POWERTIP TECH. CORP.

SPECIFICATIONS

CUSTOMER	:	
SAMPLE CODE	:	SH102600T005-ZZC
MASS PRODUCTION CODE	:	PH102600T005-ZZC
SAMPLE VERSION	:	01
SPECIFICATIONS EDITION	:	007
DRAWING NO. (Ver.)	:	LMD-PH102600T005-ZZC (Ver.005)
PACKAGING NO. (Ver.)	:	PKG-PH102600T005-ZZC (Ver.002)

Customer Approved

Date:

Approved	Checked	Designer
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POWERTIP
2017.01.05
TW RD APR

☐ Preliminary specification for design input

■ Specification for sample approval

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History of Version

Date (mm / dd / yyyy)	Ver.	Edi.	Description	Page	Design by
11/12/2014	01	001	New Sample.	--	Ackey
01/27/2015	01	002	Modify Outline.	4,Appendix	Ackey
07/28/2015	01	003	Modify CTP FPC.	Appendix	Ackey
08/27/2015	01	004	Add LED Life Time.	7	Ryan
09/02/2015	01	005	Second Sample.	-	Ackey
02/23/2016	01	006	Modify Design.	Appendix	Ackey
01/04/2017	01	007	Modify CTP Connector & Change CTP IC (ILI2301S + ILIM2VDS).	10,Appendix	Ackey

Total: 26Page

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Appendix：LCM Drawing
LCM Packaging Specifications

1. SPECIFICATIONS

1.1 Features

Item	Standard Value
Display Type	1024 * 3 (RGB) * 600 Dots
LCD Type	a-Si TFT , Normally White , Transmissive type
Screen size(inch)	10.1 inch
Color configuration	RGB-Strip
Backlight Type	LED B/L
Interface	LVDS Interface
ROHS	THIS PRODUCT CONFORMS THE ROHS OF PTC Detail information please refer website : http://www.powertip.com.tw/news.php?area_id_view=1085560481/

1.2 Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	260.92 (W) * 163.48 (L) * 10.72 (H)	mm

LCD panel

Item	Standard Value	Unit
Active Area	222.72 (W) * 125.28 (L)	mm

Note : For detailed information please refer to LCM drawing

1.3 Absolute Maximum Ratings

Module

Item	Symbol	Min.	Max.	Unit
Power Voltage	V_{DD}	-0.3	3.96	V
Power Voltage	V_{EDID_IN}	-0.3	12	V
LVDS Input Signal	VS	-	3.6	V
EN/PWM Voltage	VPWM	-0.3	12	V
Operating Temperature*1	T_{OP}	-20	70	℃
Storage Temperature*1	T_{ST}	-30	80	℃
Storage Humidity*1	H_D	10	90	%RH

Note1: The storage /operating temperature. Maximum Wet-Bulb should be 39 degree C. There is no condensation on the panel surface.

1.4 DC Electrical Characteristics

Module GND = 0V, Ta = 25℃

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Remark
Power Voltage	V_{DD}	-	3.0	3.3	3.6	V	-
Power Voltage Ripple	VRPL	Vp-p	-	-	200	mV	-
Supply Current	IDD	V_{DD} = 3.3 V Pattern= Black *1	-	130	200	mA	

Note1:Maximum current display.

LVDS GND = 0V, Ta = 25℃

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Remark
Differential Input High Threshold	Vth	Vcm=+1.2V	-	-	100	mV	-
Differential Input Low Threshold	Vtl	Vcm=+1.2V	-100	-	-	mV	-
Magnitude Differential Input	|Vid|	-	200	-	600	mV	-
Common Mode Voltage	Vcm	Vth - Vtl = 200mV	1.0	1.2	1.4	V	
Common Mode Voltage Offset	$\triangle V_{cm}$	Vth - Vtl = 200mV	-50	-	50	mV	

EDID GND = 0V, Ta = 25℃

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Power Supply Voltage	V_{EDID}	-	3.0	-	3.6	V

B/L GND = 0V, Ta = 25℃

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Power Supply Voltage	VLED_IN	-	4.5	5	5.5	V
Power Supply Current	I_{LED-IN}	V_LED=4.5V η =85%	-	-	586	mA
EN/PWM	VH	-	2.0	-	5.0	V
	VL	-	0	-	0.5	V
Life Time	-	IF= 586 mA	30000	-	-	hrs

Note: A. Input signals shall be low or Hi-Z state when VIN is off.

B. All electrical characteristics for LVDS signal are defined and shall be measured at the interface connector of LCD.

C. White Pattern at 3.3V driving voltage.

1.5 Optical Characteristics

TFT LCD Module VDD = 3.3 V, Ta=25℃

Item		Symbol	Condition	Min.	Typ.	Max.	unit	
Response time	T_r		Ta = 25℃ θX, θY = 0°	-	10	20	ms	Note 2
	T_f			-	20	30		
Viewing angle	Top	θY+	CR ≥ 10	70	80	-	Deg.	Note 4
	Bottom	θY-		70	80	-		
	Left	θX-		70	80	-		
	Right	θX+		70	80	-		
Contrast ratio		CR	Ta = 25℃ θX , θY = 0°	400	500	-	-	Note 3
Color of CIE Coordinate (With B/L & CTP)	White	X		0.26	0.31	0.36	-	Note1
		Y		0.31	0.36	0.41		
	Red	X		0.51	0.56	0.61		
		Y		0.29	0.34	0.39		
	Green	X		0.23	0.28	0.32		
		Y		0.47	0.52	0.57		
	Blue	X		0.11	0.16	0.21		
		Y		0.10	0.15	0.20		
Average Brightness Pattern=white display (With LCD)*1		IV	-	230	280	-	cd/m^2	Note1
Uniformity (With LCD)*2		△B	-	70	-	-	%	Note1

Note 1:

*1：△B=B(min) / B(max) * 100%

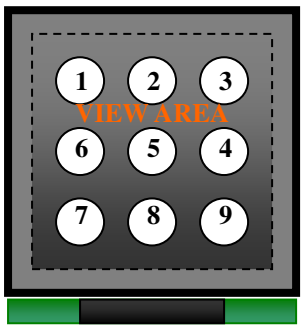
*2：Measurement Condition for Optical Characteristics:

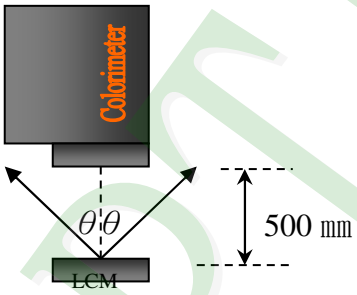
a：Environment: 25℃±5℃ / 60±20%R.H，no wind，dark room below 10 Lux at typical lamp current and typical operating frequency.

b：Measurement Distance: 500 ± 50 ㎜ ，(θ= 0°)

c：Equipment: TOPCON BM-7 fast，(field 1°)，after 10 minutes operation.

d：The uncertainty of the C.I.E coordinate measurement ±0.01，Average Brightness ± 4%





Colorimeter=BM-7 fast

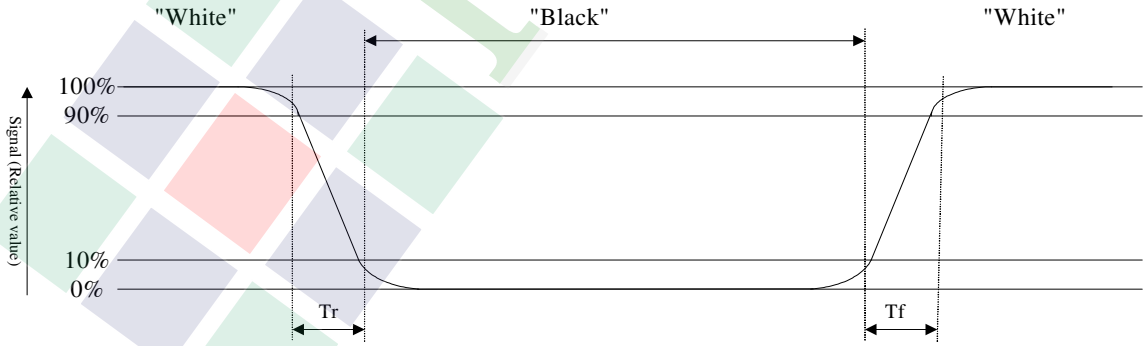
To be measured at the center area of panel with a viewing cone of 1° by Topcon luminance meter BM-7, after 10 minutes operation (module)

Note2: Definition of response time:

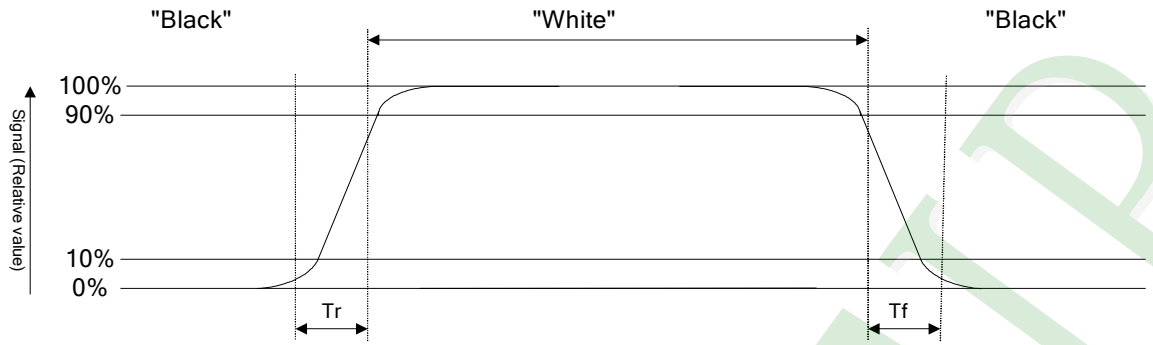
The output signals of photo detector are measured when the input signals are changed from “black” to “white”(falling time) and from “white” to “black”(rising time), respectively. The response time is defined as the time interval between the 10% and 90% of Amplitudes.

Refer to figure as below:

Normally White



Normally Black



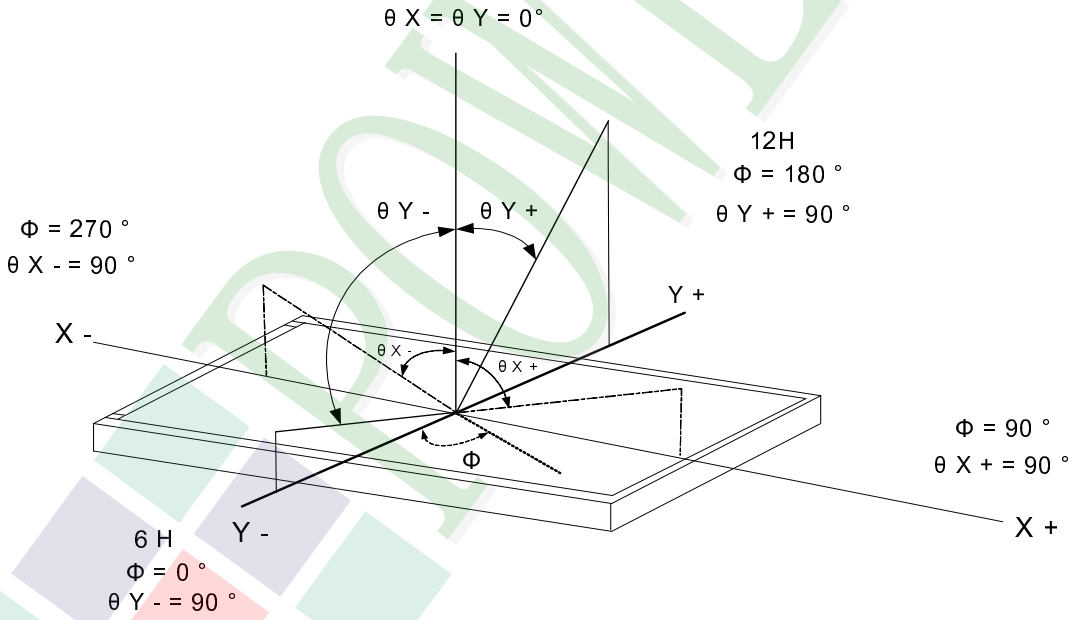
Note3: Definition of contrast ratio:

Contrast ratio is calculated with the following formula

$$\text{Contrast ratio (CR)} = \frac{\text{Photo detector output when LCD is at “White” state}}{\text{Photo detector output when LCD is at “Black” state}}$$

Note4: Definition of viewing angle:

Refer to figure as below:



1.6 Touch Panel Characteristics

Features

Item	Standard Value
Touch Panel Size	10.1”
Touch type	Transparent Type Projected Capacitive Multi Touch Panel
Input Method	5 Point(use Finger)
IC	ILI2301S + ILIM2VDS
Response Time	≦25ms
Light Transparency	85% Min
Surface Hardness	7H(Pencil)

Absolute Maximum Ratings

Item	Symbol	Condition	Min.	Max.	Unit
Operating Temperature	T_{OP}	-	-20	+70	℃
Storage Temperature	T_{ST}	-	-30	+80	℃

Touch Panel IC Read/Write description & Register Mapping

Reference: ILI2301S+ILIM2V Touch Driver Porting Reference Guide.

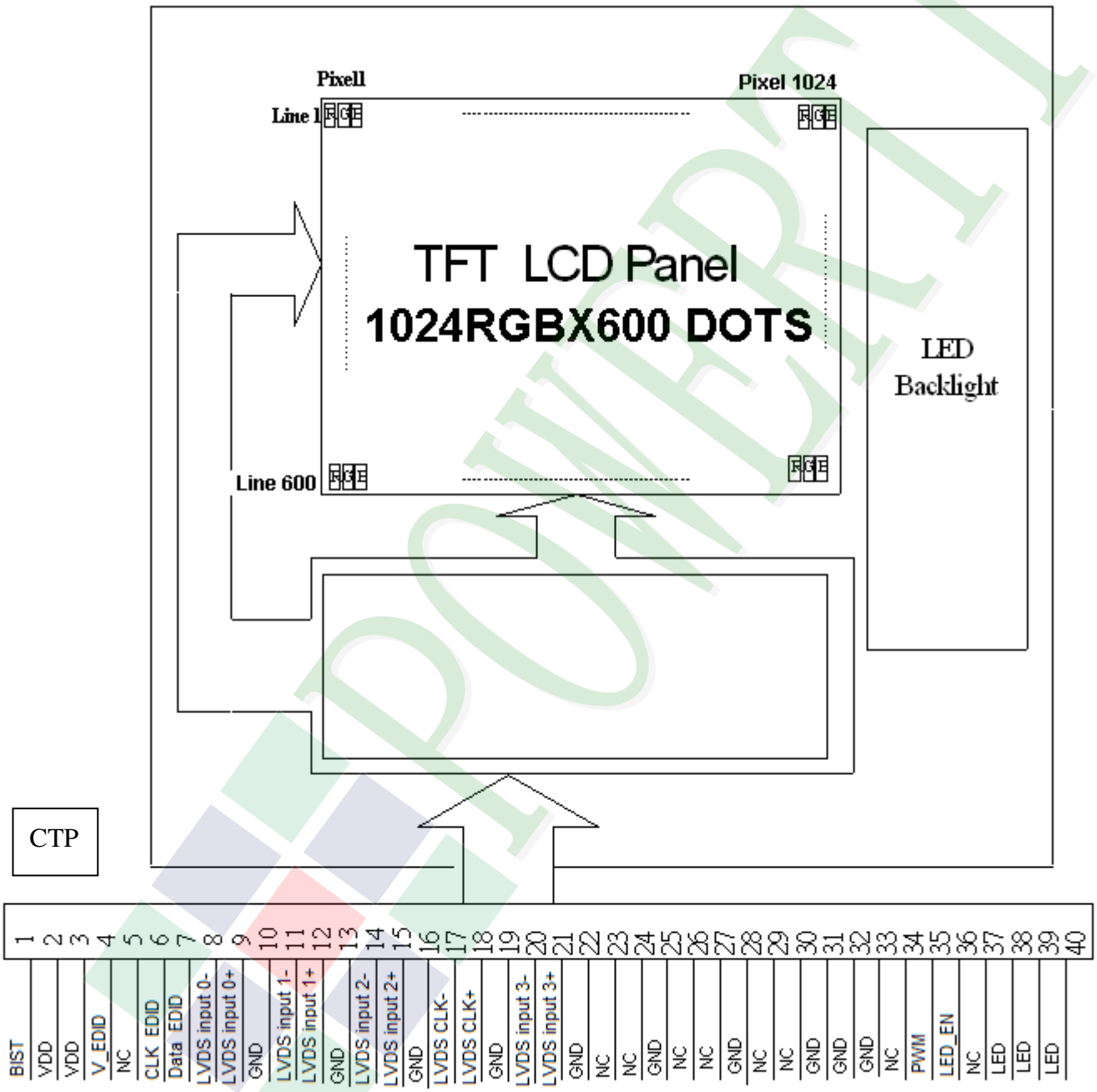
2. MODULE STRUCTURE

2.1 Counter Drawing

2.1.1 LCM Mechanical Diagram

* See Appendix

2.1.2 Block Diagram



2.2 Interface Pin Description(CN1)

Pin No.	Symbol	Function
1	BIST	BIST MODE SELECT(High Enable), FOR INTERNAL TEST.
2	VDD	LCD power supply (Typ. +3.3V).
3	VDD	LCD power supply (Typ. +3.3V).
4	V_EDID	EDID power supply.
5	NC	No connection.
6	CLK_EDID	EDID CLK signal.
7	Data_EDID	EDID Data signal.
8	LVDS input 0-	LVDS CH0 Data signal(-)，R0~R5，G0.
9	LVDS input 0+	LVDS CH0 Data signal(+)，R0~R5，G0.
10	GND	Ground.
11	LVDS input 1-	LVDS CH1 Data signal(-)，G1~G5，B0，B1.
12	LVDS input 1+	LVDS CH1 Data signal(+)，G1~G5，B0，B1.
13	GND	Ground.
14	LVDS input 2-	LVDS CH2 Data signal(-)，B2~B5，DE.
15	LVDS input 2+	LVDS CH2 Data signal(+)，B2~B5，DE.
16	GND	Ground.
17	LVDS CLK-	LVDS CLK data signal(-).
18	LVDS CLK+	LVDS CLK data signal(+).
19	GND	Ground.
20	LVDS input 3-	LVDS CH3 data signal(-)，R6~R7，G6~G7，B6.
21	LVDS input 3+	LVDS CH3 data signal(+)，R6~R7，G6~G7，B6.
22	GND	Ground.
23	NC	No connection.
24	NC	No connection.
25	GND	Ground.

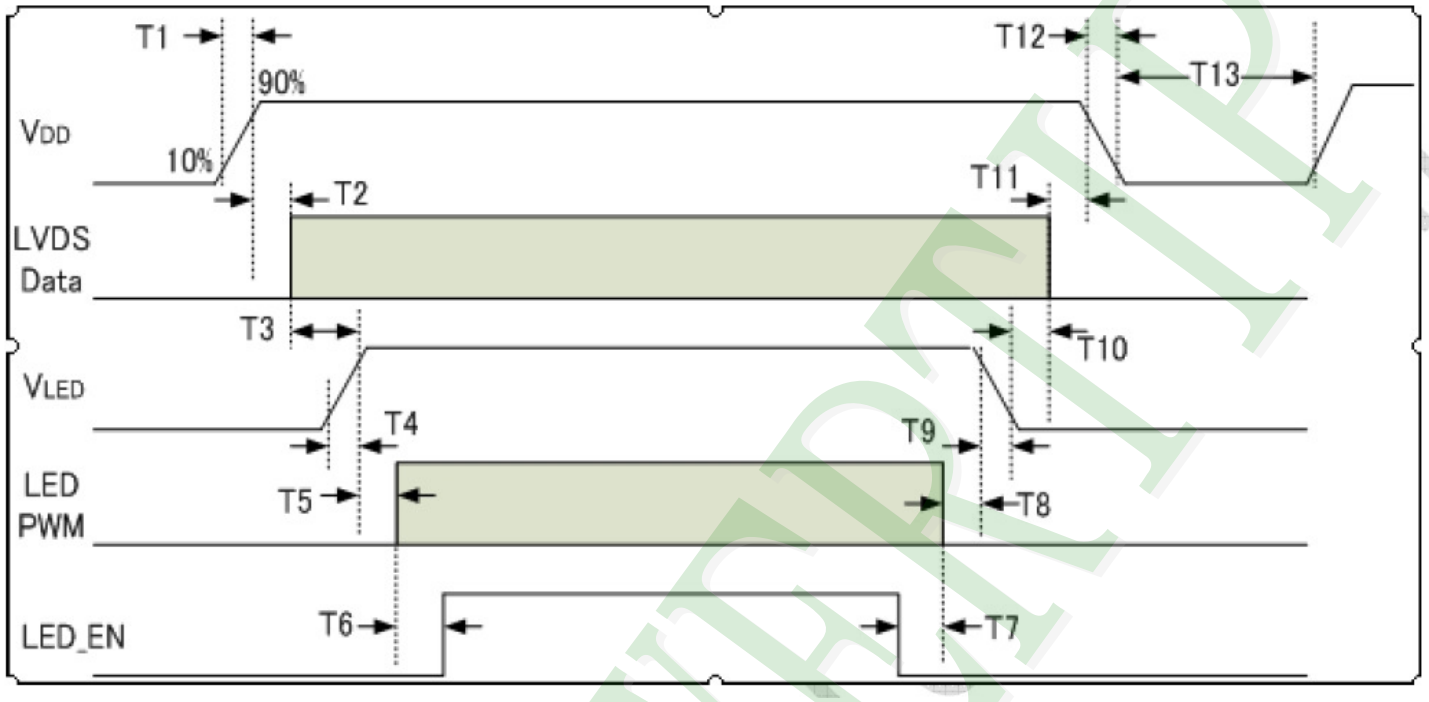
Pin No.	Symbol	Function
26	NC	No connection.
27	NC	No connection.
28	GND	Ground.
29	NC	No connection.
30	NC	No connection.
31	GND	Ground.
32	GND	Ground.
33	GND	Ground.
34	NC	No connection.
35	PWM	LED dimming signal.
36	LED_EN	LED Enable signal.
37	NC	No connection.
38	LED	LED power supply (Typ. 5V).
39	LED	LED power supply (Typ. 5V).
40	LED	LED power supply (Typ. 5V).

CN2 Interface Pin Description

Pin No.	Symbol	Function
1	VDD	Supply Voltage :USB 5V.
2	D-	USB differential signal line.
3	D+	USB differential signal line.
4	X	-
5	GND	Ground Connection.
6	X	-

2.3 Power ON/OFF Sequence

2.3.1 Power seqence



Parameter	Symbol	Unit	min	Typ.	max
VDD rising Time	T1	ms	0.5	--	10
VDD Good to Signal Valid	T2	ms	30	--	90
Signal Valid to Backlight on	T3	ms	200	--	--
Backlight Power on time	T4	ms	0.5	--	--
Backlight VDD Good to System PWM on	T5	ms	10	--	--
System PWM on to Backlight Enable on	T6	ms	10	--	--
Backlight Enable off to System PWM off	T7	ms	0	--	--
System PWM off to B/L Power Disable	T8	ms	10	--	--
Backlight Power off time	T9	ms	1	10	30
Backlight off to signal Disable	T10	ms	200	--	--
Signal Disable to Power Down	T11	ms	0	--	50
VDD Falling Time	T12	ms	1	10	30
Power Off	T13	ms	500	--	--

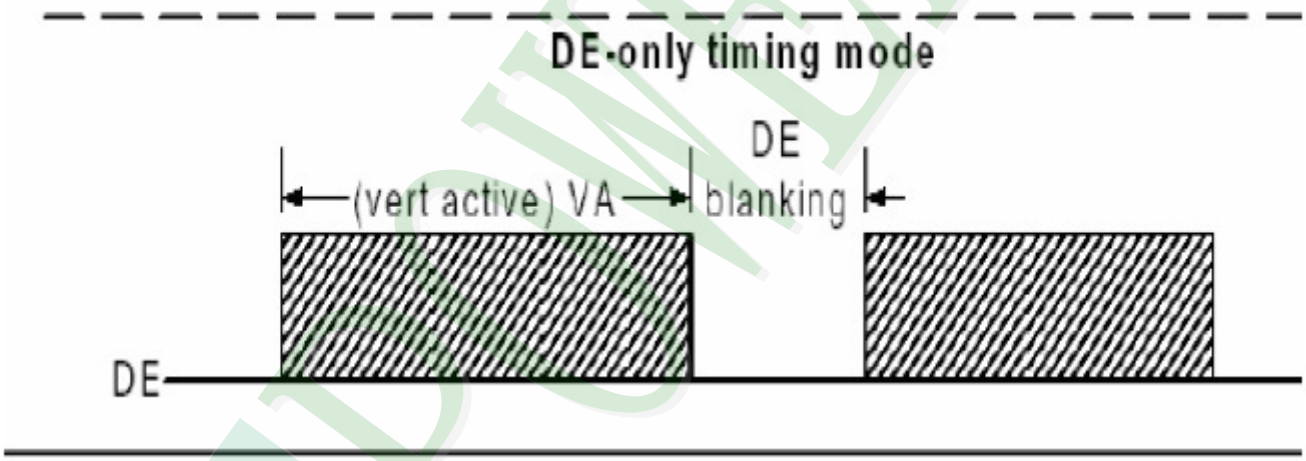
2.4 Timing Characteristics

2.4.1 Interface Timings

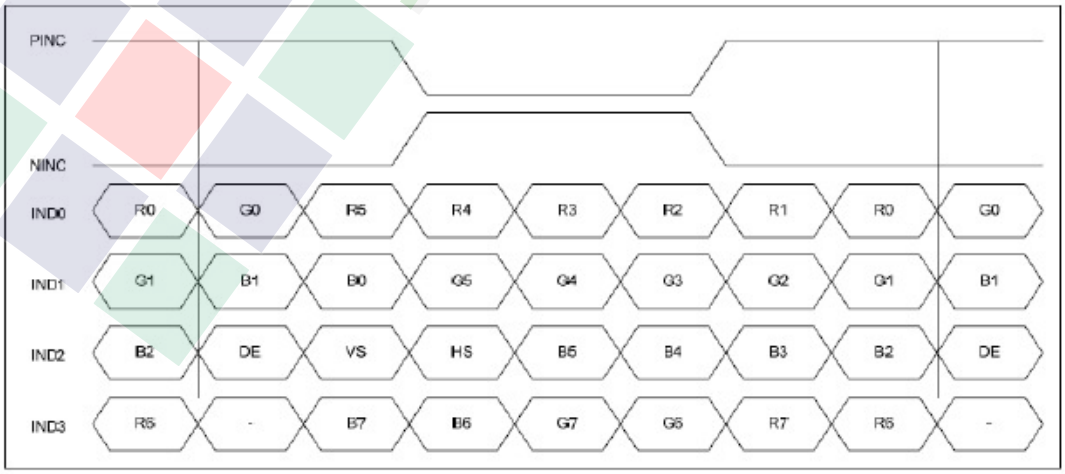
Synchronization Method: DE only

Parameter	Symbol	Min.	Typ.	Max.	Unit
LVDS Clock Frequency <single>	fdck	45	51.2	65	MHz
H Total Time	Thp	1324	1344	1364	clocks
H Active Time	HA	1024	1024	1024	clocks
H Blanking Time	THBLANK	300	320	340	clocks
V Total Time	Tvp	615	635	645	lines
V Active Time	VA	600	600	600	lines
V Blanking Time	TVBLANK	15	35	45	lines
V Frequency	fv	55	60	65	Hz

2.4.2 DE-only timing mode

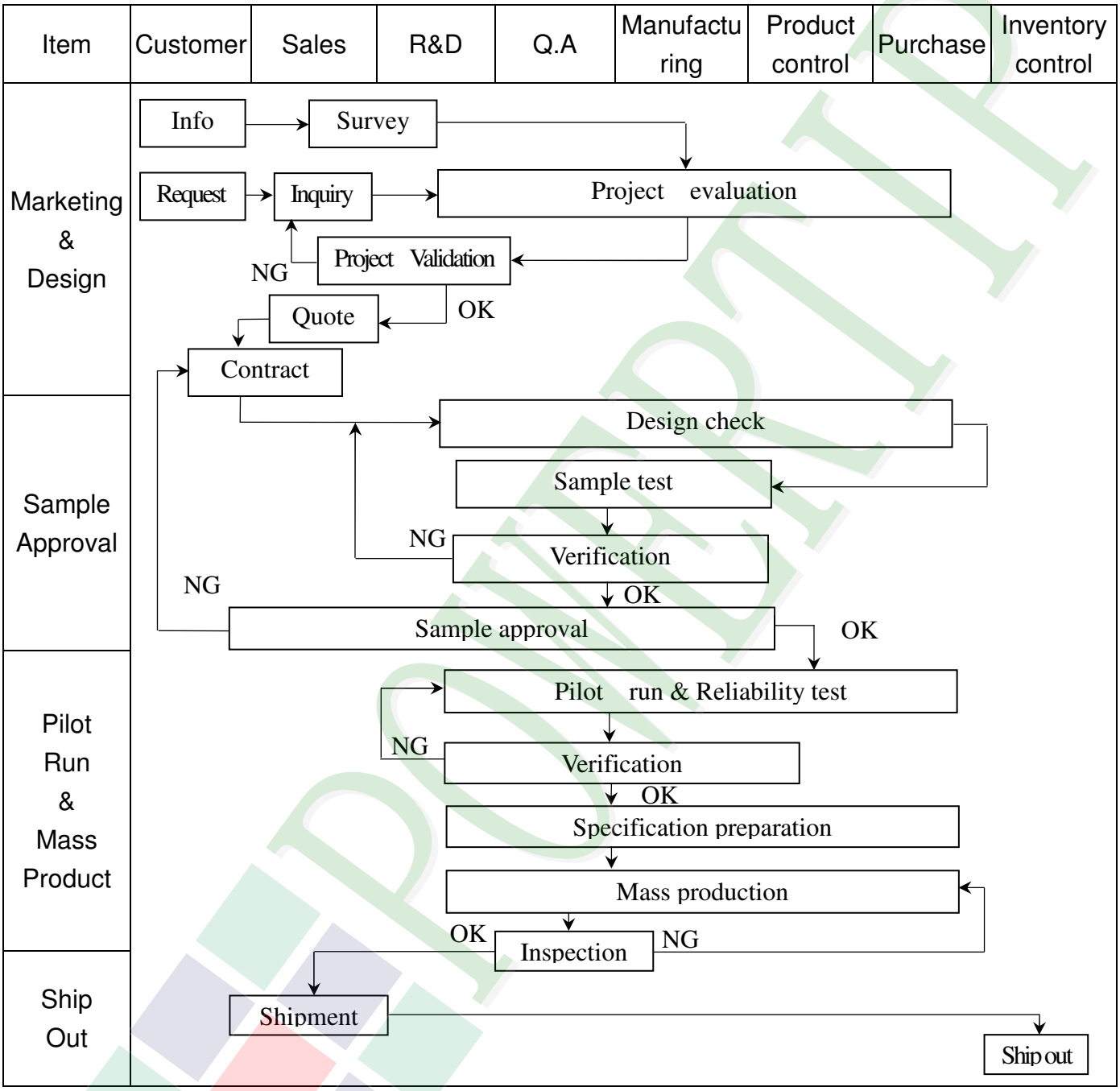


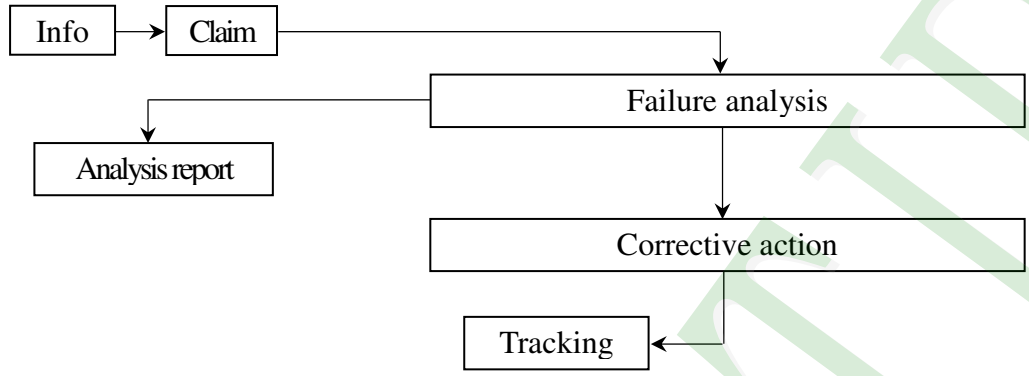
2.4.3 Timing Diagram of Interface Signal



3. QUALITY ASSURANCE SYSTEM

3.1 Quality Assurance Flow Chart



Item	Customer	Sales	R&D	Q.A	Manufacturing	Product control	Purchase	Inventory control
Sales Service								
Q.A Activity	1. ISO 9001 Maintenance Activities 2. Process improvement proposal 3. Equipment calibration 4. Education And Training Activities 5. Standardization Management							

3.2. Inspection Specification

◆Scope：The document shall be applied to TFT-LCD Module for 3.5″ ~10″ (Ver.B01).

◆Inspection Standard：MIL-STD-105E Table Normal Inspection Single Sampling Level Ⅱ.

◆Equipment：Gauge、MIL-STD、Powertip Tester、Sample

◆Defect Level：Major Defect AQL： 0.4 ； Minor Defect AQL： 1.5

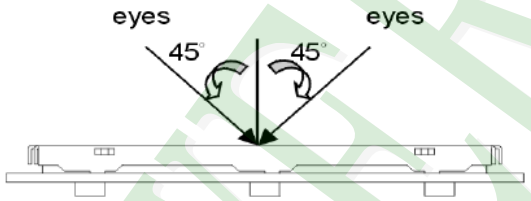
◆OUT Going Defect Level：Sampling.

◆Standard of the product appearance test：

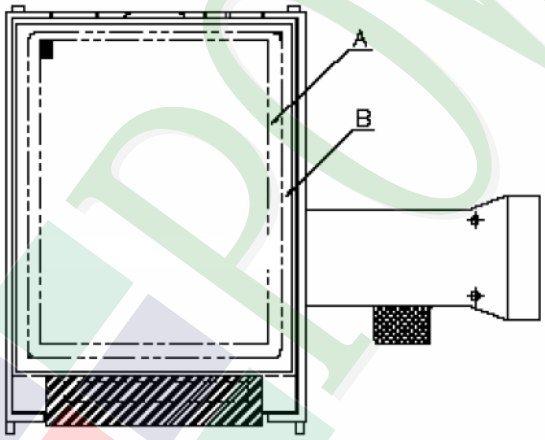
a. Manner of appearance test：

(1). The test best be under 20W×2 fluorescent light，and distance of view must be at 30 cm.

(2). The test direction is base on about around 45° of vertical line.



(3). Definition of area.



A area : viewing area

B area : Outside of viewing area

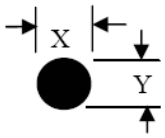
(4). Standard of inspection： (Unit：mm)

◆Specification For TFT-LCD Module 3.5″ ~10″ : (Ver.B01)

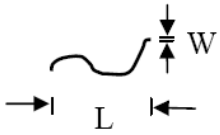
<table>
<tr><th>NO</th><th>Item</th><th>Criterion</th><th>Level</th></tr>
<tr><td rowspan="3">01</td><td rowspan="3">Product condition</td><td>1.1 The part number is inconsistent with work order of production.</td><td>Major</td></tr>
<tr><td>1.2 Mixed product types.</td><td>Major</td></tr>
<tr><td>1.3 Assembled in inverse direction.</td><td>Major</td></tr>
<tr><td>02</td><td>Quantity</td><td>2.1 The quantity is inconsistent with work order of production.</td><td>Major</td></tr>
<tr><td>03</td><td>Outline dimension</td><td>3.1 Product dimension and structure must conform to structure diagram.</td><td>Major</td></tr>
<tr><td rowspan="5">04</td><td rowspan="5">Electrical Testing</td><td>4.1 Missing line character and icon.</td><td>Major</td></tr>
<tr><td>4.2 No function or no display.</td><td>Major</td></tr>
<tr><td>4.3 Display malfunction.</td><td>Major</td></tr>
<tr><td>4.4 LCD viewing angle defect.</td><td>Major</td></tr>
<tr><td>4.5 Current consumption exceeds product specifications.</td><td>Major</td></tr>
<tr><td>05</td><td>Dot defect
(Bright dot、Dark dot)
On -display</td><td>
<table>
<tr><th colspan="2">Item</th><th>Acceptance (Q'ty)</th></tr>
<tr><td rowspan="4">Dot Defect</td><td>Bright Dot</td><td>≦ 4</td></tr>
<tr><td>Dark Dot</td><td>≦ 5</td></tr>
<tr><td>Joint Dot</td><td>≦ 3</td></tr>
<tr><td>Total</td><td>≦ 7</td></tr>
</table>
5.1 Inspection pattern：full white , full black , Red , Green and blue screens.
5.2 It is defined as dot defect if defect area ＞1/2 dot.
5.3 The distance between two dot defect ≧5 mm.
</td><td>Minor</td></tr>
</table>

◆Specification For TFT-LCD Module 3.5″ ~10″ : (Ver.B01)

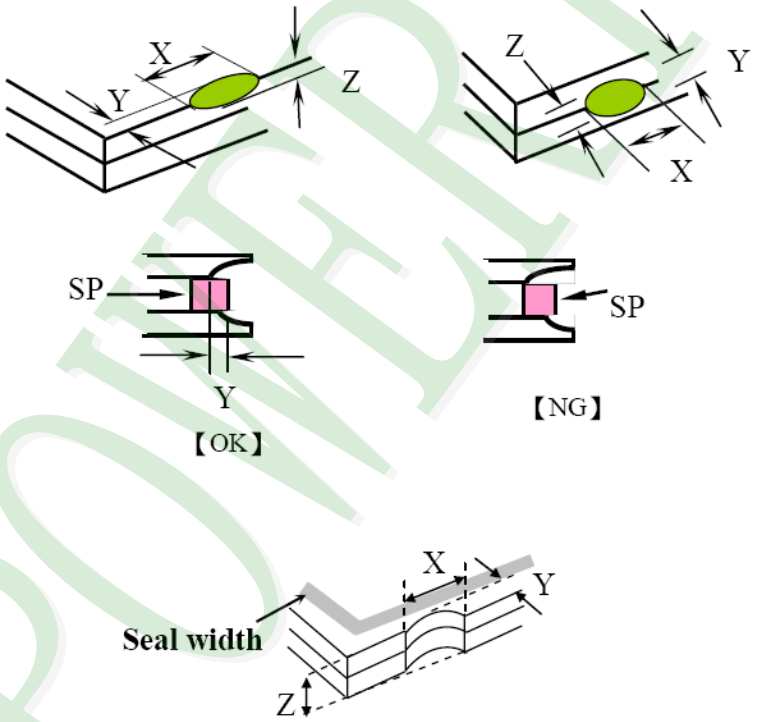
<table>
<tr><th>NO</th><th>Item</th><th>Criterion</th><th>Level</th></tr>
<tr><td>06</td><td>Black or white dot、scratch、contamination

Round type
 

Φ=(x+y) / 2

Line type
 
</td><td>6.1 Round type (Non-display or display) :
<table><tr><th rowspan="2">Dimension (diameter : Φ)</th><th colspan="2">Acceptance (Q'ty)</th></tr><tr><th>A area</th><th>B area</th></tr><tr><td>Φ ≦ 0.25</td><td>Ignore</td><td rowspan="4">Ignore</td></tr><tr><td>0.25 < Φ ≦ 0.50</td><td>5</td></tr><tr><td>Φ > 0.50</td><td>0</td></tr><tr><td>Total</td><td>5</td></tr></table>
6.2 Line type(Non-display or display) :
<table><tr><th rowspan="2">Length (L)</th><th rowspan="2">Width (W)</th><th colspan="2">Acceptance (Q'ty)</th></tr><tr><th>A area</th><th>B area</th></tr><tr><td>---</td><td>W ≦ 0.03</td><td>Ignore</td><td rowspan="5">Ignore</td></tr><tr><td>L ≦10.0</td><td>0.03 < W ≦ 0.05</td><td>4</td></tr><tr><td>L ≦5.0</td><td>0.05 < W ≦ 0.10</td><td>2</td></tr><tr><td>---</td><td>W >0.10</td><td>As round type</td></tr><tr><td colspan="2">Total</td><td>5</td></tr></table></td><td>Minor</td></tr>
<tr><td>07</td><td>Polarizer Bubble</td><td><table><tr><th rowspan="2">Dimension (diameter : Φ)</th><th colspan="2">Acceptance (Q'ty)</th></tr><tr><th>A area</th><th>B area</th></tr><tr><td>Φ ≦ 0.25</td><td>Ignore</td><td rowspan="5">Ignore</td></tr><tr><td>0.25 < Φ ≦ 0.50</td><td>4</td></tr><tr><td>0.50 < Φ ≦ 0.80</td><td>1</td></tr><tr><td>Φ > 0.80</td><td>0</td></tr><tr><td>Total</td><td>5</td></tr></table></td><td>Minor</td></tr>
</table>

◆Specification For TFT-LCD Module 3.5″ ~10″ : (Ver.B01)

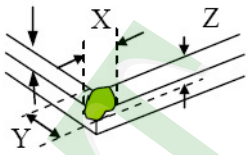
NO	Item	Criterion	Level
08	The crack of glass	Symbols : X : The length of crack Y : The width of crack. Z : The thickness of crack W : terminal length t : The thickness of glass a : LCD side length 8.1 General glass chip : 8.1.1 Chip on panel surface and crack between panels:  	Minor

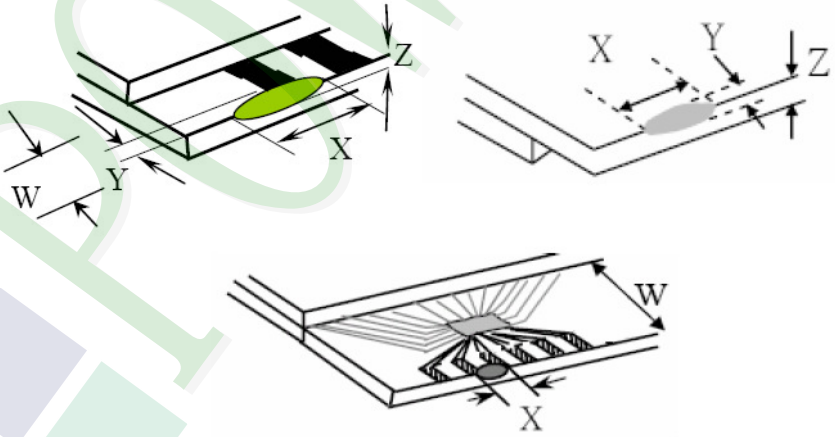
X	Y	Z
≦ a	Crack can't enter viewing area	≦1/2 t
≦ a	Crack can't exceed the half of SP width.	1/2 t < Z ≦2 t

◆Specification For TFT-LCD Module 3.5″ ~10″ : (Ver.B01)

<table>
<tr><th>NO</th><th>Item</th><th>Criterion</th><th>Level</th></tr>
<tr><td rowspan="2">08</td><td rowspan="2">The crack of glass</td><td>Symbols :

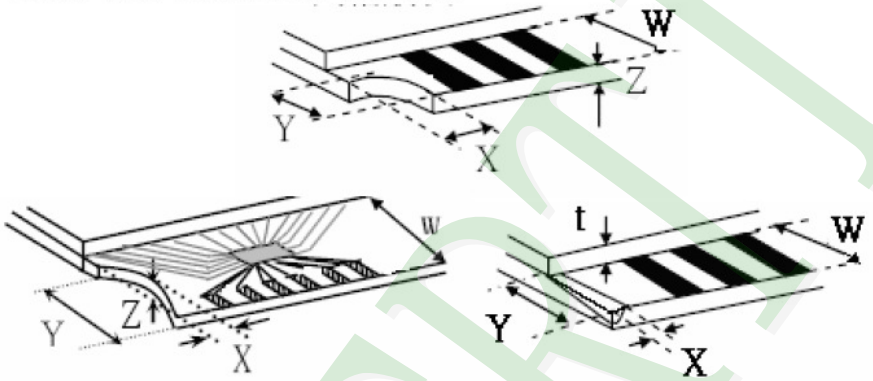
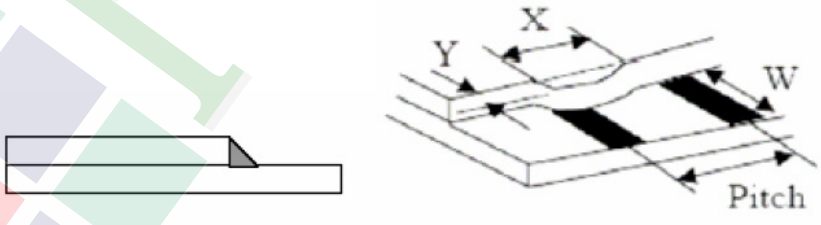
X : The length of crack
Z : The thickness of crack
t : The thickness of glass
Y : The width of crack.
W : terminal length
a : LCD side length

8.1.2 Corner crack :
 

<table><tr><th>X</th><th>Y</th><th>Z</th></tr><tr><td>≦1/5 a</td><td>Crack can’t enter viewing area</td><td>Z ≦ 1/2 t</td></tr><tr><td>≦1/5 a</td><td>Crack can’t exceed the half of SP width.</td><td>1/2 t < Z ≦ 2 t</td></tr></table></td><td></td></tr>
<tr><td>8.2 Protrusion over terminal :
8.2.1 Chip on electrode pad :
 

<table><tr><th></th><th>X</th><th>Y</th><th>Z</th></tr><tr><td>Front</td><td>≦ a</td><td>≦ 1/2 W</td><td>≦ t</td></tr><tr><td>Back</td><td>≦ a</td><td>≦ W</td><td>≦ 1/2 t</td></tr></table></td><td>Minor</td></tr>
</table>

◆Specification For TFT-LCD Module 3.5″ ~10″ : (Ver.B01)

NO	Item	Criterion	Level
08	The crack of glass	Symbols : X : The length of crack Y : The width of crack. Z : The thickness of crack W : terminal length t : The thickness of glass a : LCD side length 8.2.2 Non-conductive portion :  X ≦ 1/3 a; Y ≦ W; Z ≦t ⊙ If the chipped area touches the ITO terminal, over 2/3 of the ITO must remain and be inspected according to electrode terminal specifications. 8.2.3 Glass remain :  X ≦ a; Y ≦ 1/3 W; Z ≦t	Minor

◆Specification For TFT-LCD Module 3.5″ ~10″ : (Ver.B01)

NO	Item	Criterion	Level
09	Backlight elements	9.1 Backlight can't work normally.	Major
		9.2 Backlight doesn't light or color is wrong.	Major
		9.3 Illumination source flickers when lit.	Major
10	General appearance	10.1 Pin type、quantity、dimension must match type in structure diagram.	Major
		10.2 No short circuits in components on PCB or FPC .	Major
		10.3 Parts on PCB or FPC must be the same as on the production characteristic chart .There should be no wrong parts , missing parts or excess parts.	Major
		10.4 Product packaging must the same as specified on packaging specification sheet.	Minor
		10.5 The folding and peeled off in polarizer are not acceptable.	Minor
		10.6 The PCB or FPC between B/L assembled distance(PCB or FPC) is ≦1.5 mm.	Minor

4.1 Reliability Test Condition

NO.	TEST ITEM	TEST CONDITION	
1	High Temperature Storage Test	Keep in +80 ±2℃ 96 hrs Surrounding temperature, then storage at normal condition 4hrs.	
2	Low Temperature Storage Test	Keep in -30 ±2℃ 96 hrs Surrounding temperature, then storage at normal condition 4hrs.	
3	High Temperature / High Humidity Storage Test	Keep in +40℃ / 90% R.H duration for 96 hrs Surrounding temperature, then storage at normal condition 2hrs.	
4	ESD Test	Air Discharge: Apply 2 KV Discharge for each polarity +/-	Contact Discharge: Apply 250V discharge for each polarity +/-
		1.Temperature ambiance:15℃～35℃ 2.Humidity relative:30%～60% 3.Energy Storage Capacitance(Cs+Cd):150pF±10% 4.Discharge Resistance(Rd):330Ω±10%	
5	Thermal Shock	-30℃/30 min ~ +80℃/30 min for a total 100 cycles, Start with cold temperature and end with high temperature.	
6	Vibration Test	1. Sine wave 10～55 Hz frequency 2. The amplitude of vibration :1.5 mm 3. Each direction (X、Y、Z) duration for 2 Hrs	
7	Drop Test (Packaged)	Height:60 cm 1 corner, 3 edges, 6 surfaces	

5. PRECAUTION RELATING PRODUCT HANDLING

5.1 SAFETY

5.1.1 If the LCD panel breaks , be careful not to get the liquid crystal to touch your skin.

5.1.2 If the liquid crystal touches your skin or clothes , please wash it off immediately by using soap and water.

5.2 HANDLING

5.2.1 Avoid any strong mechanical shock which can break the glass.

5.2.2 Avoid static electricity which can damage the CMOS LSI—When working with the module , be sure to ground your body and any electrical equipment you may be using.

5.2.3 Do not remove the panel or frame from the module.

5.2.4 The polarizing plate of the display is very fragile. So , please handle it very carefully ,do not touch , push or rub the exposed polarizing with anything harder than an HB pencil lead (glass , tweezers , etc.)

5.2.5 Do not wipe the polarizing plate with a dry cloth , as it may easily scratch the surface of plate.

5.2.6 Do not touch the display area with bare hands , this will stain the display area.

5.2.7 Do not use ketonics solvent & aromatic solvent. Use with a soft cloth soaked with a cleaning naphtha solvent.

5.2.8 To control temperature and time of soldering is 320±10℃and 3-5 sec.

5.2.9 To avoid liquid (include organic solvent) stained on LCM .

5.3 STORAGE

5.3.1 Store the panel or module in a dark place where the temperature is 25℃ ±5℃ and the humidity is below 65% RH.

5.3.2 Do not place the module near organics solvents or corrosive gases.

5.3.3 Do not crush , shake , or jolt the module.

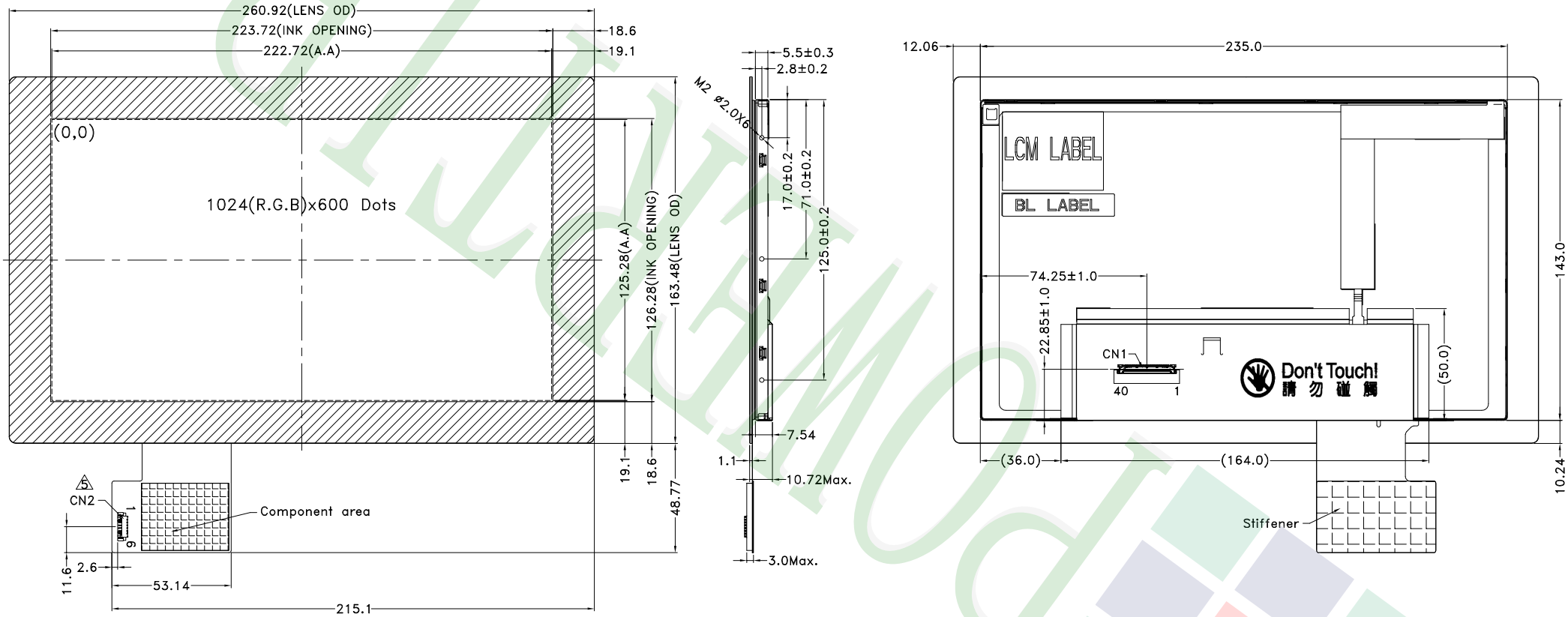
5.4 TERMS OF WARRANTY

5.4.1 Applicable warrant period

The period is within thirteen months since the date of shipping out under normal using and storage conditions.

5.4.2 Unaccepted responsibility

This product has been manufactured to your company's specification as a part for use in your company's general electronic products. It is guaranteed to perform according to delivery specifications. For any other use apart from general electronic equipment , we cannot take responsibility if the product is used in nuclear power control equipment , aerospace equipment , fire and security systems or any other applications in which there is a direct risk to human life and where extremely high levels of reliability are required.



NOTES:

1.LCD TYPE: TFT LCD
2.LCD DISPLAY: Normally White
3.The tolerance unless classified ±0.5mm
4.CN1: STM MSAK24025P40D
5.CN2: MOLEX 53261-0671 OR EQUIVALENT

REV	REV BY	REVISER	DATE
007			
006			
005	MODIFY CTP CONNECTOR	Stone	2016/12/29
004	MODIFY DESIGN	Stone	2016/02/23
003	MODIFY CTP FPC	Stone	2015/07/23
002	MODIFY OUTLINE	Stone	2015/01/26
001	NEW DRAWING	Stone	2014/10/17

PART NO: PH102600T005-ZZC

DRAWING NAME : LMD-PH102600T005-ZZC

TITLE: LCD MODULE DRAWING

久正光電股份有限公司
POWERTIP TECHNOLOGY CORPORATION

Design	Stone	(3)	Surface		
Check	Sam	Unit	MM	Material	
		Scale	1:1	Thickness	
Approve	Oliver	Page	1/1	Quantity	

Length(Min) (mm) \ Tolerance \ Precision	Precision Level
1 ~ 4	-
4 ~ 16	-
16 ~ 63	-
63 ~ 250	-
250 ~ 1000	-

Ver.002

Documents NO.	PKG-PH102600T005-ZZC

LCM包裝規格書
LCM Packaging Specifications (For Tray)

Approve	Check	Contact
Oliver	Sam	Stone

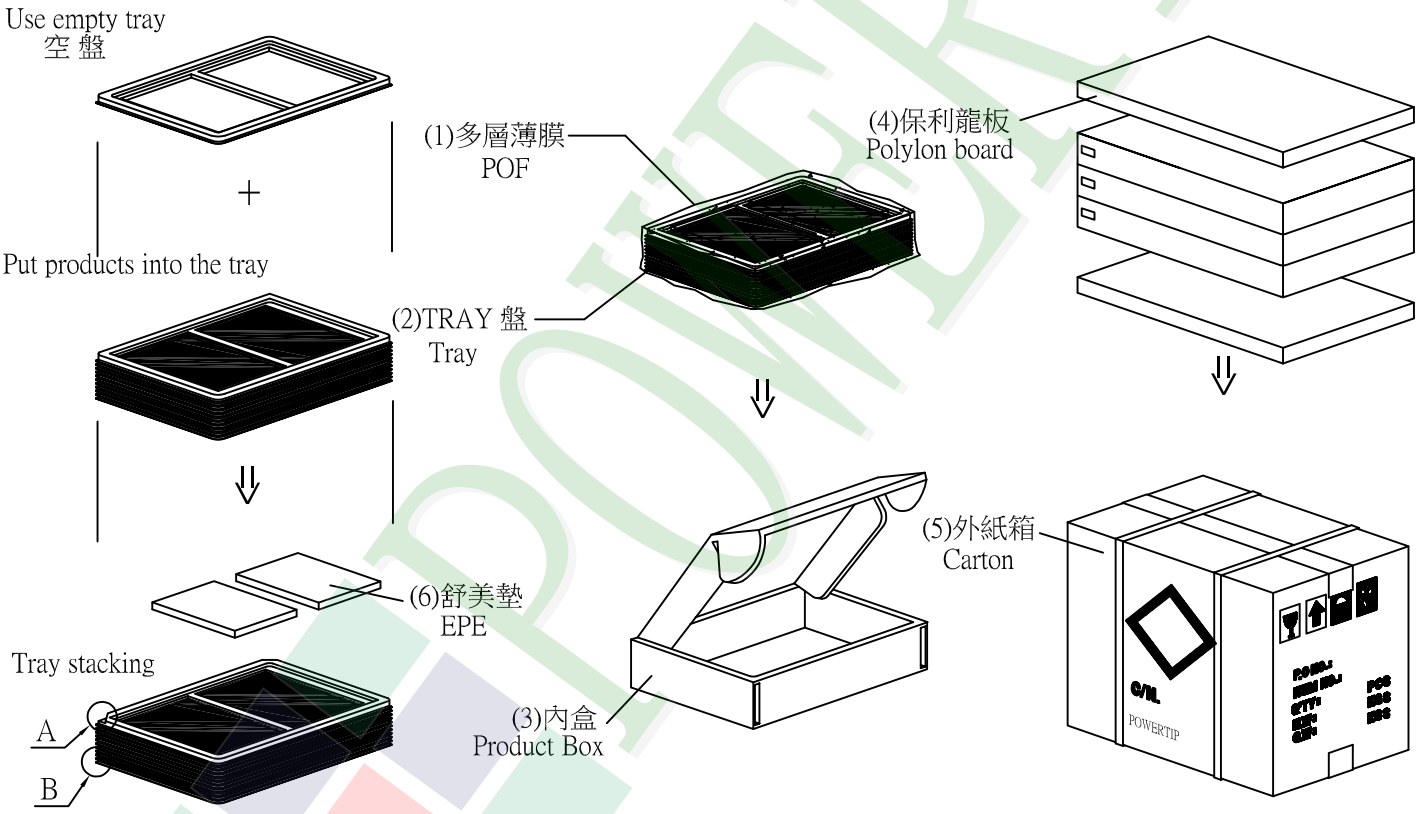
1.包裝材料規格表 (Packaging Material) : (per carton)

No.	Item	Model	Dimensions (mm)	1Pcs Weight	Quantity	Total Weight
1	成品 (LCD)	PH102600T005-ZZC	260.92 X 163.48	0.503	24	12.072
2	多層薄膜(1)POF	OTFILM0BA03ABA	————	——	3	——
3	TRAY 盤 (2)Tray	TY00000000287	517 X 377 X 16.8	0.2	12	2.4
4	內盒(3)Product Box	BX00000000071	558 X 393 X 68	0.6	3	1.8
5	保利龍板(4)Polylon board	OTPLB00PL08ABA	550 X 393 X 20	0.0284	2	0.0568
6	外紙箱(5)Carton	BX57041027CCBA	570 X 410 X 265	1.4208	1	1.4208
7	舒美墊(6)EPE	OTFOAMEP0004BA	333X 218 X 15	0.027	3	0.081
8						
9						

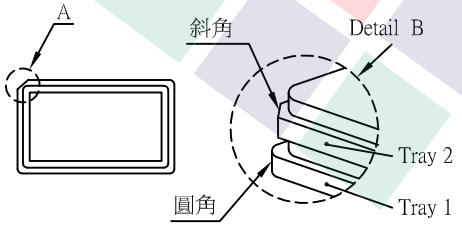
2.一 整箱總重量 (Total LCD Weight in carton) : 17.83 Kg±10%

3.單箱數量規格表 (Packaging Specifications and Quantity) :

(1)LCD quantity per box : no per tray	2	x no of tray	4	=	8
(2)Total LCD quantity in carton : quantity per box	8	x no of boxes	3	=	24



特 記 事 項 (REMARK)



4. TRAY盤相疊時,需旋轉180度,請詳見B視圖
Rotate tray 180 degrees and place on top of stack.
Check the tray stack using Fig. B.

5. 最上層產品上放置EPE(舒美墊)