SPECIFICATION

产品说明书

版本：1.0

Model/型号：JR-TFT0154L01A

中山市锦润电子有限公司	CUSTOMER/客户:
制作(PRO.)：CL	确认(PRO.)：
审核(REV.)：	审核(REV.)：
批准(APP.)：	批准(APP.)：

REVISION RECORD

修改记录

REV NO. 版本号	REV DATE 修改日期	CONTENTS 内容	REMARKS 注释
1.0	2024-08-11	First release	/

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■ GENERAL INFORMATION

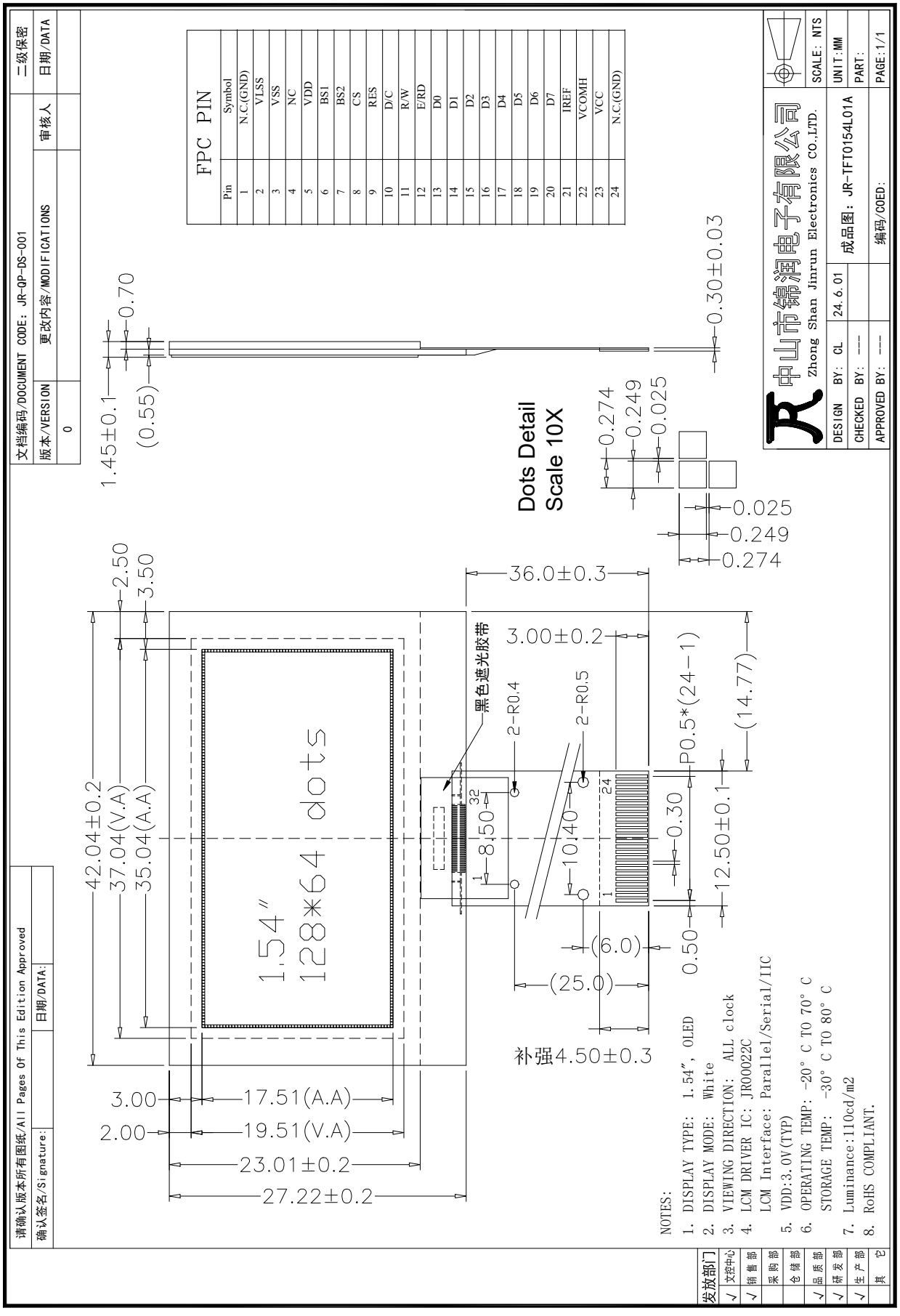
主要特征描述

ITEM	STANDARD VALUES	UNITS
LCD type	1.54'' PM OLED	--
Dot arrangement	128×64	dots
Color filter array	**Monochrome (White)**	--
Display mode	**Passive Matrix**	-
Gray Scale Inversion Direction	/	--
Eyes Viewing Direction	Free O'clock	--
Driver IC	JR00022C	
Module size	42.04(W)×27.22(H)×1.45(T)	mm
Active area	35.04(W)×17.51(H)	mm
Interface	Parallel/Serial/IIC	--
Operating temperature	-20 ~ +70	°C
Storage temperature	-30 ~ +80	°C
Back Light	NO	--
Weight	TBD	g

备注： 周围温度和驱动电压不一样会使颜色轻微改变。

■ PRODUCT DRAWING

产品图纸



■ INTERFACE DESCRIPTION

接口定义描述

<table>
<tr><th>引脚序号</th><th>符号</th><th>功能</th></tr>
<tr><td>1</td><td>GND</td><td>NC</td></tr>
<tr><td>2</td><td>VLSS</td><td>Ground of Analog Circuit（analog ground pin）</td></tr>
<tr><td>3</td><td>VSS</td><td>Ground of Logic Circuit(This is a ground pin.)</td></tr>
<tr><td>4</td><td>GND</td><td>NC</td></tr>
<tr><td>5</td><td>VDD</td><td>Power Supply for Logic(This is a voltage supply pin)</td></tr>
<tr><td>6</td><td>BS1</td><td rowspan="2"><table>
<tr><td>BS[1:2]</td><td>BS1</td><td>BS2</td></tr>
<tr><td>IIC</td><td>1</td><td>0</td></tr>
<tr><td>4-WRIE SPI</td><td>0</td><td>0</td></tr>
<tr><td>8-BIT 8080</td><td>1</td><td>1</td></tr>
<tr><td>8-BIT 6800</td><td>0</td><td>1</td></tr>
</table></td></tr>
<tr><td>7</td><td>BS2</td></tr>
<tr><td>8</td><td>CS</td><td>The chip is enabled for MCU communication only when CS# is pulled LOW (active LOW).</td></tr>
<tr><td>9</td><td>RES</td><td>This pin is reset signal input</td></tr>
<tr><td>10</td><td>D/C</td><td>This pin is Data/Command control pin connecting to the MCU.This pin is Data/Command control pin. When the pin is pulled high, the input at D7~D0 is treated as display data. When the pin is pulled low, the input at D7~D0 will be transferred to the command register.When the pin is pulled high and serial interface mode is selected, the data at SDIN will be interpreted as data. When it is pulled low, the data at SDIN will be transferred to the command register. In I2C mode, this pin acts as SA0 for slave address selection.For detail relationship to MCU interface signals, please refer to the Timing Characteristics Diagrams.</td></tr>
<tr><td>11</td><td>R/W</td><td>Read/Write Select or Write. This pin is MCU interface input. When interfacing to a 68XX-series microprocessor, this pin will be used as Read/Write (R/W#) selection input. Pull this pin to “High” for read mode and pull it to “Low” for write mode.When 80XX interface mode is selected, this pin will be the Write (WR#) input. Data write operation is initiated when this pin is pulled low and the CS# is pulled low.When serial or I2C mode is selected, this pin must be connected to VSS.</td></tr>
<tr><td>12</td><td>E/RD</td><td>Read/Write Enable or Read.This pin is MCU interface input. When interfacing to a 68XX-series microprocessor, this pin will be used as the Enable (E) signal. Read/write operation is initiated when this pin is pulled high and the CS# is pulled low.When connecting to an 80XX-microprocessor, this pin receives the Read (RD#)signal. Data read operation is initiated when this pin is pulled low and CS# is pulled low.When serial or I2C mode is selected, this pin must be connected to VSS.</td></tr>
</table>

13-20	D0-D7	These pins are bi-directional data bus connecting to the MCU data bus. Unused pins are recommended to tie LOW. When serial interface mode is selected, D0 will be the serial clock input: SCLK; D1 .will be the serial data input: SDIN and D2 should be kept NC. When I2C mode is selected, D2, D1 should be tied together an
21	IREF	Current Reference for Brightness Adjustment.This pin is segment current reference pin. A resistor should be connected between this pin and VSS. Set the current at 12.5 μ A maximum.
22	VCOMH	Voltage Output High Level for COM Signal.This pin is the input pin for the voltage output high evel for COM signals. A capacitor should be connected between this pin and VSS.
23	IVCC	Power supply for panel driving voltage. This is also the most positive power voltage supply pin.
24	GND	NC

■ ELECTRICAL SPECIFICATION
电气特征

Absolute Maximum Ratings

Item	Symbol	Min.	Max.	Unit
Logic Supply Voltage	VDD	-0.3	4.0	V
Supply Voltage for Display	VCC	0	17	V
Life Time (130 cd/m2)	-	10,000	-	hour
Life Time (110 cd/m2)	-	30,000	-	hour
Life Time (80 cd/m2)	-	50,000	-	hour
Operating Temperature	TOP	-40	85	°C
Storage Temperature	TST	-40	85	°C

Maximum ratings are those values beyond which damages to the device may occur. Functional operation should be restricted to the limits in the Electrical Characteristics tables or Pin Description section.
This device may be light sensitive. Caution should be taken to avoid exposure of this device to any light source during normal operation. This device is not radiation protected.

DC Characteristics

Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
V_{CC}	Operating Voltage	-	7	-	16	V
V_{DD}	Logic Supply Voltage	-	1.65	-	3.3	V
V_{OH}	High Logic Output Level	I_{OUT} = 100uA, 3.3MHz	0.9 x V_{DD}	-	-	V
V_{OL}	Low Logic Output Level	I_{OUT} = 100uA, 3.3MHz	-	-	0.1 x V_{DD}	V
V_{IH}	High Logic Input Level	-	0.8 x V_{DD}	-	-	V
V_{IL}	Low Logic Input Level	-	-	-	0.2 x V_{DD}	V
$I_{DD,SLEEP}$	Sleep mode Current	V_{DD} = 1.65V~3.3V, V_{CC} = 7V~16V Display OFF, No panel attached	-	-	10	uA
$I_{CC,SLEEP}$	Sleep mode Current	V_{DD} = 1.65V~3.3V, V_{CC} = 7V~16V Display OFF, No panel attached	-	-	10	uA
I_{CC}	V_{CC} Supply Current V_{DD} = 2.8V, V_{CC} =12, I_{REF} =10uA, No loading, Display ON, All ON	Contrast = FFh	-	450	580	uA
I_{DD}	V_{DD} Supply Current V_{DD} =2.8V, V_{CC} = 12, I_{REF} = 10uA , No loading, Display ON, All ON,		-	90	110	uA
I_{SEG}	Segment Output Current, V_{DD} = 2.8V, V_{CC}=12V, I_{REF}=10uA, Display ON.	Contrast=FFh	280	310	340	uA
		Contrast=AFh	-	215	-	
		Contrast=7Fh	-	155	-	
		Contrast=3Fh	-	78	-	
		Contrast=0Fh	-	20	-	
Dev	Segment output current uniformity	Dev = (I_{SEG} – I_{MID})/I_{MID} I_{MID} = (I_{MAX} + I_{MIN})/2 I_{SEG}[0:127] = Segment current at contrast setting = FFh	-3	-	3	%
Adj. Dev	Adjacent pin output current uniformity (contrast setting = FFh)	Adj Dev = (I[n]-I[n+1]) / (I[n]+I[n+1])	-2	-	2	%

AC CHARACTERISTICS

(Voltage referenced to VSS, VDD=1.65 to3.3V, TA = 25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
F_{OSC} (1)	Oscillation Frequency of Display Timing Generator	V_{DD} = 2.8V	360	450	540	kHz
F_{FRM}	Frame Frequency	128x64 Graphic Display Mode, Display ON, Internal Oscillator Enabled	-	F_{OSC} x 1/(DxKx64) (2)	-	Hz
RES#	Reset low pulse width		3	-	-	us

Note

(1) F_{OSC} stands for the frequency value of the internal oscillator and the value is measured when command D5h A[7:4] is in default value.

(2) D: divide ratio (default value = 1)
K: number of display clocks per row period (default value = 69)
Please refer to 9.5 (Set Display Clock Divide Ratio/Oscillator Frequency, D5h) for detailed description

■ TIMING CHARACTERISTICS

时序特征

Table 13-2 : 6800-Series MCU Parallel Interface Timing Characteristics

(V_{DD} - V_{SS} = 1.65V to 3.3V, T_A = 25°C)

Symbol	Parameter	Min	Typ	Max	Unit
t_{cycle}	Clock Cycle Time	300	-	-	ns
t_{AS}	Address Setup Time	20	-	-	ns
t_{AH}	Address Hold Time	0	-	-	ns
t_{DW}	Data Write Time	80	-	-	ns
t_{DSW}	Write Data Setup Time	40	-	-	ns
t_{DHW}	Write Data Hold Time	20	-	-	ns
t_{DHR}	Read Data Hold Time	20	-	-	ns
t_{OH}	Output Disable Time	-	-	70	ns
t_{ACC}	Access Time	-	-	140	ns
PW_{CSL}	Chip Select Low Pulse Width (read) Chip Select Low Pulse Width (write)	120 60	-	-	ns
PW_{CSH}	Chip Select High Pulse Width (read) Chip Select High Pulse Width (write)	60 60	-	-	ns
t_R	Rise Time	-	-	40	ns
t_F	Fall Time	-	-	40	ns

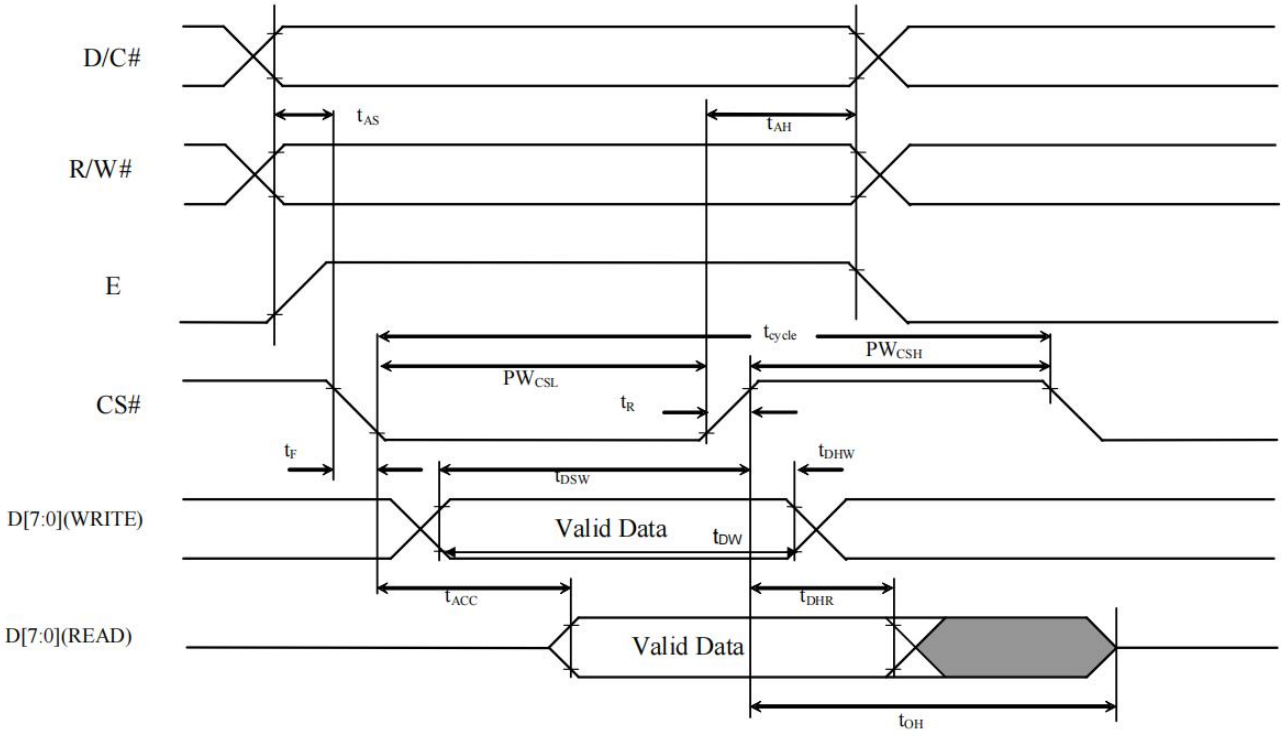
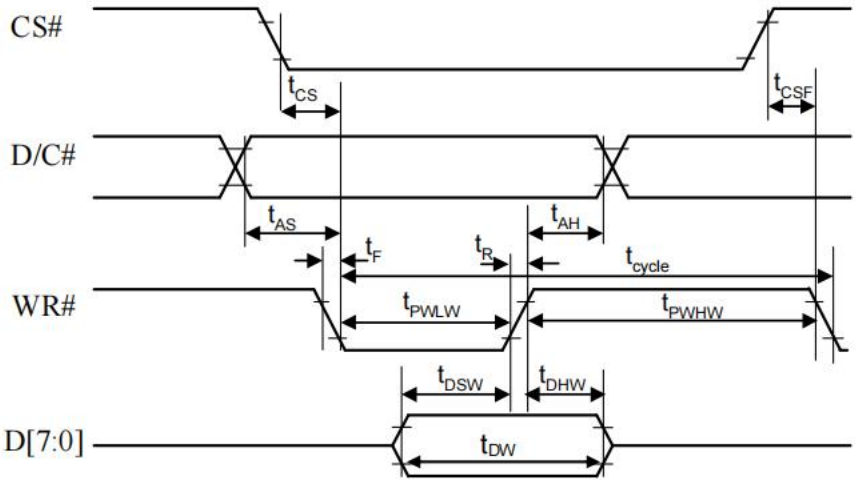


Table 13-3 : 8080-Series MCU Parallel Interface Timing Characteristics

(V_{DD} - V_{SS} = 1.65V ~3.3V, T_A = 25°C)

Symbol	Parameter	Min	Typ	Max	Unit
t_{cycle}	Clock Cycle Time	300	-	-	ns
t_{AS}	Address Setup Time	20	-	-	ns
t_{AH}	Address Hold Time	0	-	-	ns
t_{DW}	Data Write Time	70	-	-	ns
t_{DSW}	Write Data Setup Time	40	-	-	ns
t_{DHW}	Write Data Hold Time	15	-	-	ns
t_{DHR}	Read Data Hold Time	20	-	-	ns
t_{OH}	Output Disable Time	-	-	70	ns
t_{ACC}	Access Time	-	-	140	ns
t_{PWLR}	Read Low Time	120	-	-	ns
t_{PWLW}	Write Low Time	60	-	-	ns
t_{PWHR}	Read High Time	60	-	-	ns
t_{PWHW}	Write High Time	60	-	-	ns
t_R	Rise Time	-	-	40	ns
t_F	Fall Time	-	-	40	ns
t_{CS}	Chip select setup time	0	-	-	ns
t_{CSH}	Chip select hold time to read signal	0	-	-	ns
t_{CSF}	Chip select hold time	20	-	-	ns

Write cycle



Read Cycle

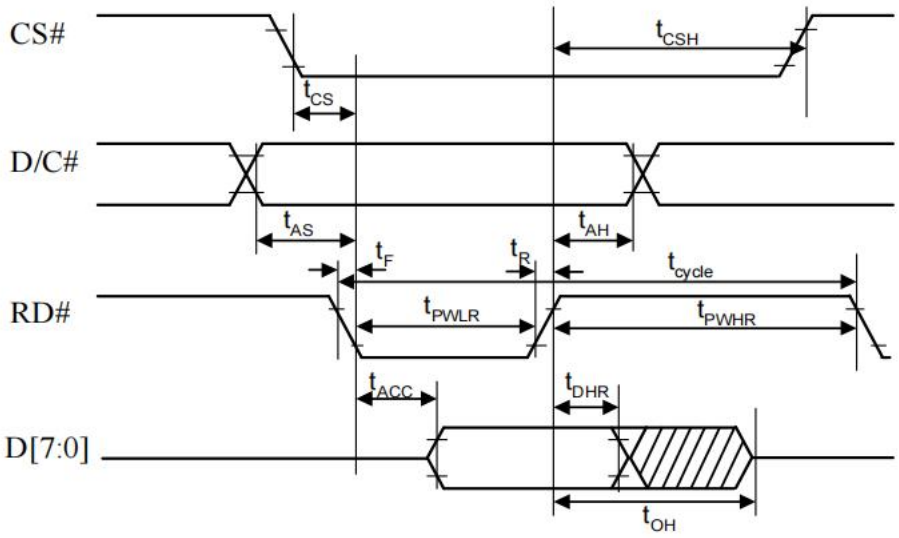
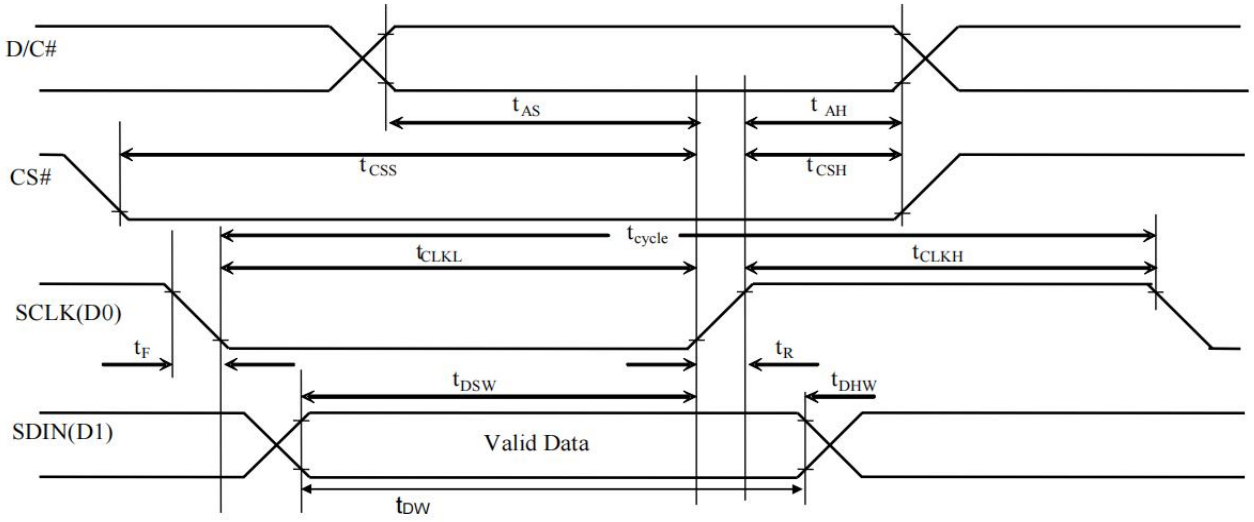


Table 13-4 : Serial Interface Timing Characteristics (4-wire SPI)

(V_{DD} - V_{SS} = 1.65V~3.3V, T_A = 25°C)

Symbol	Parameter	Min	Typ	Max	Unit
t_{cycle}	Clock Cycle Time	100	-	-	ns
t_{AS}	Address Setup Time	15	-	-	ns
t_{AH}	Address Hold Time	15	-	-	ns
t_{CSS}	Chip Select Setup Time	20	-	-	ns
t_{CSH}	Chip Select Hold Time	50	-	-	ns
t_{DW}	Data Write Time	55	-	-	ns
t_{DSW}	Write Data Setup Time	15	-	-	ns
t_{DHW}	Write Data Hold Time	15	-	-	ns
t_{CLKL}	Clock Low Time	50	-	-	ns
t_{CLKH}	Clock High Time	50	-	-	ns
t_R	Rise Time	-	-	40	ns
t_F	Fall Time	-	-	40	ns

Figure 13-3 : Serial interface characteristics (4-wire SPI)



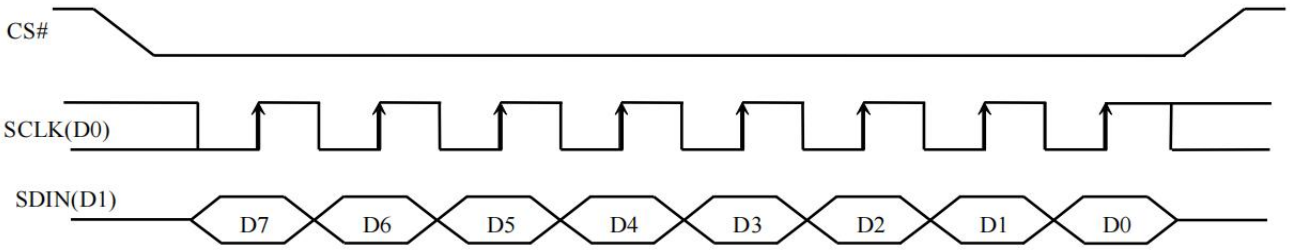
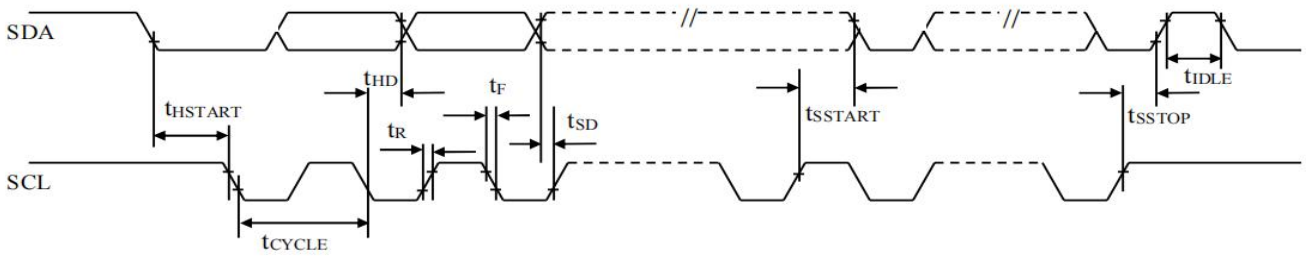
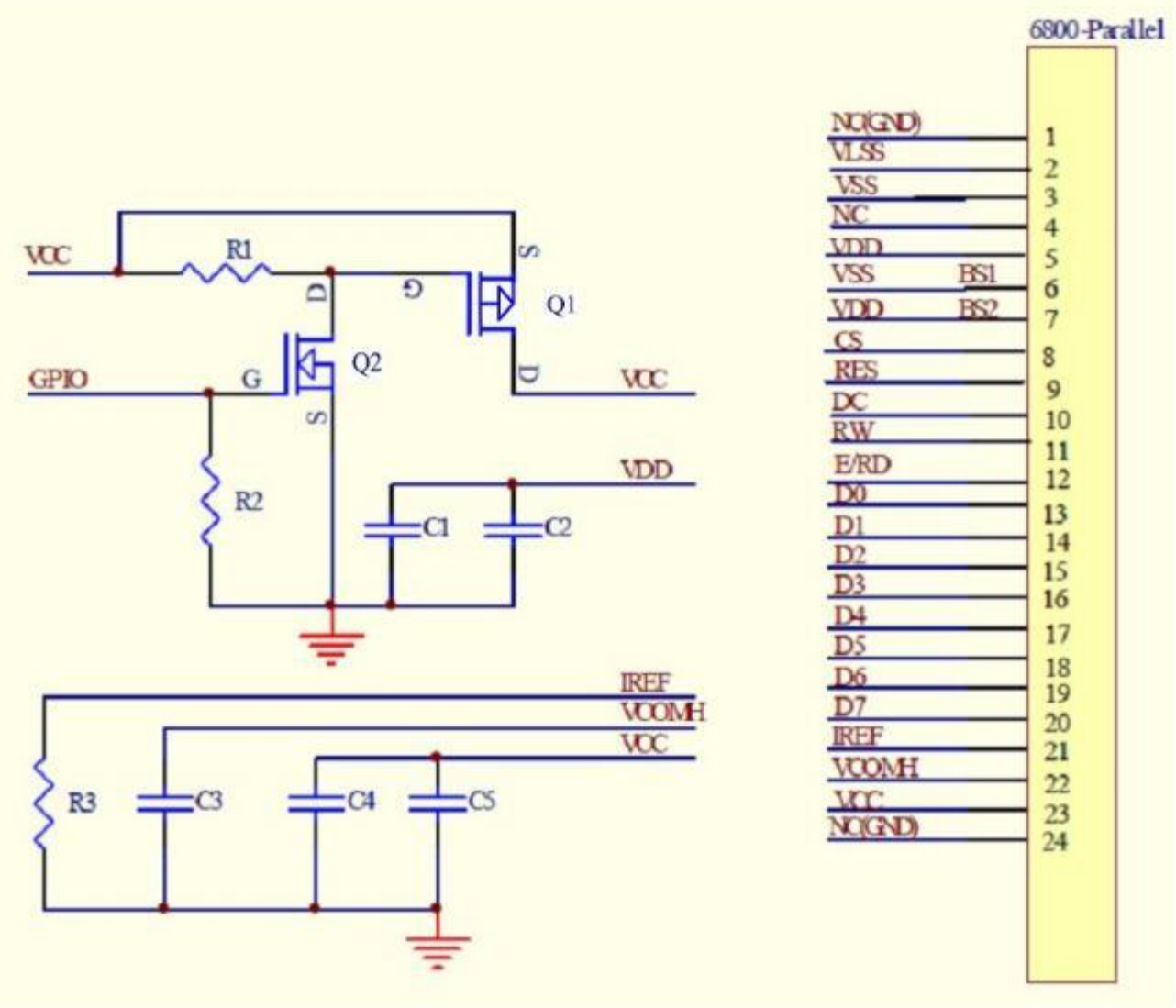


Table 13-6 : I²C Interface Timing Characteristics

Symbol	Parameter	Min	Typ	Max	Unit
t_{cycle}	Clock Cycle Time	2.5	-	-	us
t_{HSTART}	Start condition Hold Time	0.6	-	-	us
t_{HD}	Data Hold Time (for "SDA_{OUT}" pin)	0	-	-	ns
	Data Hold Time (for "SDA_{IN}" pin)	300	-	-	ns
t_{SD}	Data Setup Time	100	-	-	ns
t_{SSTART}	Start condition Setup Time (Only relevant for a repeated Start condition)	0.6	-	-	us
t_{SSTOP}	Stop condition Setup Time	0.6	-	-	us
t_R	Rise Time for data and clock pin	-	-	300	ns
t_F	Fall Time for data and clock pin	-	-	300	ns
t_{IDLE}	Idle Time before a new transmission can start	1.3	-	-	us



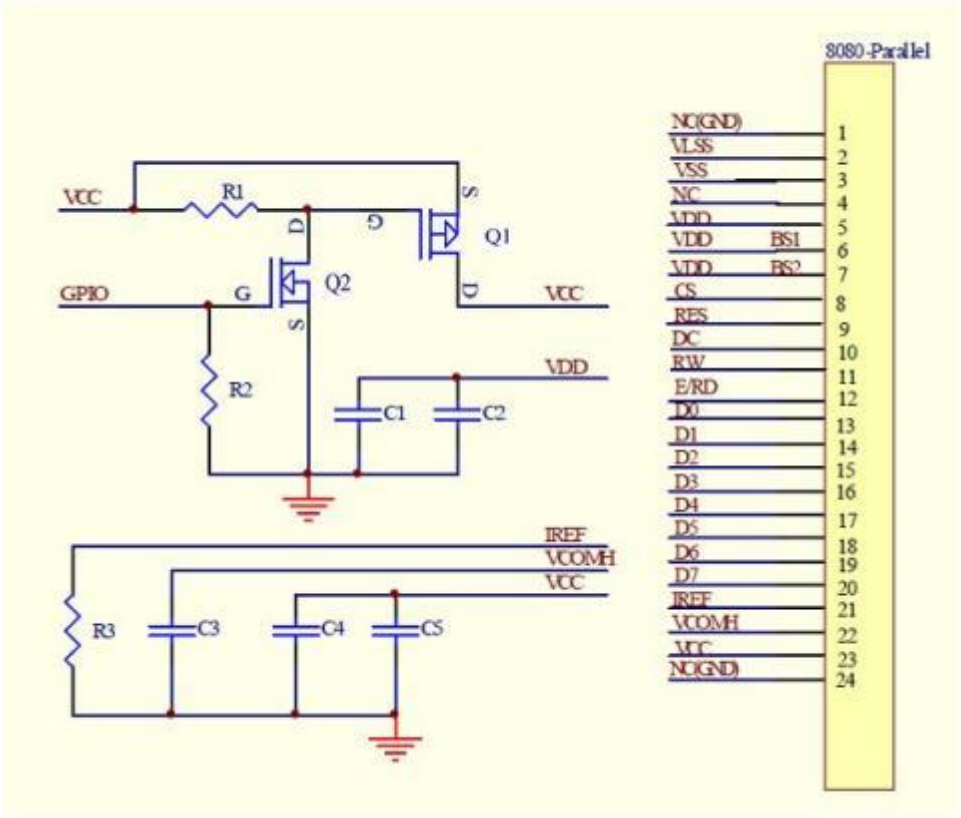


Recommended Components:

C1, C2:	1μF / 16V, X5R
C3:	2.2μF /25V
C4:	4.7μF / 25V, X7R
C5:	0.1μF/ 25V, X7R
R1, R2:	47kΩ
R3:	910KΩ, R3 = (Voltage at IREF - VSS) / IREF
Q1:	FDN338P
Q2:	FDN335N

Notes:

VDD:	1.65V~3.3V
VCC_IN:	11.5~12.5V

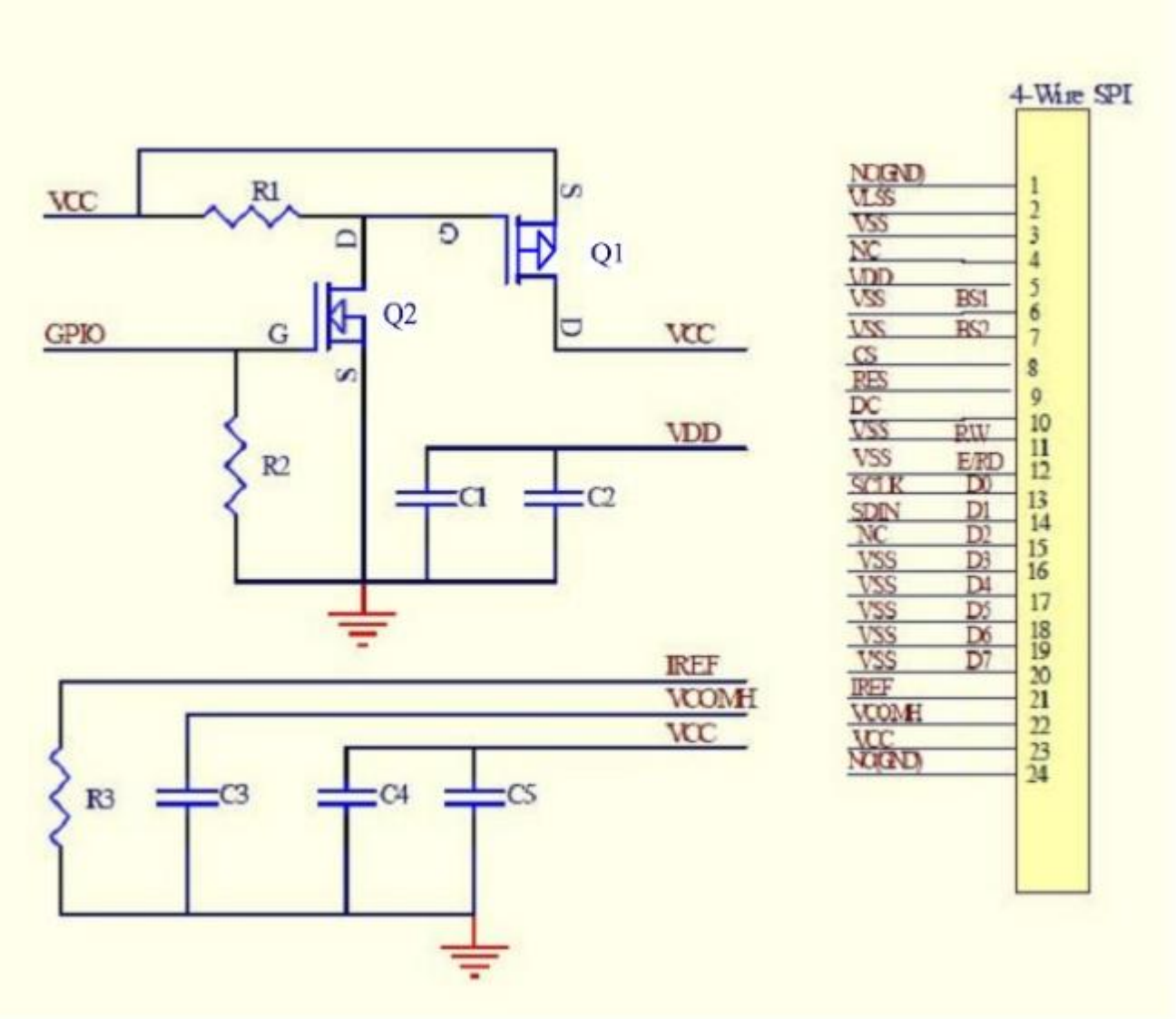


Recommended Components:

C1, C2:	**1μF / 16V, X5R**
C3:	**2.2μF /25V**
C4:	**4.7μF / 25V, X7R**
C5:	**0.1μF/ 25V, X7R**
R1, R2:	**47kΩ**
R3:	**910KΩ, R3 = (Voltage at IREF - VSS) / IREF**
Q1:	**FDN338P**
Q2:	**FDN335N**

Notes:

VDD:	**1.65V~3.3V**
VCC_IN:	**11.5~12.5V**



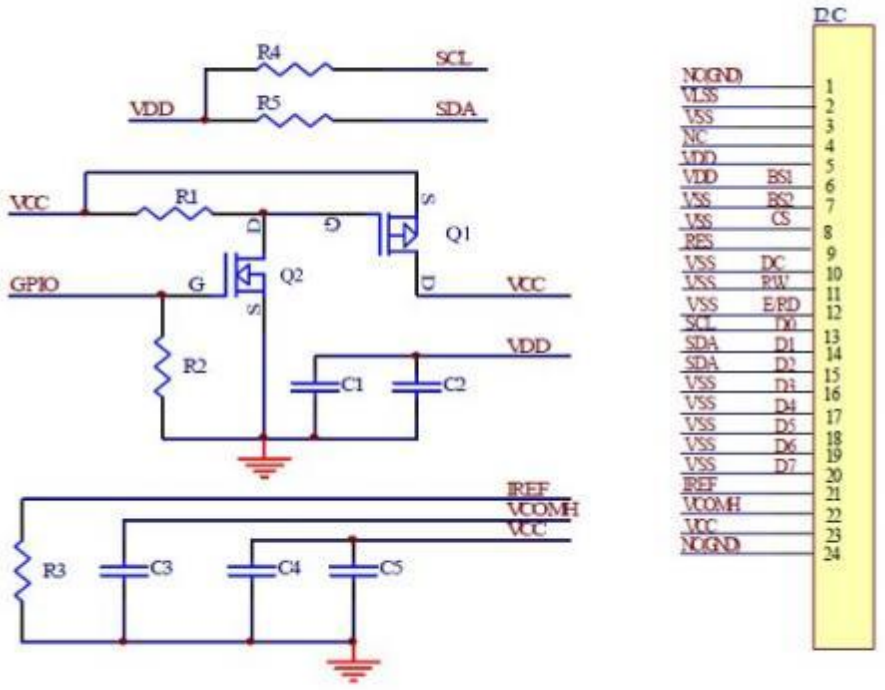
Recommended Components:

C1, C2:	1μF / 16V, X5R
C3:	2.2μF /25V
C4:	4.7μF / 25V, X7R
C5:	0.1μF/ 25V, X7R
R1, R2:	47kΩ
R3:	910KΩ, R3 = (Voltage at IREF - VSS) / IREF
Q1:	FDN338P
Q2:	FDN335N

Notes:

VDD:	1.65V~3.3V
VCC_IN:	11.5~12.5V

IIC Interface with Internal Charge Pump



Recommended Components:

C1, C2: 1μF / 16V, X5R
C3: 2.2μF /25V
C4: 4.7μF / 25V, X7R
C5: 0.1μF/ 25V, X7R
R1, R2: 47kΩ
R3: 910KΩ, R3 = (Voltage at IREF - VSS) / IREF
R4, R5: 4.7kΩ
Q1: FDN338P
Q2: FDN335N

Notes:

VDD: 1.65V~3.3V
VCC_IN: 11.5~12.5V
The I^2C slave address is 0111100b'. If the customer ties D/C# to VDD, the I^2C slave address will be 0111101b'.

■ OPTICAL CHARACTERISTICS
光学特征

All data in below based the condition (Ta = 22±3℃,60±10％RH).
以下参数均基于 Ta = 22±3℃,60±10％RH 的条件。

Items 项目		Symbol 符号	Min. 最小值	Typ. 典型值	Max. 最大值	Unit 单位	Remark 备注
Operating Luminance 工作亮度		L	90	110*	-	cd/m^2	-
Color Coordinate 色坐标	White	CIE x	0.24	0.28	0.32	CIE1931	Darkroom
		CIE y	0.28	0.32	0.36		
Operating Life Time* 工作寿命		Top	20,000	-	-	Hours	L= 110 cd/m2

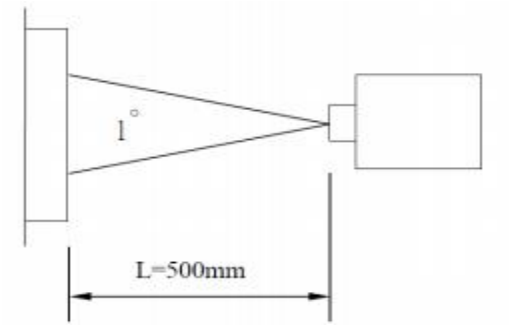
Note(注意事项):

1. L=110 cd/m^2 is based on VDD=2.8V, VCC=12.0V, Contrast command setting 0x32.
   L=110 cd/m^2 基于 VDD=2.8V, VCC=12.0V，对比度设置为 0x32。
2. **Life Time** is defined when the Luminance has decayed to less than 50% of the initial Luminance specification.
   (Odd and even chess board alternately displayed).
   (The initial value should be closed to the typical value after adjusting.)
   寿命的定义为当亮度衰减到初始亮度 50％时所消耗的时间。
   (奇数和偶数棋盘交替显示)。
   (初始亮度值应调试到接近典型值的大小)。

The above data are the data of OLED MODULE with polarizer, for reference only.
以上数据为带偏光片的 OLED 模块数据，仅供参考。

备注 1.周围环境条件：25℃±2℃， 60±10%RH，暗房亮度在 10cd/m2 以下。

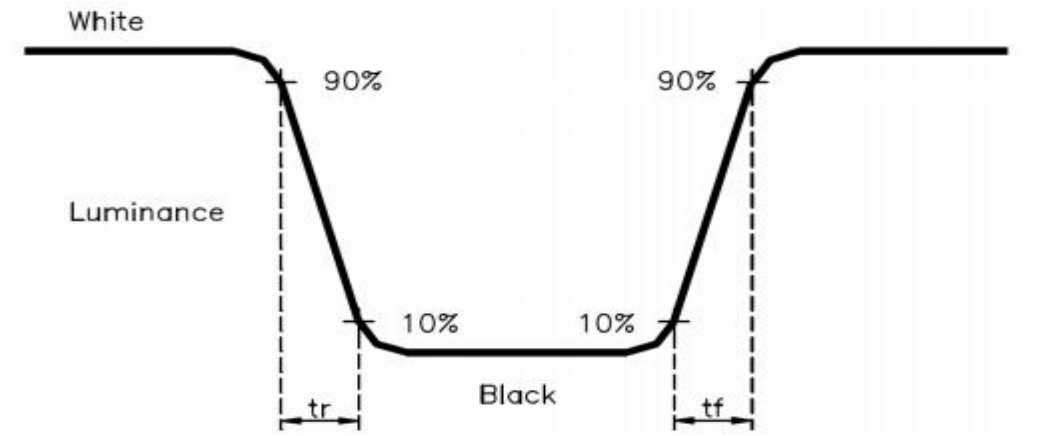
备注 2.测量设备：BM-5A (TOPCON)，viewing cone=1°， I_L=20mA。



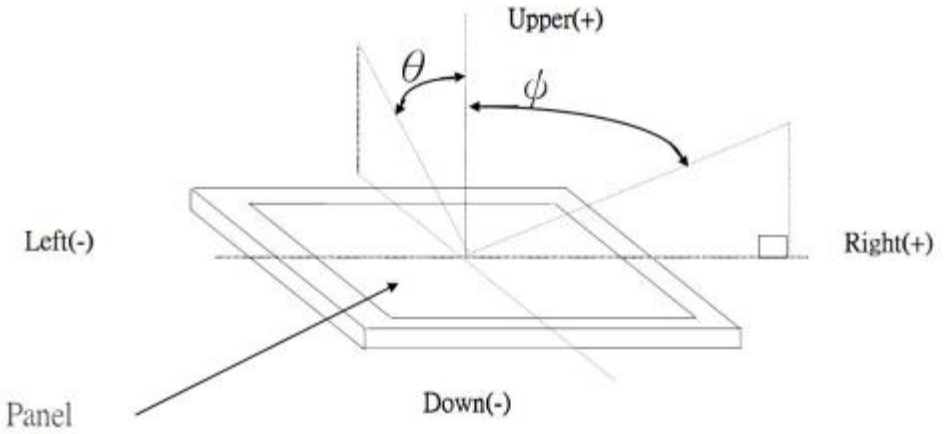
备注 3.对比度定义：

对比度 = 白色亮度 (全显) / 黑色亮度 (全灭)

备注 4. 响应时间定义：响应时间是指幅值的 10%到 90%的时间间隔。



备注 5. 视角定义(θ， ψ):



备注 6. 光源: C 光源.

■ BACKLIGHT CHARACTERISTICS
背光特性

（NO 无）

■ RELIABILITY TEST CONDITIONS

可靠性试验条件

序号	测试项目	测试条件	备注
1	高温存储测试	Ta=+80℃ Dry 240h	
2	低温存储测试	Ta=-30℃ Dry 240h	
3	高温带电测试	Ta=70℃ Dry 240h	
4	低温带电测试	Ta=-20℃ Dry 240h	
5	高温高湿带电测试	Ta=60℃ 90%RH 120h	
6	温度冲击测试	-30℃(0.5h) ~ 80℃(0.5h) / 24 循 环	

备注:

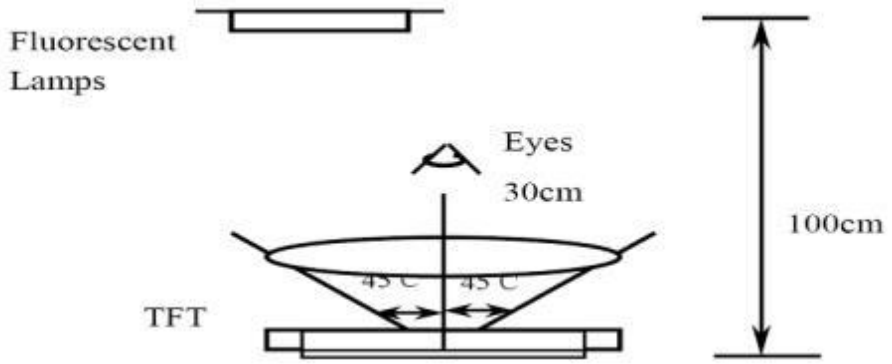
1. 测试样品在功能测试之前需在常温放置 2 小时恢复。在标准的测试条件下，不能有功能显示不良发生。
2. 可靠性实验前确保产品的外观良好。

■ QUALITY STANDARDS

品质标准

1.检测条件

功能检测：日光灯照明下，检验桌面照度300Lux 以下，检验者眼睛距被检LCD面30±5cm进行检验；
外观检查：日光灯照明下，检验桌面照度750±150Lux，检验者眼睛距被检LCD面30±5cm进行检验；
检验视角：上下左右视角：眼睛正式Defect上下视角0～45°,左右视角0～45°

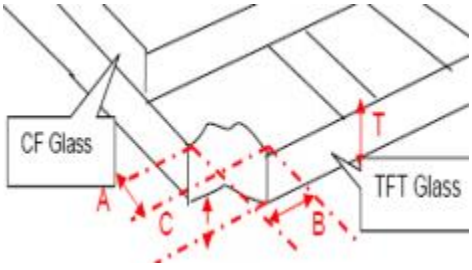


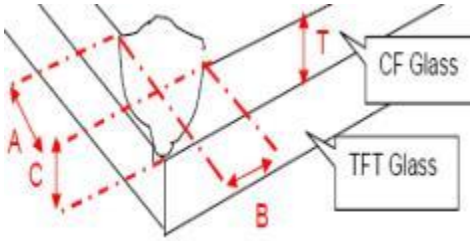
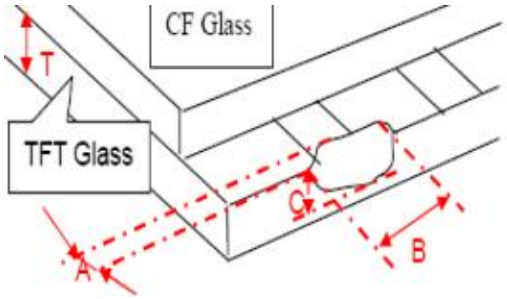
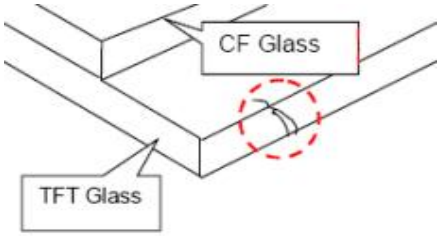
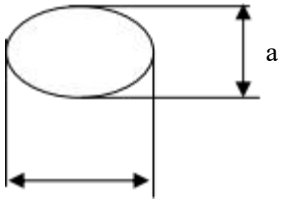
2.质量水平：AQL 和缺陷分类见表二

表二

缺陷类别	缺陷描述	AQL
主要缺陷	指影响LCM正常显示功能、使用可靠性,或导 致装配不良的缺陷；	0.25
次要缺陷	指对LCM显示功能影响较小、仅在外观方面 出现的缺陷；	0.65

: 3.外观检验规格

缺陷	检验项目	规格
无ITO区域下片LCD边角破损		1. A≤2.0 mm, B≤2.0 mm,C≤T 忽略不计 2. A＞2.0 mm ,或 B＞2.0 mm 不允许 3. 台阶两侧的缺损不得损伤对位标识。

<table>
<tr><td>无ITO区上LCD边角破损</td><td>
</td><td>1. A≤1.5 mm , B≤1.5 mm , C≤T 忽略不计
2. A＞1.5 mm,或 B＞1.5 mm 不允许
3. 缺损不得到达边框外沿或走线</td></tr>
<tr><td>有ITO区域破损</td><td>
</td><td>1. A≤0.8 mm, C≤T
B长度忽略不计
2. A＞0.8 mm, 不允许
3. 缺损不得损伤对位标识</td></tr>
<tr><td>裂痕</td><td>
</td><td>任何区域有任何裂痕不允许</td></tr>
<tr><td>偏光片点状不良</td><td>

Φ= a或b最大值</td><td><table>
<tr><td>尺寸</td><td>容许个数</td></tr>
<tr><td>Φ≤0.1mm</td><td>不计（注1）</td></tr>
<tr><td>0.1mm＜Φ≤0.2mm</td><td>2</td></tr>
<tr><td>0.2mm＜Φ</td><td>0</td></tr>
<tr><td colspan="2">超过以上不允许</td></tr>
</table>
注 1:两个邻近缺点间距≥5mm.</td></tr>
<tr><td>线状不良</td><td>1、刮伤等线状缺陷
2、纤维、异物等线状缺陷</td><td><table>
<tr><td>尺寸</td><td>容许个数</td></tr>
<tr><td>W≤0.03mm</td><td>不计（注1）</td></tr>
<tr><td>L≤2.5 mm
0.03mm＜W≤0.05mm</td><td>2（注2）</td></tr>
<tr><td>L＞2.5 mm或0.05mm＜W</td><td>0</td></tr>
<tr><td colspan="2">超过以上不允许</td></tr>
</table></td></tr>
</table>

辅料贴附	1、保护膜无法附着于偏光片 2、撕裂胶纸、易撕贴无法撕起保护膜 3、撕裂胶纸、易撕贴颜色错误 4、遮光带、保强带没有覆盖住元器件	不允许
封胶	1、ITO 未封硅胶保护。 2、封胶未覆盖整个 ITO 3、封胶厚度超过 LCD 上偏光片， 封胶宽 度超过 LCD 边	不允许
元器件	IC/ FPC： 1、明显刮伤、断线 2、引脚氧化、断裂、锐角折伤 3、FPC 补强板不可粘贴不良或歪斜凸出 超出设计图纸所示规格	不允许
背光	1、尺寸规格不符合设计图纸 2、脏污、手指印、变形超出规格	不允许

4. 点亮检验规格：

<table>
<tr><td>缺陷</td><td>检验项目</td><td colspan="2">规格</td></tr>
<tr><td>显示点缺陷</td><td>偏光片脏点，气泡，刺伤
圆形物、外来物、盒内物等点状缺陷</td><td colspan="2">尺寸 | 容许个数
0.1mm＜Φ≤0.2mm | 2
0.2mm＜Φ | 0
超过以上不允许
注 1:两个邻近缺点间距≥5mm.</td></tr>
<tr><td>显示线缺陷</td><td>1、TFT划伤或偏光片刮伤、折痕等线状缺陷
2、纤维、异物等线状缺陷</td><td colspan="2">尺寸 | 容许个数
W≤0.03mm | 不计（注 1）
L≤2.5 mm
0.03mm＜W≤0.05mm | 2（注 2）
L＞2.5 mm 或 0.05mm＜W | 0
超过以上不允许</td></tr>
<tr><td>显示内容缺陷</td><td>1、缺段、缺字
2、显示异常、无显示、显示乱
3、视角反</td><td colspan="2">不允许</td></tr>
<tr><td>亮点</td><td>Sub-pixel 一直显示亮</td><td colspan="2">N≤1</td></tr>
<tr><td>Mura</td><td>1. 客户无特殊要求则使用 ND5%来判断， 不可见为 OK
2. 限度样板或按照客户要求</td><td colspan="2"></td></tr>
<tr><td>大电流</td><td>显示电流超过规格定义要求</td><td colspan="2">不允许</td></tr>
</table>

背光电性能缺陷	1、 背光死灯 2、 发光不匀 3、 亮度超规格 4、漏光	发光不匀、漏光按照限定样板，其他不良不允许

注意事项

1 客户收到我司产品时,若发现产品外包装有明显破损或其它质量问题,请保持原状,及时与本公司直 接联系。

2 本公司负责更换或维修在客户检验和使用过程中发现的不合格产品(不合格产品需我司品质部确认 为我方质量问题),规定为发货后一年内保修保换；因人为损伤、偏光片划伤、机械损坏和贮存不当 造成的不合格品,不在保修范围之列。

3 客户在使用本公司产品时,如因我方产品质量问题要求批量退货,请在收到产品三个月内退回本公 司,并保持或恢复产品的原状。

4 LCM 是一种易碎品,请小心取放,避免加较大的力在显示器的表面上。

5 保持贮存环境无尘、洁净及气流畅通,避免直接将产品暴露在阳光或紫外光下。

6 液晶是一种有害的化学物质,一旦从玻璃盒泄露出来,请避免其进入嘴内,如果液晶沾在皮肤或衣服 上,请立即用肥皂将其清洗干净。

7 LCM须在规定的条件下贮存,过高的温度和湿度会造成LCD 的偏光片变色、脱落或起泡,长期贮存要 求保持在40℃及60%RH 以下。

8 不要划伤或弄脏LCD 的偏光片。

9 为了避免静电对产品造成损害,在储存和使用中请注意静电防护。

■ PACKING SPECIFICATION

包装规格

（待定）