PLL wake-up time       | $T_{enPLL}$ | -     | -                   | 150  | us   |                                                          |

Table 13.1: LVDS mode AC electrical characteristics



Timing requirements for RESETB

When RESETB of the reset pin equals to Low, it will be in the condition of reset.  
When it is in the condition of reset, it will make the device recover the initial set.

However, in order to avoid the reset noise cause reset, there is a mechanism to judge about whether the reset is needed or not.

The closed interval of Low can be shown as the following.

(Test condition: VDDIO=2.3V~3.6V, VSS=0V, TA=-30 ~+85 )

| Parameter             | Symbol | Conditions | Spec. |      |     | Unit |
|-----------------------|--------|------------|-------|------|-----|------|
|                       |        |            | Min.  | Typ. | Max |      |
| Reset low pulse width | Trst   |            | 20    | -    | -   | μs   |



5.可靠性实验测试(Reliability Test Conditions And Methods)

| 序号 | 试验项目         | 试验条件及方法                                                                                  | 试验设备    | 检验项目                       | 检验工具            |
|----|--------------|------------------------------------------------------------------------------------------|---------|----------------------------|-----------------|
| 1  | 高温高湿(静、动态)试验 | 温度 60℃±3℃,湿度 90%±3%,要求选择时间分别为 96 小时,静、动态(产品点亮)在室温下恢复 2 小时后进行外观,显示功能全画面检查。 <u>成品要检触摸。</u> | 恒温恒湿试验机 | 检验外观、功能、底色、亮度、抗腐蚀性、粒子状态、触摸 | 目视/测试架/客户样机/显微镜 |
| 2  | 高、低温冲击试验     | 静态-30℃(30 分钟)~80℃(30 分钟)~ -30℃(30 分钟), 24 个循环,在室温下恢复 2 小时后进行外观,显示功能全画面检查。 <u>成品要检触摸。</u> | 冷热冲击试验机 | 检验外观、功能、底色、亮度、抗腐蚀性、粒子状态、触摸 |                 |
| 3  | 高温储存试验       | <u>温度80℃+/-3℃</u> 、试验箱内保存96小时后,在室温状态下恢复1 小时在2 小时内完成外观、显示功能全画面检查, <u>成品要检触摸。</u>          | 烤箱      | 检验外观、功能、底色、亮度、抗腐蚀性、粒子状态、触摸 | 目视/测试架/客户样机     |
| 4  | 高温工作         | <u>按LCD规格书</u> 、试验箱内保存96小时后,在室温状态下恢复1 小时在2 小时内完成外观、显示功能全画面检查。 <u>成品要检触摸</u>              | 烤箱      | 检验外观、功能、底色、亮度、抗腐蚀性、粒子状态、触摸 |                 |
| 5  | 低温储存         | 温度-30±3℃,试验箱内保存96小时后,在室温状态下恢复1 小时,在2 小时完成外观、显示功能全                                        | 低温冰箱    | 检验外观、功能、底色、亮度、抗腐           |                 |

|   |           |                                                                                                                                                                                                                                                                                                                              |                     |                                                              |                    |
|---|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------|--------------------|
|   | 试验        | 画面检查，特别注意检查是否有漏液、断线、腐蚀、偏光片不良现象。 <u>成品要检触摸。</u>                                                                                                                                                                                                                                                                               |                     | 蚀性、 <u>粒子状态、触摸</u>                                           |                    |
| 6 | 低温工作      | <u>按LCD规格书</u> 试验箱内点亮刷屏96小时，过程中每1小时观察一次，全画面检查显示功能，如：异常，卡机，花屏等。特别注意检查是否有漏液、断线、腐蚀、偏光片不良现象。 <u>成品要检触摸。</u>                                                                                                                                                                                                                      | 低温冰箱                | 检验外观、功能、 <u>底色、亮度、抗腐蚀性、粒子状态、触摸</u>                           | <u>目视/测试架/客户样机</u> |
| 7 | 盐雾试验      | 1.标准条件:中性盐雾试验（NSS 试验）: 5%的氯化钠盐水溶液,溶液 PH 值中性（6.5~7.2）,试验温度 $35\pm 2^{\circ}\text{C}$ , 盐雾的沉降率在 $1\sim 2\text{ml}/80\text{cm}^2.\text{h}$ 之间,时间 24h。2.其它特殊要求条件:醋酸盐雾试验(ASS 试验): 5%氯化钠溶液中配入冰醋酸,溶液 PH 值为 3 左右, 试验温度 $35\pm 2^{\circ}\text{C}$ ,盐雾的沉降率在 $1\sim 2\text{ml}/80\text{cm}^2.\text{h}$ 之间,时间 24h。全画面检查外观、功能，特别注意检查是否有腐蚀 | 盐雾试验设备              | 检验外观、功能，盐雾试验结果的判定方法，腐蚀物出现判定法：定性判定，试验后功能测试应 OK，外观观察产品无腐蚀现象产生。 | 目视/测试架/客户样机/显微镜    |
| 8 | ESD 防静电试验 | 测试架测试状态下试验: 接触 4KV,非接触(空气) 8KV 放电测试                                                                                                                                                                                                                                                                                          | 防静电枪（尖头接触放电，圆头空气放电） | 检验外观、功能                                                      | 目视/测试架             |



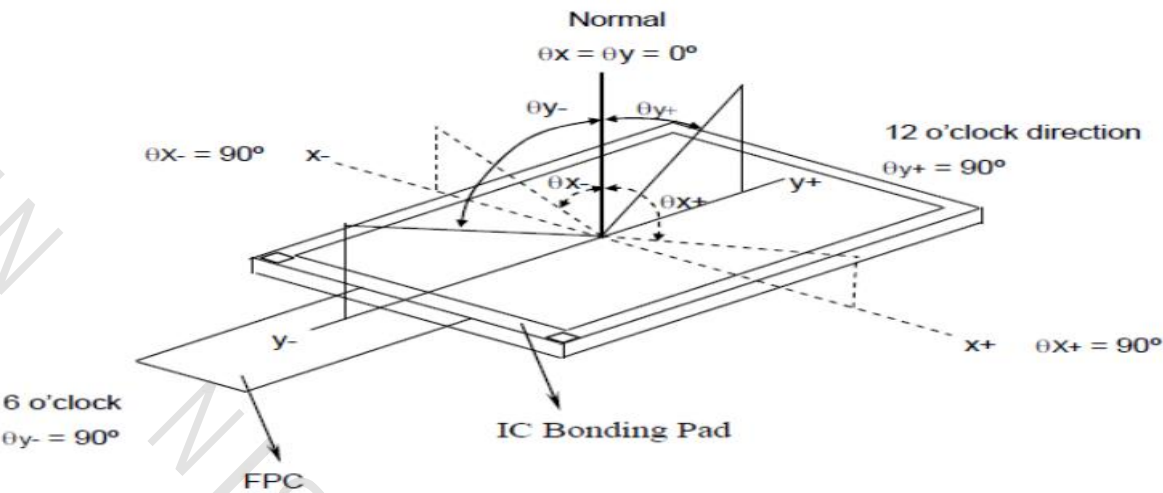
## 6. 光电参数 (Optical Characteristics)

### 6.1 光学规格 (Optical Specifications)

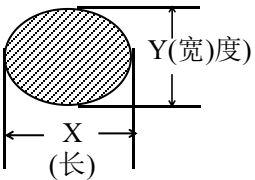
| Item                                     |       | Symbol                         | Condition                         | Min.  | Typ.  | Max.  | Unit | Note                                                                            |
|------------------------------------------|-------|--------------------------------|-----------------------------------|-------|-------|-------|------|---------------------------------------------------------------------------------|
| Transmittance<br>(with Normal Polarizer) |       | T (%)                          | Θ=0<br>Normal<br>viewing<br>angle | 4.9   | 5.5   | —     | %    | Measuring with<br>normal polarizer ·<br>for reference only.<br>Base on Vop=4.8V |
| Transmittance<br>(with Mobile Polarizer) |       | T (%)                          |                                   | 4.55  | 5.1   |       |      | Measuring with<br>normal polarizer ·<br>for reference only.<br>Base on Vop=4.8V |
| Transmittance<br>(without Polarizer)     |       | T (%)                          |                                   | 17.0  | 19.0  | —     | %    |                                                                                 |
| Contrast Ratio                           |       | CR                             |                                   | 800   | 1000  | —     | —    | (1)(2)                                                                          |
| Response Time                            |       | T <sub>R</sub> +T <sub>F</sub> |                                   | —     | 25    | 35    | msec | (1)(3)                                                                          |
| Color Gamut                              | (%)   |                                |                                   | 45    | 50    | —     | %    | C-light                                                                         |
| Color<br>Chromaticity<br>(CIE1931)       | White | W <sub>x</sub>                 |                                   | -0.02 | 0.322 | +0.02 | —    | (1)(4)<br>CF glass<br>C-light                                                   |
|                                          |       | W <sub>y</sub>                 | 0.344                             |       |       |       |      |                                                                                 |
|                                          | Red   | R <sub>x</sub>                 | 0.618                             |       | —     |       |      |                                                                                 |
|                                          |       | R <sub>y</sub>                 | 0.328                             |       |       |       |      |                                                                                 |
|                                          | Green | G <sub>x</sub>                 | 0.335                             |       | —     |       |      |                                                                                 |
|                                          |       | G <sub>y</sub>                 | 0.542                             |       |       |       |      |                                                                                 |
|                                          | Blue  | B <sub>x</sub>                 | 0.136                             |       | —     |       |      |                                                                                 |
|                                          |       | B <sub>y</sub>                 | 0.145                             |       |       |       |      |                                                                                 |
| Viewing Angle                            | Hor.  | Θ <sub>L</sub>                 | CR>10                             | 70    | 80    | —     | —    | (1)(4)<br>Measuring with<br>normal polarizer ·<br>Reference Only                |
|                                          |       | Θ <sub>R</sub>                 |                                   | 70    | 80    | —     |      |                                                                                 |
|                                          | Ver.  | Θ <sub>U</sub>                 |                                   | 70    | 80    | —     |      |                                                                                 |
|                                          |       | Θ <sub>D</sub>                 |                                   | 70    | 80    | —     |      |                                                                                 |
| Optima View Direction                    |       | Free                           |                                   |       |       |       |      | (5)                                                                             |

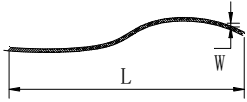
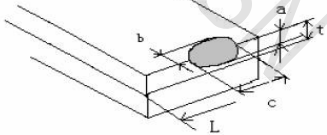
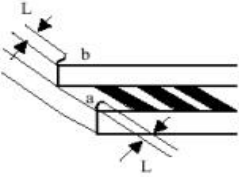


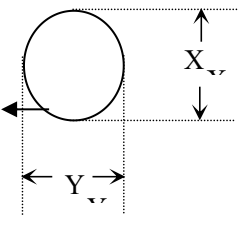
6.2 视角定义（Description of View Angle）



7.检验标准（Inspection standard）

| 项目             | 不良描述                                                                                                                                          | 判定标准                  |      |           | 检验方法      |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------|-----------|-----------|
| 1-1 外观<br>(次缺) | 产品外观或点亮状态下的圆形物（LCD/POL/BL/盖板/TP/组装异物/贴合异物、产品本身的亮点/暗点等）<br> | 点状直径                  | 允收个数 | 备注        | 目视（非林卡比对） |
|                |                                                                                                                                               | $\Phi \leq 0.1$       | 不计   |           |           |
|                |                                                                                                                                               | $0.1 < \Phi \leq 0.2$ | 3    | 两点间距 15mm |           |
|                |                                                                                                                                               | $0.2 < \Phi \leq 0.3$ | 2    | 两点间距 15mm |           |
|                |                                                                                                                                               | $0.3 < \Phi \leq 0.5$ | 1    |           |           |
|                |                                                                                                                                               | $\Phi > 0.5$          | 0    |           |           |

| <p>1-2 外观<br/>(次缺)</p> | <p>产品外观或点亮状态下的线状物 (LCD/POL/BL/盖板/TP/组装异物/贴合异物、产品本身的亮点/暗点等)</p>  | <table border="1"> <tr> <th>L</th><th>W</th><th>允收个数</th><th>备注</th></tr> <tr> <td><math>L \leq 3</math></td><td><math>W \leq 0.03</math></td><td>不计</td><td>两线间距 15mm</td></tr> <tr> <td><math>L \leq 5</math></td><td><math>0.03 &lt; W \leq 0.05</math></td><td>2</td><td>两线间距 15mm</td></tr> <tr> <td><math>L &gt; 5</math></td><td><math>W &gt; 0.05</math></td><td>0</td><td></td></tr> </table> | L         | W    | 允收个数 | 备注   | $L \leq 3$ | $W \leq 0.03$ | 不计                    | 两线间距 15mm | $L \leq 5$ | $0.03 < W \leq 0.05$ | 2 | 两线间距 15mm | $L > 5$ | $W > 0.05$ | 0 |  | <p>目视 (非林卡比对)</p> |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|------|------|------------|---------------|-----------------------|-----------|------------|----------------------|---|-----------|---------|------------|---|--|-------------------|
| L                      | W                                                                                                                                                | 允收个数                                                                                                                                                                                                                                                                                                                                                                                                   | 备注        |      |      |      |            |               |                       |           |            |                      |   |           |         |            |   |  |                   |
| $L \leq 3$             | $W \leq 0.03$                                                                                                                                    | 不计                                                                                                                                                                                                                                                                                                                                                                                                     | 两线间距 15mm |      |      |      |            |               |                       |           |            |                      |   |           |         |            |   |  |                   |
| $L \leq 5$             | $0.03 < W \leq 0.05$                                                                                                                             | 2                                                                                                                                                                                                                                                                                                                                                                                                      | 两线间距 15mm |      |      |      |            |               |                       |           |            |                      |   |           |         |            |   |  |                   |
| $L > 5$                | $W > 0.05$                                                                                                                                       | 0                                                                                                                                                                                                                                                                                                                                                                                                      |           |      |      |      |            |               |                       |           |            |                      |   |           |         |            |   |  |                   |
| <p>1-3 外观<br/>(次缺)</p> | <p>崩边、崩角</p> <p>非电极侧</p>                                        | <table border="1"> <tr> <th>厚度 a</th><th>宽度 b</th><th>长度 c</th><th>允收个数</th></tr> <tr> <td><math>a \leq T</math></td><td>B 不伤及边框或走线</td><td><math>c \leq 5.0\text{mm}</math></td><td>允收</td></tr> </table>                                                                                                                                                                                             | 厚度 a      | 宽度 b | 长度 c | 允收个数 | $a \leq T$ | B 不伤及边框或走线    | $c \leq 5.0\text{mm}$ | 允收        | <p>目视</p>  |                      |   |           |         |            |   |  |                   |
| 厚度 a                   | 宽度 b                                                                                                                                             | 长度 c                                                                                                                                                                                                                                                                                                                                                                                                   | 允收个数      |      |      |      |            |               |                       |           |            |                      |   |           |         |            |   |  |                   |
| $a \leq T$             | B 不伤及边框或走线                                                                                                                                       | $c \leq 5.0\text{mm}$                                                                                                                                                                                                                                                                                                                                                                                  | 允收        |      |      |      |            |               |                       |           |            |                      |   |           |         |            |   |  |                   |
| <p>1-4 外观<br/>(主缺)</p> | <p>玻璃裂痕 (LCD 或 T/P 有延伸式之裂开痕迹, 但未形成破损)</p>                     | <p>任何区域的延伸性裂痕 NG</p>                                                                                                                                                                                                                                                                                                                                                                                   | <p>目视</p> |      |      |      |            |               |                       |           |            |                      |   |           |         |            |   |  |                   |
| <p>1-5 外观<br/>(次缺)</p> | <p>偏光片漏边</p>                                                                                                                                     | <p>1、贴合总成后外观及功能, 正视角或 45°视角目视可见片边 NG</p> <p>2、贴合总成后功能测试边框画面不完整, 存在压边现象 NG</p>                                                                                                                                                                                                                                                                                                                          | <p>目视</p> |      |      |      |            |               |                       |           |            |                      |   |           |         |            |   |  |                   |

|                |                                                                                                                                                                          |                       |      |           |         |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------|-----------|---------|
| 1-6 外观<br>(次缺) | <div>偏光片气泡（偏光片气泡、凹凸点等）</div> <div><math display="block">\Phi = (X + Y) / 2</math></div> |                       |      |           | 撕起保护膜目视 |
|                |                                                                                                                                                                          | 点状直径                  | 允收个数 | 备注        |         |
|                |                                                                                                                                                                          | $\Phi \leq 0.2$       | 不计   |           |         |
|                |                                                                                                                                                                          | $0.2 < \Phi \leq 0.3$ | 2    | 两点间距 15mm |         |
|                |                                                                                                                                                                          | $0.3 < \Phi \leq 0.5$ | 1    | 两点间距 15mm |         |
|                |                                                                                                                                                                          | $\Phi > 0.5$          | 0    |           |         |