PRODUCT SPECIFICATION

8.0" TFT LCD MODULE
MODEL: YDP LCD I 800 LVDS

ROHS

< ◇ > Preliminary Specification

< ◆ > Finally Specification

CUSTOMER'S APPROVAL	
CUSTOMER :	
SIGNATURE:	**DATE:**

APPROVED BY	**PM REVIEWED**	**PD REVIEWED**	**PREPARED BY**

knitter-switch

Revision History

Revision	Date	Originator	Detail	Remarks
1.0	2016.06.24	LJ	Initial Release	
1.1	2016.12.10	ZFY	Add weight Modify temperature Add Chromaticity Modify outline drawing(C)	P4 P4/P22 P6 P26
1.2	2016.12.13	ZFY	Modify Uniformity	P5
1.3	2018.04.24	ZFY	Modify many details	P23/P24

Table of Contents

No. Item Page

1. General Description

The specification is a transmissive type color active matrix liquid crystal display (LCD) which uses amorphous thin film transistor (TFT) as switching devices. This product is composed of a TFT-LCD panel, driver Ics and a backlight unit.

2. Module Parameter

Features	Details	Unit
Display Size(Diagonal)	8.0”	
LCD type	IPS TFT	
Display Mode	Transmissive /normally black	
Resolution	1024*(RGB) x 768	Pixels
View Direction	FULL VIEW	Best Image
Module Outline	175.26(H) x142(V) x 2.95(T) (Note1)	mm
Active Area	162.05(H) x121.54(V)	mm
Pixel Size	158(H)x158(V)	um
Pixel Arrangement	R.G.B. Vertical Stripe	
Surface treatment	Hard coating	
Display Colors	16.7M	
Interface	6 bit/8 bit -LVDS interface	
With or Without Touch Panel	Without	
Operating Temperature	**-20～70**	ºC
Storage Temperature	**-30～70**	ºC
Weight	142	g

Note 1: Exclusive hooks, posts , FFC/FPC tail etc.

3. Absolute Maximum Ratings

V_{SS}=0V, Ta=25ºC

Item	Symbol	Min.	Max.	Unit
Supply Voltage	VDD	(-0.3)	(5.0)	V
	AVDD	(6.5)	(13.5)	V
	VGH	(-0.3)	(VGL+40.0)	V
	VGL	(-20.0)	(0.3)	V
Storage temperature	T_{stg}	-30	+70	ºC
Operating temperature	T_{op}	-20	+70	ºC

Note 1: If Ta below 50ºC, the maximal humidity is 90%RH, if Ta over 50ºC, absolute humidity should be less than 60%RH.

Note 2: The response time will be extremely slow when the operating temperature is around -10℃, and the back ground will become darker at high temperature operating.

4. DC Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	VDD	(3.0)	(3.3)	(3.6)	V
	AVDD	(9.8)	(10)	(10.2)	V
	VGH	(18.6)	(18.9)	(19.2)	V
	VGL	(-8.1)	(-7.8)	(-7.5)	V
Input signal voltage	VCOM	(2.6)	(3.6)	(4.6)	V
Input logic high voltage	VIH	(0.7*VDD)	-	(VDD)	V
Input logic low voltage	VIL	0	-	(0.3*VDD)	V
Current Consumption All White	I_{CC+} I_{IN}	-	TBD	-	mA

Note 1:Be sure to apply VCC and VGL to the LCD first,and then apply VGH

Note 2:VCC setting should match the signal output voltage (refer to Note 3)of customer's system board

Note 3:Typical Vcom is only a reference value ,it must be optimized according to each LCM

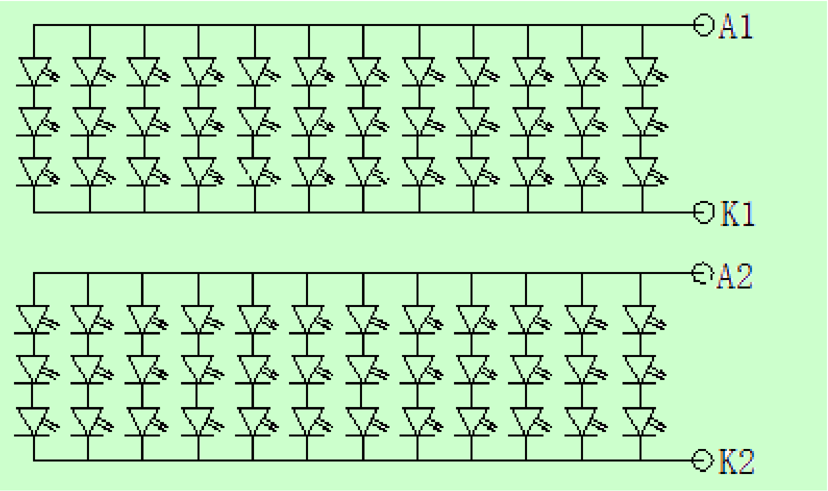
Note 4:DCLK,HS,VS,RSTB,UPDN,STLR,MODE,DITHB

5. Backlight Characteristic

5.1. Backlight Characteristic

Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	Ta=25 ºC, I_F=20mA	-	9.8	-	V
Forward Current	I_F	Ta=25 ºC, V_F=9.8V	-	240*2	-	mA
Power dissipation	Pd		-	4704	-	W
Uniformity	Avg		65	-	-	%
Drive method	Constant current					
LED Configuration	72 White LEDs (3 LEDs in one string and 12 groups in parallel)*2					

5.2. Backlighting circuit



6. Optical Characteristics

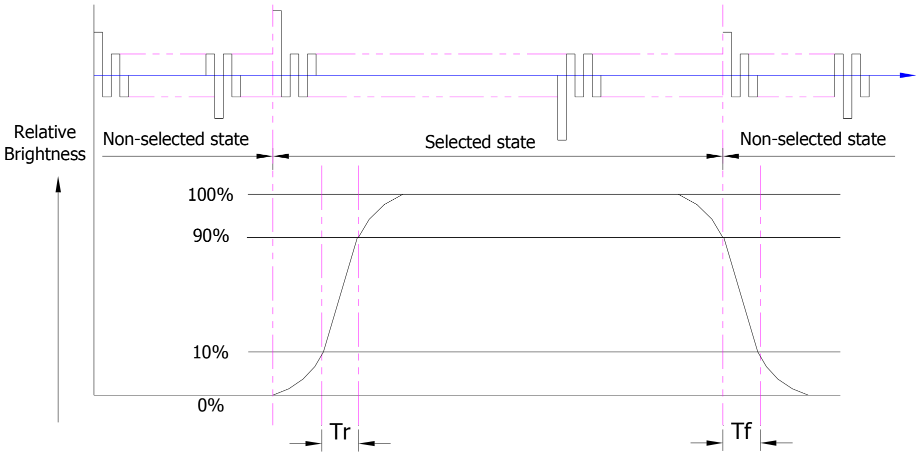
6.1. Optical Characteristics

Ta=25ºC, VDD=3.3V

	Item		Symbol	Condition	Specification			Unit
					Min.	**Typ.**	**Max.**	
Backlight On (Transmissive Mode)	Luminance on TFT(I_f =20mA/LED)		Lv		**640**	**800**	-	cd/m²
	Contrast ratio(See 6.3)		CR		500	800	-	
	Response time (See 6.2)		T_R+T_F		-	39	78	ms
	Chromaticity Transmissive (See 6.5)	Red	X_R		**0.533**	**0.583**	**0.633**	
			Y_R		**0.289**	**0.339**	**0.389**	
		Green	X_G		**0.252**	**0.302**	**0.352**	
			Y_G		**0.563**	**0.613**	**0.663**	
		Blue	X_B		**0.095**	**0.145**	**0.195**	
			Y_B		**0.070**	**0.120**	**0.170**	
		White	X_W		**0.231**	**0.281**	**0.331**	
			Y_W		**0.296**	**0.346**	**0.396**	
	Viewing Angle (See 6.4)	Horizontal	θ_{X+}	Center CR≥10	**75**	**85**	-	Deg.
			θ_{X-}		**75**	**85**	-	
		Vertical	φ_{Y+}		**75**	**85**	-	
			φ_{Y-}		**75**	**85**	-	

6.2. Definition of Response Time

6.2.1. Normally Black Type (Negative)

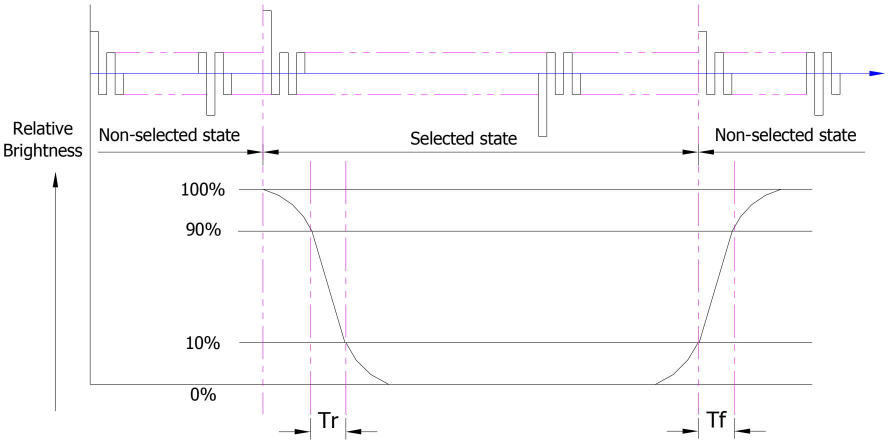


Tr is the time it takes to change form non-selected stage with relative luminance 10% to selected state with relative luminance 90%;

Tf is the time it takes to change from selected state with relative luminance 90% to non-selected state with relative luminance 10%.

Note : Measuring machine: LCD-5100

6.2.2. Normally White Type (Positive)



Tr is the time it takes to change form non-selected stage with relative luminance 90% to selected state with relative luminance 10%;

Tf is the time it takes to change from selected state with relative luminance 10% to non-selected state with relative luminance 90%;

Note : Measuring machine: LCD-5100 or EQUI

6.3. Definition of Contrast Ratio

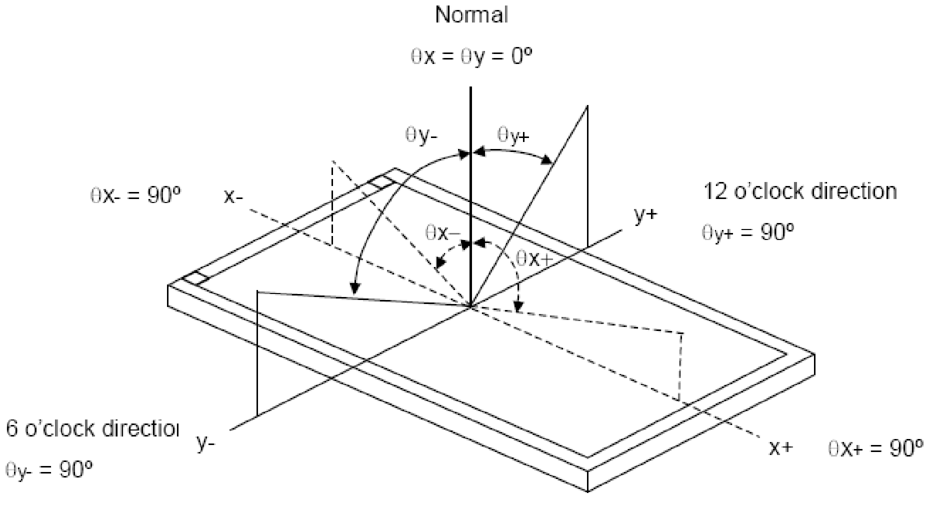
Contrast is measured perpendicular to display surface in reflective and transmissive mode.

The measurement condition is:

Measuring Equipment	Eldim or Equivalent
Measuring Point Diameter	3mm//1mm
Measuring Point Location	Active Area centre point
Test pattern	A: All Pixels white
	B: All Pixel black
Contrast setting	Maximum

Definitions: CR (Contrast) = Luminance of White Pixel / Luminance of Black Pixel

6.4. Definition of Viewing Angles



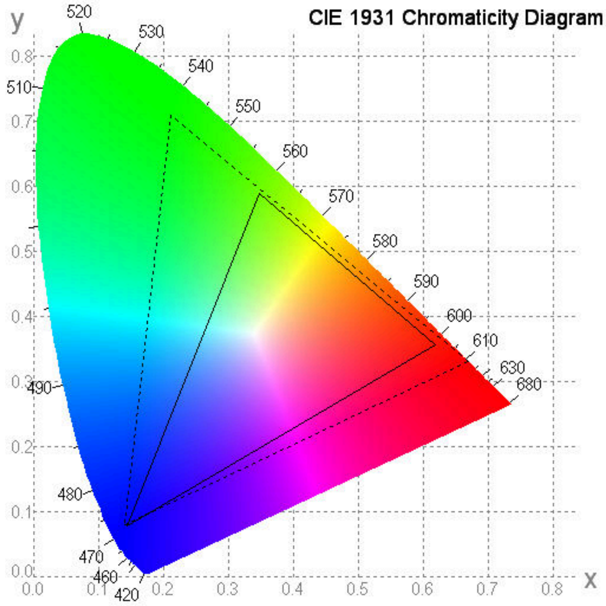
Measuring machine: LCD-5100 or EQUI

6.5. Definition of Color Appearance

R,G,B and W are defined by (x, y) on the IE chromaticity diagram

NTSC=area of RGB triangle/area of NTSC triangleX100%

Measuring picture: Red, Green, Blue and White (Measuring machine: BM-7)



6.6. Definition of Surface Luminance, Uniformity and Transmittance

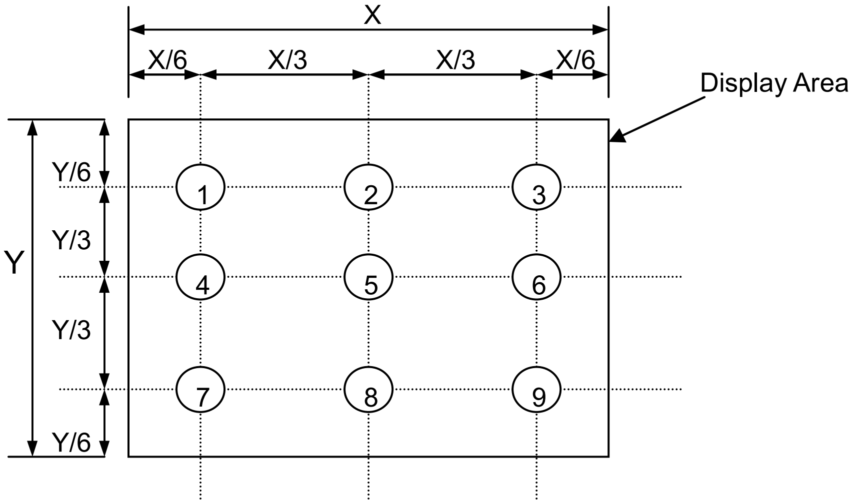
Using the transmissive mode measurement approach, measure the white screen luminance of the display panel and backlight.

6.6.1. Surface Luminance: L_V = average (L_{P1}:L_{P9})

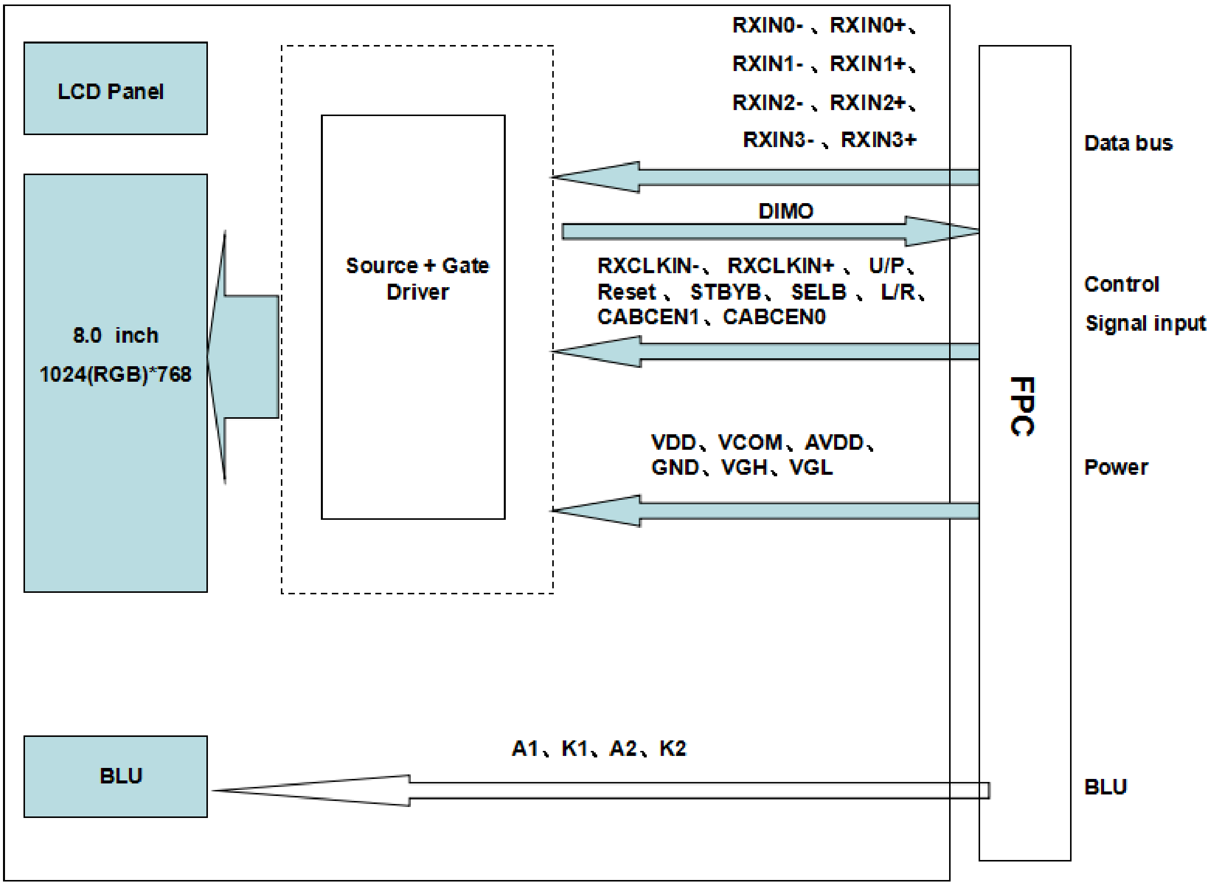
6.6.2. Uniformity = Minimal (L_{P1}:L_{P9}) / Maximal (L_{P1}:L_{P9}) * 100%

6.6.3. Transmittance = L_V on LCD / L_V on Backlight * 100%

Note : Measuring machine: BM-7



7. Block Diagram and Power Supply



8. Interface Pins Definition

1)FH12A-40S-0.5SH

No.	Symbol	Function	Remark
1	VCOM	Common Voltage	
2	VDD	Power Voltage for digital circuit	
3	VDD	Power Voltage for digital circuit	
4	NC	No connection	
5	Reset	Global reset pin	
6	STBYB	Standby mode normally pulled high	
7	GND	Ground	
8	RXIN0-	-LVDS differential data input	
9	RXIN0+	+LVDS differential data input	
10	GND	Ground	
11	RXIN1-	-LVDS differential data input	
12	RXIN1+	+LVDS differential data input	
13	GND	Ground	
14	RXIN2-	-LVDS differential data input	
15	RXIN2+	+LVDS differential data input	
16	GND	Ground	
17	RXCLKIN-	-LVDS differential clock input	
18	RXCLKIN+	+LVDS differential clock input	
19	GND	Ground	
20	RXIN3-	-LVDS differential data input	
21	RXIN3+	+LVDS differential data input	
22	GND	Ground	
23	NC	No connection	
24	NC	No connection	
25	GND	Ground	
26	NC	No connection	
27	DIMO	Backlight CABC controller signal output	
28	SELB	6bit/8bit mode select	Note1
29	AVDD	Power for Analog Circuit	
30	GND	Ground	
31	LED-	No connection	
32	LED-	No connection	
33	L/R	Horizontal inversion	Note3
34	U/D	Vertical inversion	Note3
35	VGL	Gate OFF Voltage	
36	CABCEN1	CABC H/W enable	Note2
37	CABCEN0	CABC H/W enable	Note2
38	VGH	Gate ON Voltage	
39	LED+	No connection	

40	LED+	No connection	

2)Connection:BHSR-02VS-1

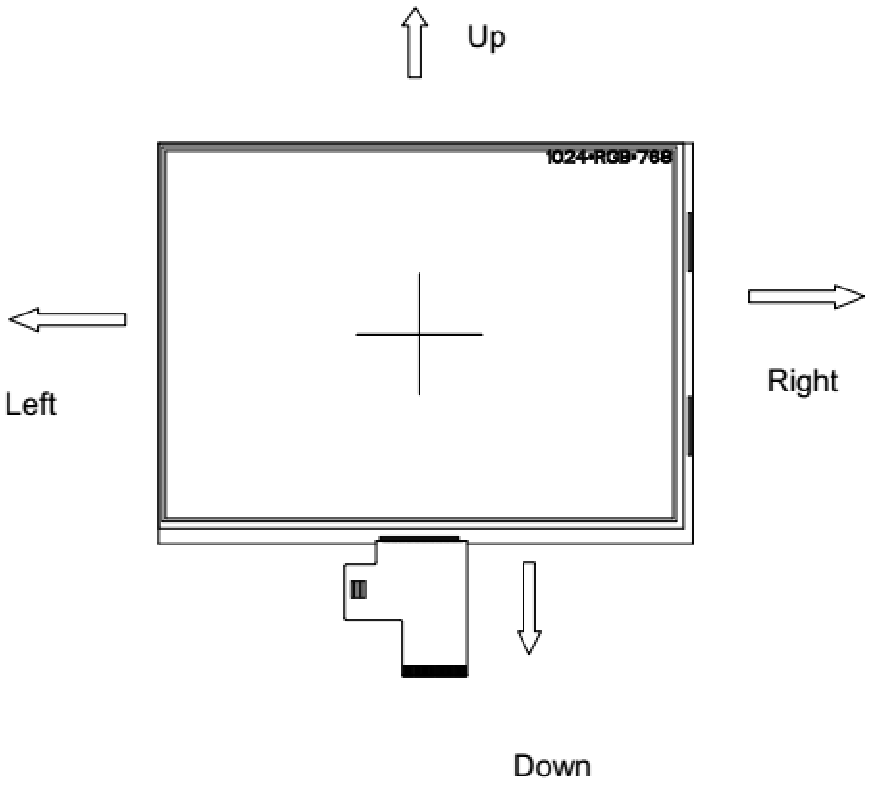
Symbol	Color	Function
A1	Red	LED Anode
K1	Black	LED Cathode
A2	Red	LED Anode
K2	Black	LED Cathode

Note1: If LVDS input data is 6 bits ,SELB must be set to High;
If LVDS input data is 8 bits ,SELB must be set to Low.

Note2: When CABC_EN="00", CABC OFF.
When CABC_EN="01", user interface image.
When CABC_EN="10", still picture.
When CABC_EN="11", moving image.
When CABC off, don't connect DIMO, else connect it to backlight.

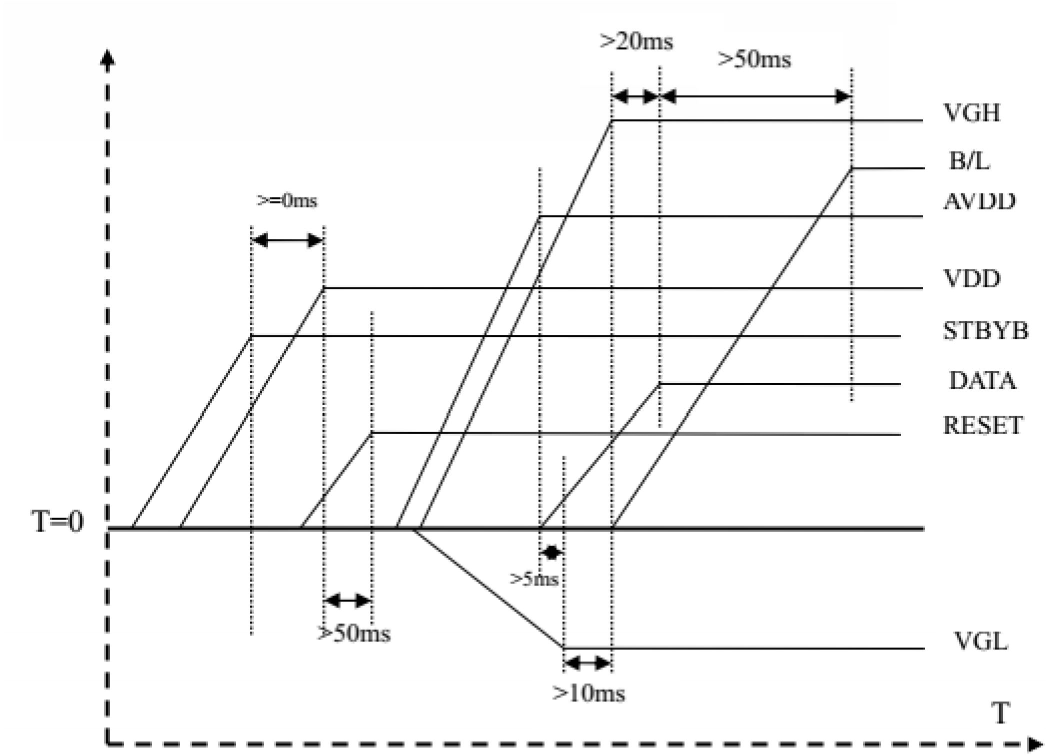
Note3: When L/R="0", set right to left scan direction.
When L/R="1", set left to right scan direction.
When U/D="0", set top to bottom scan direction.
When U/D="1", set bottom to top scan direction.

Note: Definition of scanning direction.
Refer to the figure as below:



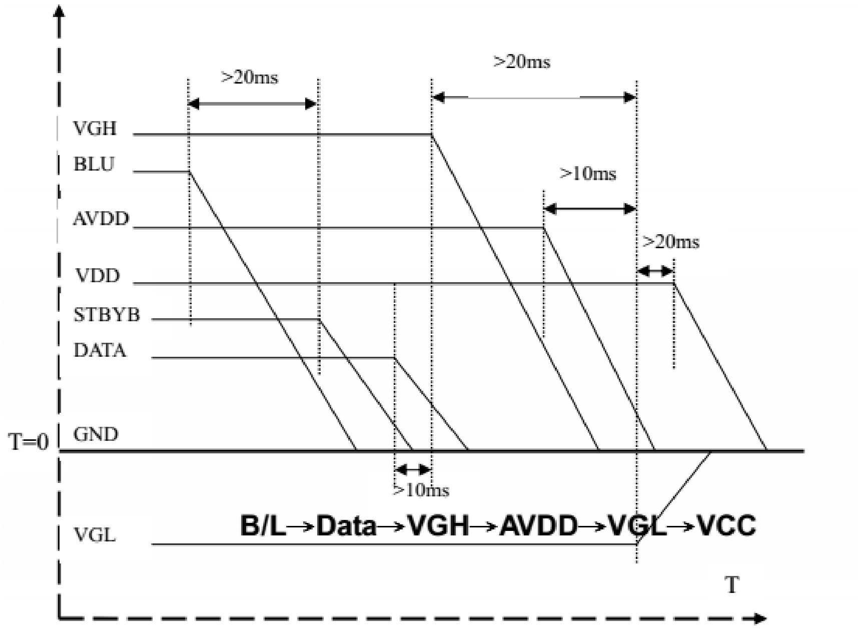
9. Power Sequence

1)



STBYB → VDD→AVDD→VGL→VGH→DATA→B/L

2)



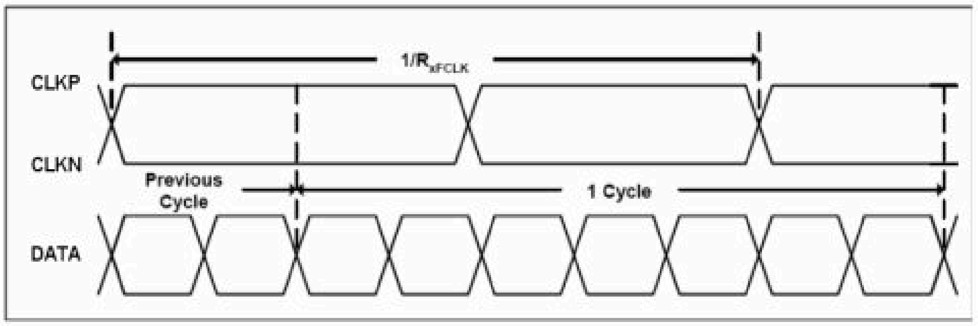
B/L→STBYB→DATA→VGH→VGL→AVDD→VDD

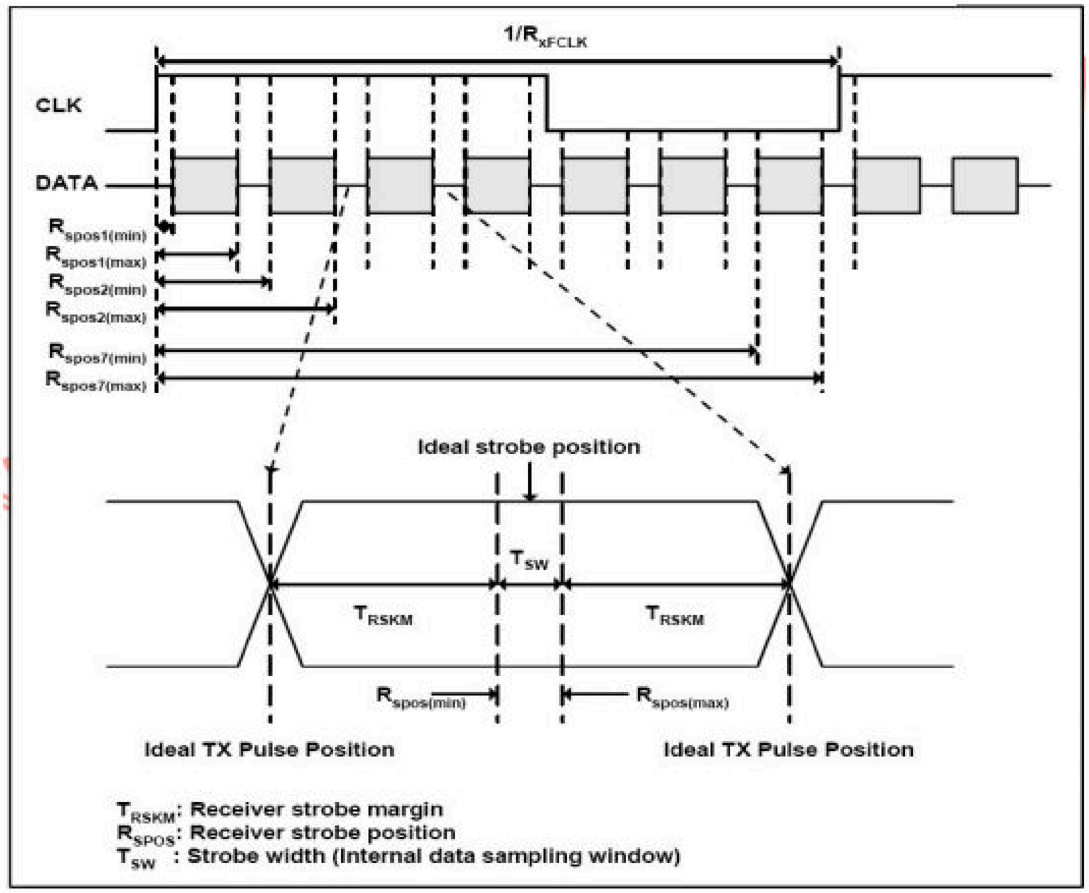
10. Timing Characteristics

10.1 AC Electrical Characteristics

Parameter	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
Clock frequency	R_{xFCLK}	20	-	71	MHz	
Input data skew margin	T_{RSKM}	500	-	-	ps	
Clock high time	T_{LVCH}	-	$4/(7^* R_{xFCLK})$	-	ns	
Clock low time	T_{LVCL}	-	$3/(7^* R_{xFCLK})$	-	ns	

10.2 Input Clock and Data Timing Diagram

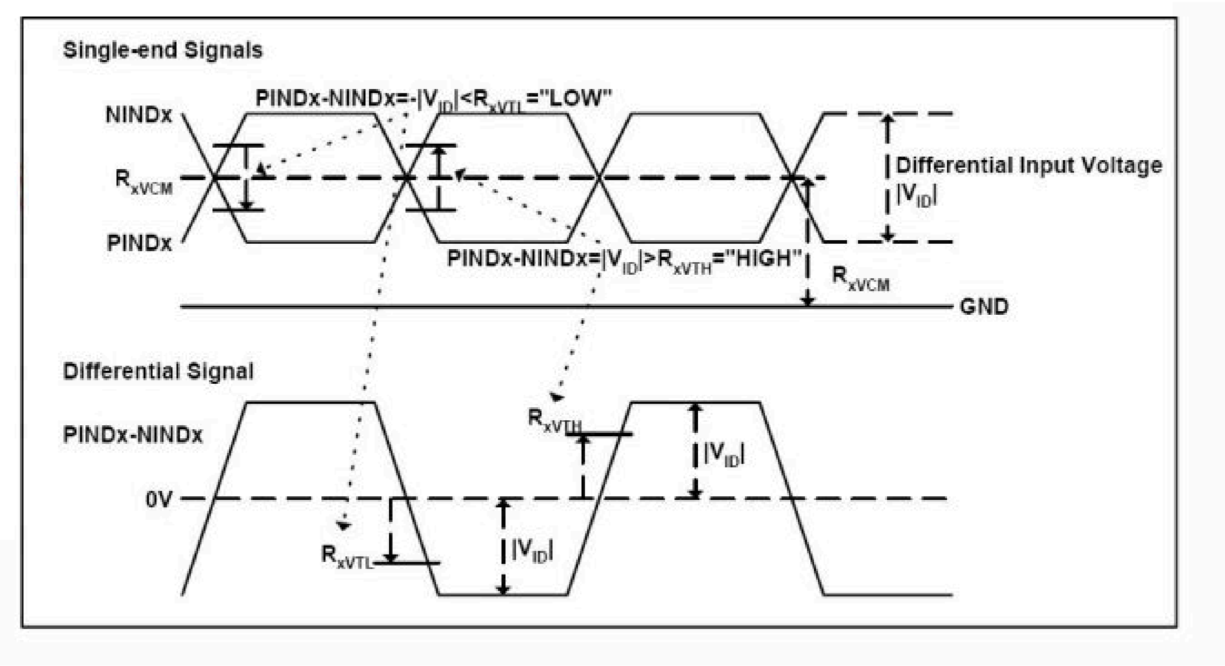




T_{RSKM}: Receiver strobe margin
R_{SPOS}: Receiver strobe position
T_{SW} : Strobe width (Internal data sampling window)

10.3 DC Eldtrical Characeristics

Parameter	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
Differential input high Threshold voltage	R_{xVTH}	-	-	+0.1	V	R_{XVCM}=1.2V
Differential input low Threshold voltage	R_{xVTH}	-0.1	-	-	V	
Input voltage range (singled-end)	R_{xVIN}	0	-	2.4	V	
Differential input common mode voltage	R_{xVCM}	$\|V_{ID}\|/2$	-	$2.4-\|V_{ID}\|/2$	V	
Differential voltage	$\|V_{ID}\|$	0.2	-	0.6	V	
Differential input leakage current	RV_{xliz}	-10	-	+10	uA	

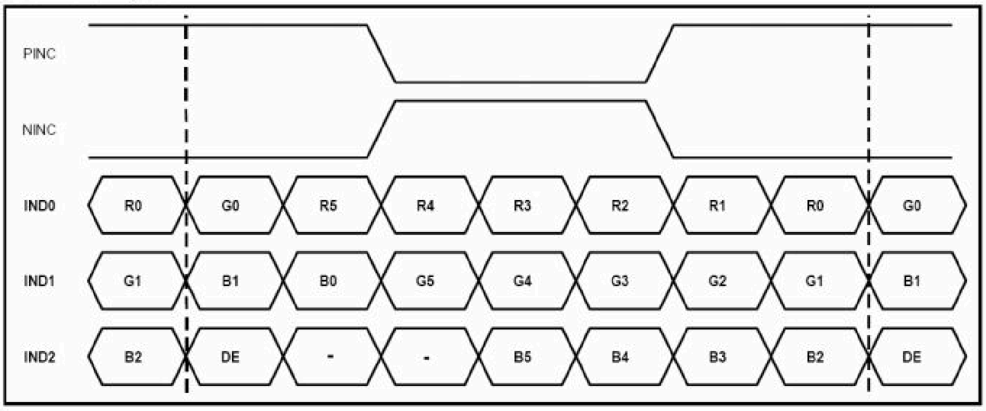


10.4 Timing

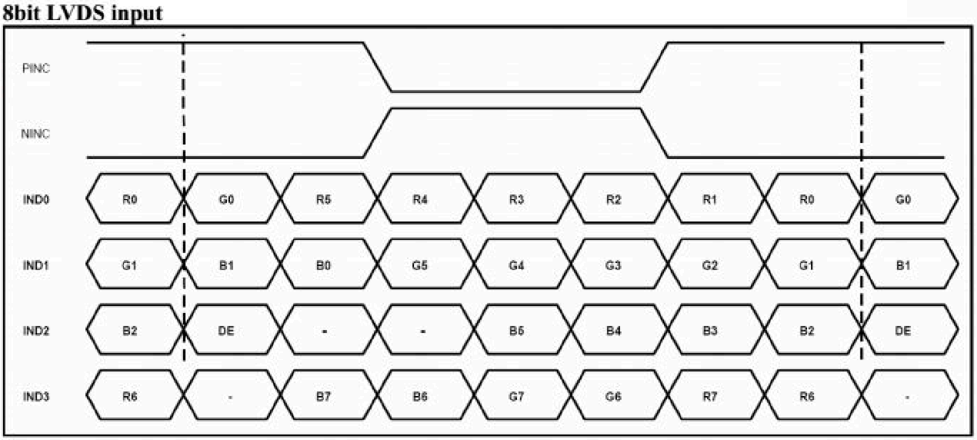
Item	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
Clock Frequency	fclk	52	65	71	MHz	Frame rate
Horizontal display area	thd	1024			DCLK	
HS period time	th	1114	1344	1400	DCLK	
HS Blanking	thb	90	320	376	DCLK	
Vertical display area	tvd	768			H	
VS period time	tv	778	806	845	H	
VS Blanking	thb	10	38	77	H	

10.5 Data Input Format

6bit LVDS input



8bit LVDS input



Note: Support DE timing mode only, SYNC mode not supported.

11. Quality Assurance

11.1 Purpose

This standard for Quality Assurance assures the quality of LCD module products supplied to customer.

11.2 Standard for Quality Test

11.2.1 Sampling Plan:
GB2828.1-2012
Single sampling, general inspection level II

11.2.2 Sampling Criteria:
Visual inspection: AQL 1.5%
Electrical functional: AQL 0.65%.

11.2.3 Reliability Test:
Detailed requirement refer to Reliability Test Specification.

11.3 Nonconforming Analysis & Disposition

11.3.1 Nonconforming analysis:

11.3.1.1 Customer should provide overall information of non-conforming sample for their complaints.

11.3.1.2 After receipt of detailed information from customer, the analysis of nonconforming parts usually should be finished in one week.

11.3.1.3 If can not finish the analysis on time, customer will be notified with the progress status.

11.3.2 Disposition of nonconforming:

11.3.2.1 Non-conforming product over PPM level will be replaced.

11.3.2.2 The cause of non-conformance will be analyzed. Corrective action will be discussed and implemented.

11.4 Agreement Items

Shall negotiate with customer if the following situation occurs:

11.4.1 There is any discrepancy in standard of quality assurance.

11.4.2 Additional requirement to be added in product specification.

11.4.3 Any other special problem.

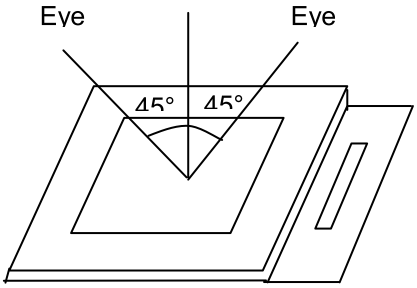
11.5 Standard of the Product Visual Inspection

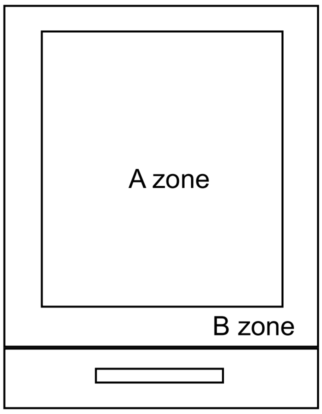
11.5.1 Appearance inspection:

11.5.1.1 The inspection must be under illumination about 1000 – 1500 lx, and the distance of view must be at 30cm ± 2cm.

11.5.1.2 The viewing angle should be 45° from the vertical line without reflection light or follows customer's viewing angle specifications.

11.5.1.3 Definition of area: A Zone: Active Area, B Zone: Viewing Area,



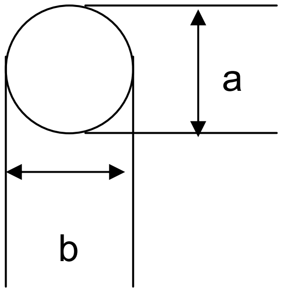


11.5.2 Basic principle:

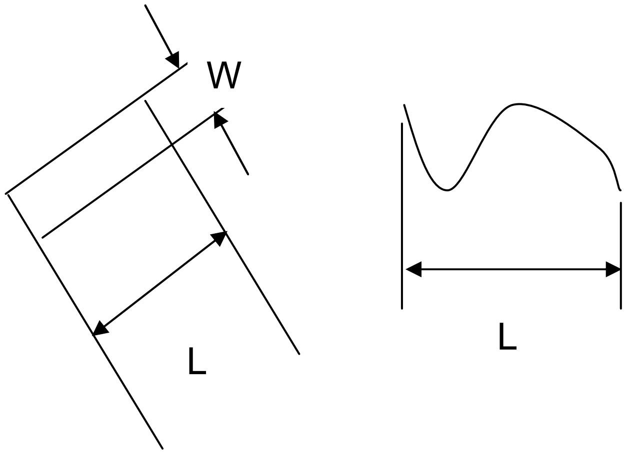
11.5.2.1 A set of sample to indicate the limit of acceptable quality level must be discussed by both us and customer when there is any dispute happened.

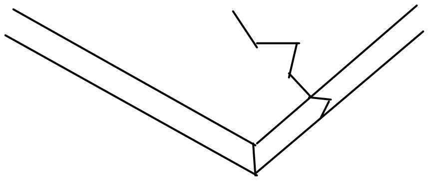
12.5.2.2 New item must be added on time when it is necessary.

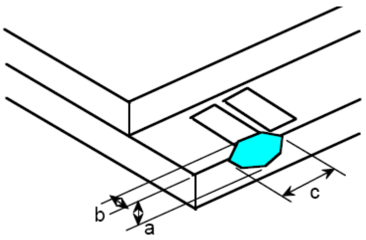
11.6 Inspection Specification

<table>
<tr><th>No.</th><th>Item</th><th>Criteria (Unit: mm)</th></tr>
<tr><td>01</td><td>Black / White spot
Foreign material
(Round type)
Pinholes
Stain
Particles inside cell.
(Minor defect)</td><td>

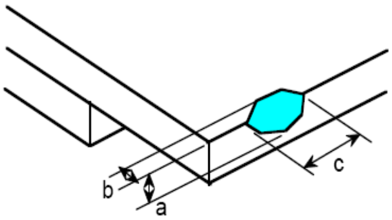
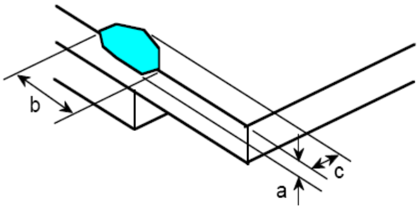
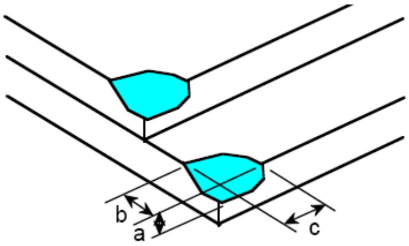
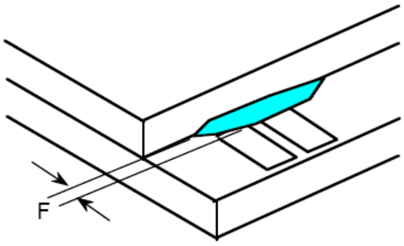
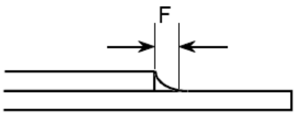
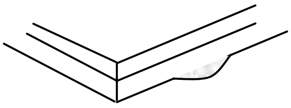
<table>
<tr><th>Area / Size</th><th>Acc. Qty</th></tr>
<tr><td>φ≤0.20</td><td>Ignore</td></tr>
<tr><td>0.20<φ≤0.50</td><td>N≤3</td></tr>
<tr><td>0.50<φ</td><td>0</td></tr>
</table>
φ= (a + b) /2
Distance between 2 defects should more than 5mm apart.</td></tr>
<tr><td>02</td><td>Electrical Defect
(Minor defect)</td><td>
<table>
<tr><td rowspan="2">Bright dot</td><td>Display Area</td><td>Total</td><td rowspan="4">Note1</td></tr>
<tr><td>N≤2</td><td>N≤2</td></tr>
<tr><td>Dark dot</td><td>N≤4</td><td>N≤4</td></tr>
<tr><td>Total dot</td><td>N≤4</td><td>N≤4</td></tr>
<tr><td>Mura</td><td colspan="2">Not visible through 5% ND filters.</td><td>Note 2</td></tr>
</table>
Remark:
1. Bright dot caused by scratch and foreign object accords to item 1.</td></tr>
</table>

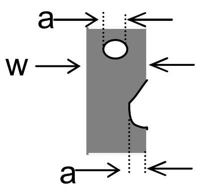
<table>
<tr>
<td>03</td>
<td>Black and White line
Scratch
Foreign material
(Line type)
(Minor defect)</td>
<td>


<table>
<tr><th>Length</th><th>Width</th><th>Acc. Qty</th></tr>
<tr><td>/</td><td>W ≦ 0.1</td><td>Ignore</td></tr>
<tr><td>L ≦ 2.5</td><td>0.1 ＜ W ≦ 0.2</td><td>3</td></tr>
<tr><td>L＞2.5</td><td>0.2 ＜ W</td><td>0</td></tr>
<tr><td colspan="2">Total</td><td>3</td></tr>
</table>
Distance between 2 defects should more than 3mm apart. Scratches not viewable through the back of the display are acceptable.
</td>
</tr>
<tr>
<td>04</td>
<td>Glass Crack
(Minor defect)</td>
<td>

Crack is potential to enlarge, any type is not allowed.
</td>
</tr>
</table>

<table>
<tr>
<td>05</td>
<td>Glass Chipping Pad Area:
(Minor defect)


</td>
<td>
<table>
<tr><th>Length and Width</th><th>Acc. Qty</th></tr>
<tr><td>c > 3.0, b< 1.0</td><td>1</td></tr>
<tr><td>c< 3.0, b< 1.0</td><td>3</td></tr>
<tr><td colspan="2">a<Glass Thickness</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr>
<td>06</td>
<td>Glass Chipping Rear of Pad Area:
(Minor defect)
 </td>
<td><table>
<tr><th>Length and Width</th><th>Acc. Qty</th></tr>
<tr><td>c > 3.0, b< 1.0</td><td>1</td></tr>
<tr><td>c< 3.0, b< 1.0</td><td>2</td></tr>
<tr><td>c< 3.0, b< 0.5</td><td>4</td></tr>
<tr><td colspan="2">a<Glass Thickness</td></tr>
</table></td>
</tr>
<tr>
<td>07</td>
<td>Glass Chipping Except Pad Area:
(Minor defect)
 </td>
<td><table>
<tr><th>Length and Width</th><th>Acc. Qty</th></tr>
<tr><td>c > 3.0, b< 1.0</td><td>1</td></tr>
<tr><td>c< 3.0, b< 1.0</td><td>2</td></tr>
<tr><td>c< 3.0, b< 0.5</td><td>4</td></tr>
<tr><td colspan="2">a<Glass Thickness</td></tr>
</table></td>
</tr>
<tr>
<td>08</td>
<td>Glass Corner Chipping:
(Minor defect)
 </td>
<td><table>
<tr><th>Length and Width</th><th>Acc. Qty</th></tr>
<tr><td>c < 3.0, b< 3.0</td><td>Ignore</td></tr>
<tr><td colspan="2">a<Glass Thickness</td></tr>
</table></td>
</tr>
<tr>
<td>09</td>
<td>Glass Burr:
(Minor defect)


</td>
<td><table>
<tr><th>Length</th><th>Acc. Qty</th></tr>
<tr><td>F < 1.0</td><td>Ignore</td></tr>
</table>
Glass burr don't affect assemble and module dimension.</td>
</tr>
</table>

<table>
<tr><td>10</td><td>FPC Defect:
(Minor defect)
 </td><td>10.1 Dent, pinhole width a<w/3.
(w: circuitry width.)
10.2 Open circuit is unacceptable.
10.3 No oxidation, contamination and distortion.</td></tr>
<tr><td>11</td><td>Bubble on Polarizer
(Minor defect)</td><td><table>
<tr><th>Diameter</th><th>Acc. Qty</th></tr>
<tr><td>φ≤0.30</td><td>Ignore</td></tr>
<tr><td>0.30 <φ≤0.50</td><td>N≤2</td></tr>
<tr><td>0.50 < φ</td><td>N=0</td></tr>
</table></td></tr>
<tr><td>12</td><td>Dent on Polarizer
(Minor defect)</td><td><table>
<tr><th>Diameter</th><th>Acc. Qty</th></tr>
<tr><td>φ≤0.25</td><td>Ignore</td></tr>
<tr><td>0.25 <φ≤0.50</td><td>N≤4</td></tr>
<tr><td>0.50 < φ</td><td>None</td></tr>
</table></td></tr>
<tr><td>13</td><td>Bezel</td><td>13.1 No rust, distortion on the Bezel.
13.2 No visible fingerprints, stains or other contamination.</td></tr>
<tr><td>14</td><td>Touch Panel</td><td>D: Diameter W: width L: length
14.1 Spot: D<0.25 is acceptable
0.25≤D≤0.4
2dots are acceptable and the distance between defects should more than 10 mm.
D>0.4 is unacceptable
14.2 Dent: D>0.40 is unacceptable
14.3 Scratch: W≤0.03, L≤10 is acceptable,
0.03<W≤0.10, L≤10 is acceptable
Distance between 2 defects should more than 10 mm.
W>0.10 is unacceptable.</td></tr>
<tr><td>15</td><td>PCB</td><td>15.1 No distortion or contamination on PCB terminals.
15.2 All components on PCB must same as documented on the BOM/component layout.
15.3 Follow IPC-A-600F.</td></tr>
<tr><td>16</td><td>Soldering</td><td>Follow IPC-A-610C standard</td></tr>
</table>

17	Electrical Defect (Major defect)	The below defects must be rejected. 17.1 Missing vertical / horizontal segment, 17.2 Abnormal Display. 17.3 No function or no display. 17.4 Current exceeds product specifications. 17.5 LCD viewing angle defect. 17.6 No Backlight. 17.7 Dark Backlight. 17.8 Touch Panel no function.

Remark: LCD Panel Broken shall be rejected. Defect out of LCD viewing area is acceptable.

11.7 Classification of Defects

11.7.1 Visual defects (Except no / wrong label) are treated as minor defect and electrical defect is major.

11.7.2 Two minor defects are equal to one major in lot sampling inspection.

11.8 Identification/marking criteria

Any unit with illegible / wrong /double or no marking/ label shall be rejected.

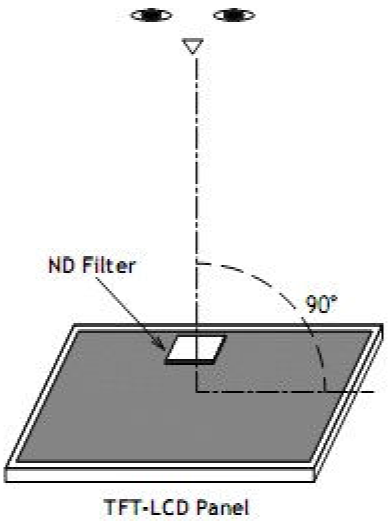
11.9 Packing

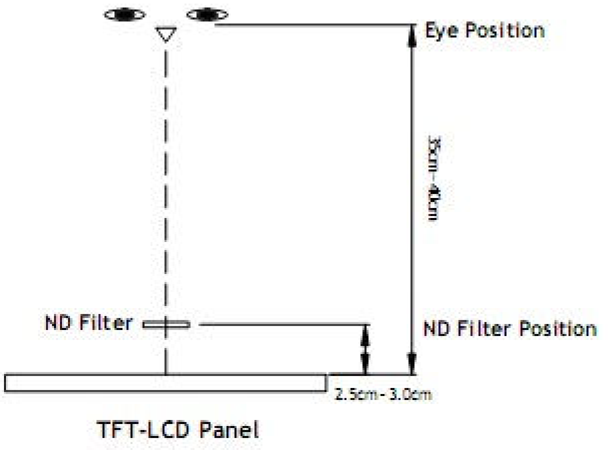
11.9.1 There should be no damage of the outside carton box, each packaging box should have one identical label.

11.9.2 Modules inside package box should have compliant mark.

11.9.3 All direct package materials shall offer ESD protection

Note1: Bright dot is defined as the defective area of the dot is larger than 50% of one sub-pixelarea.





Bright dot:The bright dot size defect at black display pattern.It can be recognized by 2% transparency of filter when the distance between eyes and panel is 350mm±50mm.

Dark dot:Cyan,Magenta or Yellow dot size defect at white display pattern.It can be recognized by 5% transparency of filter when the distance between eyes and panel is 350mm±50mm.

Note2: Mura on display which appears darker / brighter against background brightness on parts of display area.

12. Reliability Specification

No	Item	Condition	Quantity	Criteria
1	High Temperature Operating	**70℃, 96Hrs**	2	GB/T2423.2 -2008
2	Low Temperature Operating	**-20℃, 96Hrs**	2	GB/T2423.1 -2008
3	High Humidity	**40℃, 90%RH, 96Hrs**	2	GB/T2423.3 -2006
4	High Temperature Storage	**70℃, 96Hrs**	2	GB/T2423.2 -2008
5	Low Temperature Storage	**-30℃, 96Hrs**	2	GB/T2423.1 -2008
6	Thermal Cycling Test	-20℃, 30min~70℃, 30min, 100 cycles.	2	GB/T2423.22 -2012
7	Packing vibration	Frequency range:10Hz~50Hz Acceleration of gravity:5G X, Y, Z 30 min for each direction.	2	GB/T5170.14 -2009
8	Electrical Static Discharge	Air:±4KV 150pF/330Ω 5 times	2	GB/T17626.2 -2006
		Contact:±2KV 150pF/330Ω 5 times		
9	Drop Test (Packaged)	Height:80 cm,1 corner, 3 edges, 6 surfaces.	2	GB/T2423.8 -1995

Note1. No defection cosmetic and operational function allowable.

Note2. Total current Consumption should be below double of initial value

13. Precautions and Warranty

13.1. Safety

13.1.1 The liquid crystal in the LCD is poisonous. Do not put it in your mouth. If the liquid crystal touches your skin or clothes, wash it off immediately using soap and water.

13.1.2 Since the liquid crystal cells are made of glass, do not apply strong impact on them. Handle with care.

13.2. Handling

13.2.1 Reverse and use within ratings in order to keep performance and prevent damage.

13.2.2 Do not wipe the polarizer with dry cloth, as it might cause scratch. If the surface of the LCD needs to be cleaned, wipe it swiftly with cotton or other soft cloth soaked with petroleum IPA, do not use other chemicals.

13.3. Storage

13.3.1. Do not store the LCD module beyond the specified temperature ranges.

13.3.2. Strong light exposure causes degradation of polarizer and color filter

13.4. Metal Pin (Apply to Products with Metal Pins)

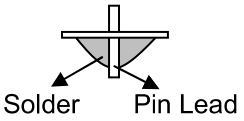
13.4.1 Pins of LCD and Backlight

13.4.1.1 Solder tip can touch and press on the tip of Pin LEAD during the soldering

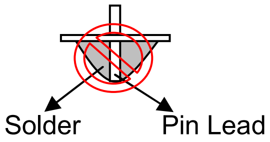
13.4.1.2 Recommended Soldering Conditions

Solder Type: Sn96.3~94-Ag3.3~4.3-Cu0.4~1.1
Maximum Solder Temperature: 370℃
Maximum Solder Time: 3s at the maximum temperature
Recommended Soldering Temp: 350±20℃
Typical Soldering Time: ≤3s

13.4.1.3 Solder Wetting



Recommended



Not Recommended

13.4.2 Pins of EL

13.4.2.1 Solder tip can touch and press on the tip of EL leads during soldering.

13.4.2.2 No Solder Paste on the soldering pad on the motherboard is recommended.

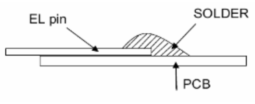
13.4.2.3 Recommended Soldering Conditions

Solder type: Nippon Alimit Leadfree SR-34, size 0.5mm
Recommended Solder Temperature: 270～290℃
Typical Soldering Time: ≤2s
Minimum solder distance from EL lamp (body):2.0mm

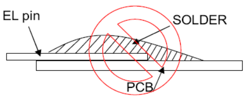
13.4.2.4 No horizontal press on the EL leads during soldering.

13.4.2.4 180° bend EL leads three times is not allowed.

13.4.2.5 Solder Wetting

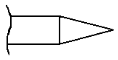


Recommended

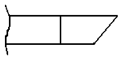


Not Recommended

13.4.2.6 The type of the solder iron:

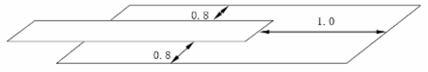


Recommended



Not Recommended

13.4.2.7 Solder Pad



13.5. Operation

13.5.1. Do not drive LCD with DC voltage

13.5.2. Response time will increase below lower temperature

13.5.3. Display may change color with different temperature

13.5.4. Mechanical disturbance during operation, such as pressing on the display area, may cause the segments to appear “fractured”.

13.5.5. Do not connect or disconnect the LCM to or from the system when power is on.

13.5.6. Never use the LCM under abnormal condition of high temperature and high humidity.

13.5.7. Module has high frequency circuits. Sufficient suppression to the electromagnetic interface shall be done by system manufacturers. Grounding and shielding methods may be important to minimize the interference.

13.5.8. Do not display the fixed pattern for long time（we suggest the time not longer than one hour） because it may develop image sticking due to the TFT structure.

13.6. Static Electricity

13.6.1. CMOS LSIs are equipped in this unit, so care must be taken to avoid the electro-static charge, by ground human body, etc.

13.6.2. The normal static prevention measures should be observed for work clothes and benches.

13.6.3. The module should be kept into anti-static bags or other containers resistant to static for storage.

13.7. Limited Warranty

13.7.1. Our warranty liability is limited to repair and/or replacement. We will not be responsible for any consequential loss.

13.7.2. If possible, we suggest customer to use up all modules in six months. If the module storage time over twelve months, we suggest that recheck it before the module be used

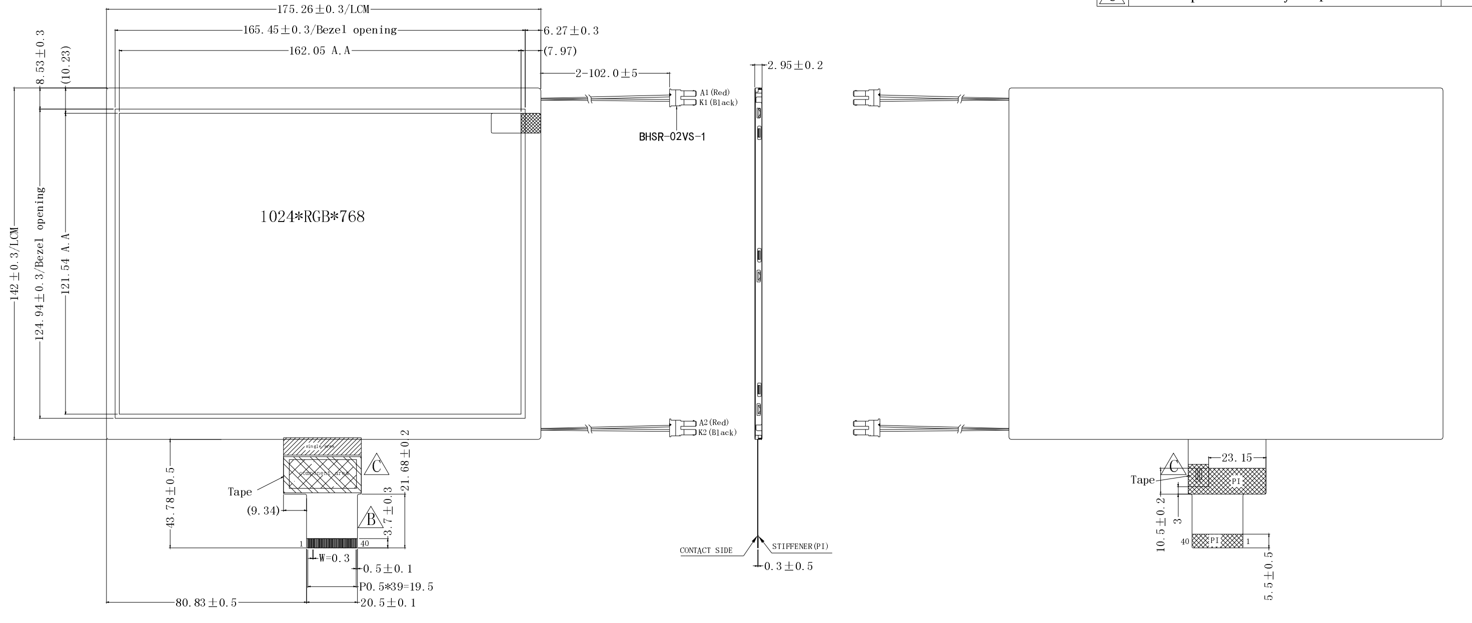
13.7.3. After the product shipped, any product quality issues must be feedback within three months, otherwise, we will not be responsible for the subsequent or consequential events.

14. Packaging

TBD

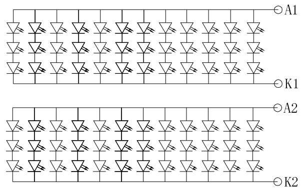
15. Outline Drawing

REV	REVISION RECORD	SIGN	DATE
A	First Issue		
B	Modify Details		
C	add tape & modify tape		



PIN FUNCTION

PIN	SYMBOL
1	VCOM
2	VDD
3	VDD
4	NC
5	RESET
6	STBYB
7	GND
8	RXIN0-
9	RXIN0+
10	GND
11	RXIN1-
12	RXIN1+
13	GND
14	RXIN2-
15	RXIN2+
16	GND
17	RXCLKIN-
18	RXCLKIN+
19	GND
20	RXIN3-
21	RXIN3+
22	GND
23	NC
24	NC
25	GND
26	NC
27	DIMO
28	SELB
29	AVDD
30	GND
31	LED-
32	LED-
33	UL/R
34	U/D
35	VGL
36	CABCEN1
37	CABCEN0
38	VGH
39	LED+
40	LED+



NOTES:
1.Display size:8.0"TFT
2.Viewing direction:Full viewing
3.Display mode:Transmissive/Normal black
4.Operation temperature:-20°C~+70°C
5.Storage temperature:-30°C~+70°C B
6.Power supply voltage:3.3V
7.Backlight :White(72 LED)/9.8(TYP)V/240*2 mA
8.Brightness:800 cd/m2(TYP)
8.ROHS must be complied
9.Unspecification tolerance are ±0.2mm
10. ( ) reference dimension

	VERSION	DATE	MODEL NAME: YDP LCD I 800 LVDS
	C	2 6	
SCALE	NO.	UNIT	TITLE: Outline
	1/1	mm	
APPROVED	CHECKED	DRAWN	FILE NAME: