



SPECIFICATIONS

CUSTOMER	:	_____
SAMPLE CODE	:	SH128800T004-ZFA
MASS PRODUCTION CODE	:	PH128800T004-ZFA
SAMPLE VERSION	:	01
SPECIFICATIONS EDITION	:	008
DRAWING NO. (Ver.)	:	LMD-PH128800T004-ZFA (Ver.002)
PACKAGING NO. (Ver.)	:	PKG-PH128800T004-ZFA (Ver.005)

Customer Approved

Date: _____

Approved	Checked	Designer
黃秋源 Oliver Huang	石建莊 Stone Shin	王聖硯 Stephen Wang

- Preliminary specification for design input
- Specification for sample approval

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History of Version

Date	Ver.	Edi.	Description	Page	Design by
01/25/2017	01	001	New Drawing	-	Stephen
03/21/2017	01	002	Update Spec	12~14	Stephen
05/10/2017	01	003	New Sample	-	Stephen
10/18/2017	01	004	Update LCD Module Drawing Version	-	Stephen
05/10/2018	01	005	Modify Spec	4	Stephen
05/17/2018	01	006	Update Packaging Drawing	-	Stephen
12/20/2018	01	007	Modify Spec 1.1 Features - Display Mode 1.3 Maximum Ratings - Operating Temperature	4、5	Stephen
11/06/2020	01	008	Update Packaging Drawing	-	Stephen

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1. SPECIFICATIONS

1.1 Features

Item	Standard Value
Screen Size(inch)	10.1(Diagonal)
Resolution	1280* (R、G、B) * 800 Dots
Display Mode	Full Viewing Angle、Transmissive、Normally Black
Color	16.7M
Weight	222 g
Interface	LVDS
ROHS	THIS PRODUCT CONFORMS THE ROHS OF PTC Detail information please refer website : http://www.powertip.com.tw/news_detail.php?Key=1&cID=1

1.2 Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	229.8(W) * 149.0 (L) * 5.9 (H)	mm

LCD panel

Item	Standard Value	Unit
Active Area	216.96 (W) * 135.60 (L)	mm

Note : For detailed information please refer to LCM drawing.

1.3 Absolute Maximum Ratings

Item	Symbol	Condition	Min.	Max.	Unit
Power Supply Voltage	VDD		-0.3	+4.0	V
Operating Temperature	T _{OP}	-	-20	+70	°C
Storage Temperature	T _{ST}	-	-30	+80	°C
Storage Humidity	H _D	T _a < 25 °C	55	60	%RH

1.4 DC Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Note
Power Supply Voltage for LCD Driver	VDD-VSS	-	3.0	3.3	3.6	V	-
Power Supply Voltage for LED Driver	VLED-VLSS	-	6	12	21	V	-
PWM Signal Voltage	V _{PWM}	High	3.0	-	3.6	V	-
		Low	0	-	0.4		-
LED Enable Voltage	V _{LED_EN}	High	3.0	-	3.6	V	-
		Low	0	-	0.4		-
VDD Current	IDD	VDD=3.3V, Pattern= Picture*1	-	0.222	-	A	-
VLED Current	I _{LED}	VLED=12V PWM=100%	-	0.294	-	A	-
VDD Power Consumption	PDD	VDD=3.3V	-	-	1	W	-
VLED Power Consumption	PLED	VLED=12V	-	-	5	W	-
Rush Current	I _{rush}	-	-	-	1.5	A	-
Driver Ripple Voltage	V _{VDD-RP}	-	-	-	300	mV	-
Input PWM Frequency	FPWM	-	100	-	200	Hz	DDIM≥0.1%
			200	-	500		DDIM≥0.25%
			500	-	1000		DDIM≥0.5%
			1000	-	2000		DDIM≥1%
			2000	-	5000		DDIM≥2.5%
			5000	-	10000		DDIM≥5%
			10000	-	20000		DDIM≥10%
			20000	-	30000		DDIM≥15%

Note1: Maximum current display.

1.5 Optical Characteristics

TFT LCD Panel

Ta=25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	-	
Response Time	Tr + Tf	-	-	25	50	ms	Note2	
Viewing Angle	Top	ΘY+	CR ≥ 10	75	85	-	Deg.	Note4
	Bottom	ΘY-		75	85	-		
	Left	ΘX-		75	85	-		
	Right	ΘX+		75	85	-		
Contrast Ratio	CR	-	600	800	-	-	Note3	
Color of CIE Coordinate (With B/L)	White	X	-	0.268	0.318	0.368	-	Note1
		Y		0.302	0.352	0.402		
	Red	X		0.541	0.591	0.641		
		Y		0.300	0.350	0.400		
	Green	X		0.293	0.343	0.393		
		Y		0.534	0.584	0.634		
	Blue	X		0.104	0.154	0.204		
		Y		0.099	0.149	0.199		
Average Brightness Pattern=White Display	IV	IF=80 mA	400	500	-	cd/m ²	Note1	
Luminance Uniformity	YU	IF=80 mA	70	75	-	%	Note1	

Note1:

1 : $\Delta B = B(\min) / B(\max) \times 100\%$

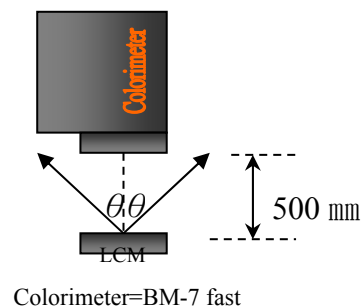
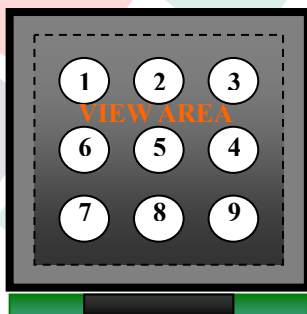
2 : Measurement Condition for Optical Characteristics:

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

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

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

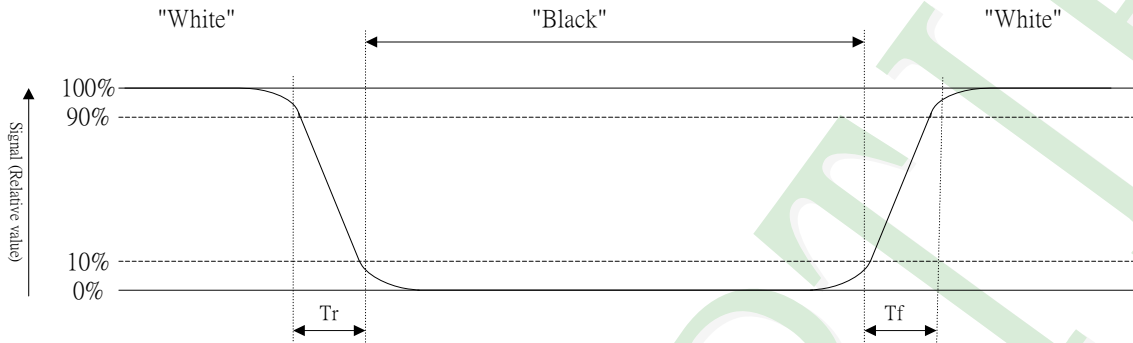
d : The uncertainty of the C.I.E coordinate measurement ± 0.01 , Average Brightness ± 4%



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:



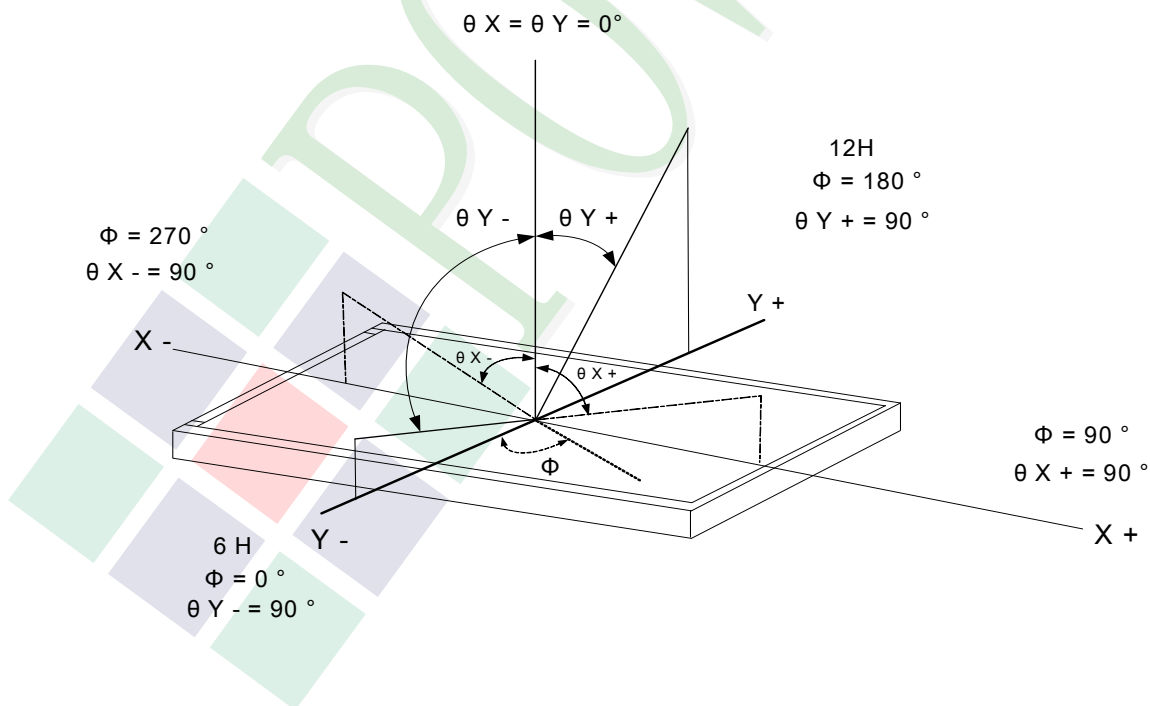
Note3: Definition of contrast ratio:

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 Backlight Characteristics

Maximum Ratings

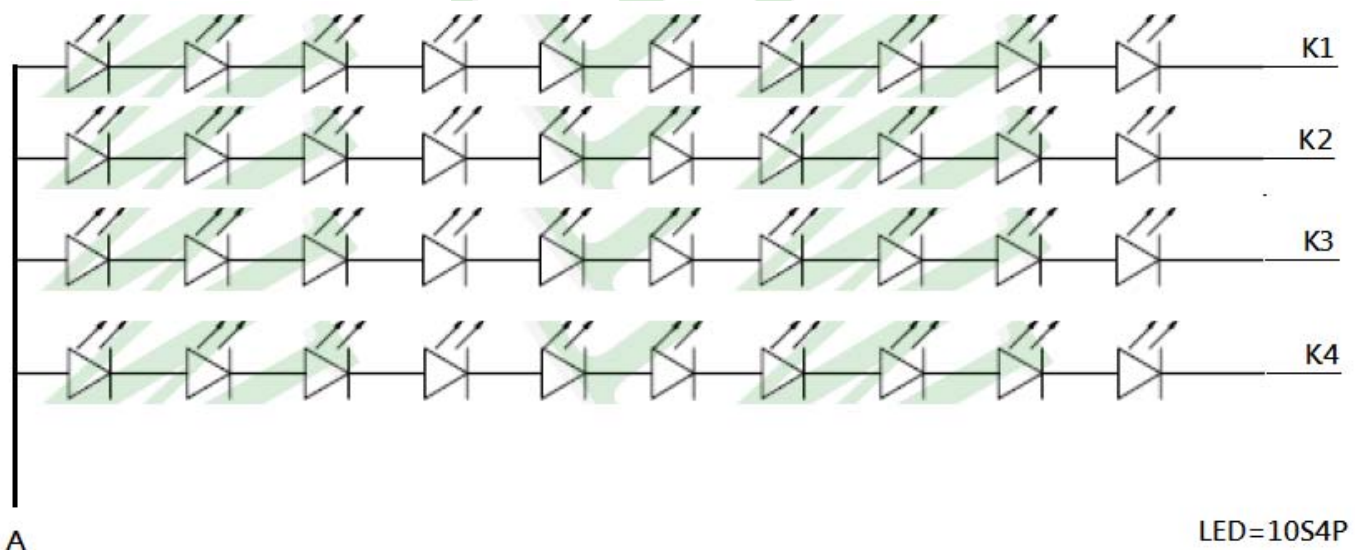
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Power Dissipation	Pd	-	-	100	-	mW
LED Forward Current	IF	1 LED	-	-	30	mA
LED Reverse Voltage	VR	1 LED	-	-	1.2	V

Electrical / Optical Characteristics

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Voltage for LED Backlight	VF	If=80mA	27.5	31.0	34.0	V
Current for LED Backlight	IF		-	80	-	mA
Color	White					

Other Description

Item	Conditions	Description
Life Time	Ta =25°C If= 80 mA	50000 hrs

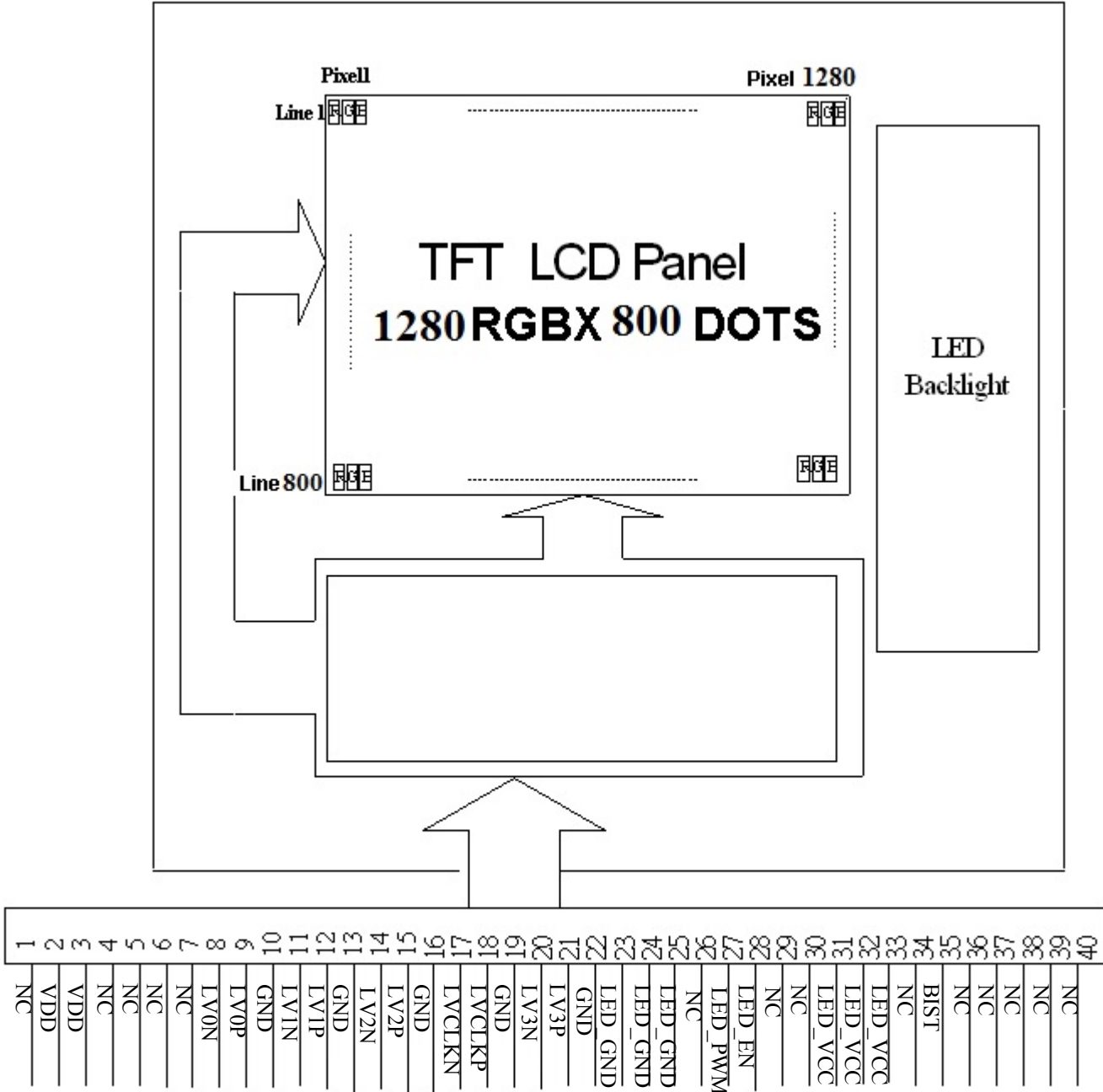


2. MODULE STRUCTURE

2.1 Counter Drawing

2.1.1 LCM Mechanical Diagram

* See Appendix



2.2 Interface Pin Description

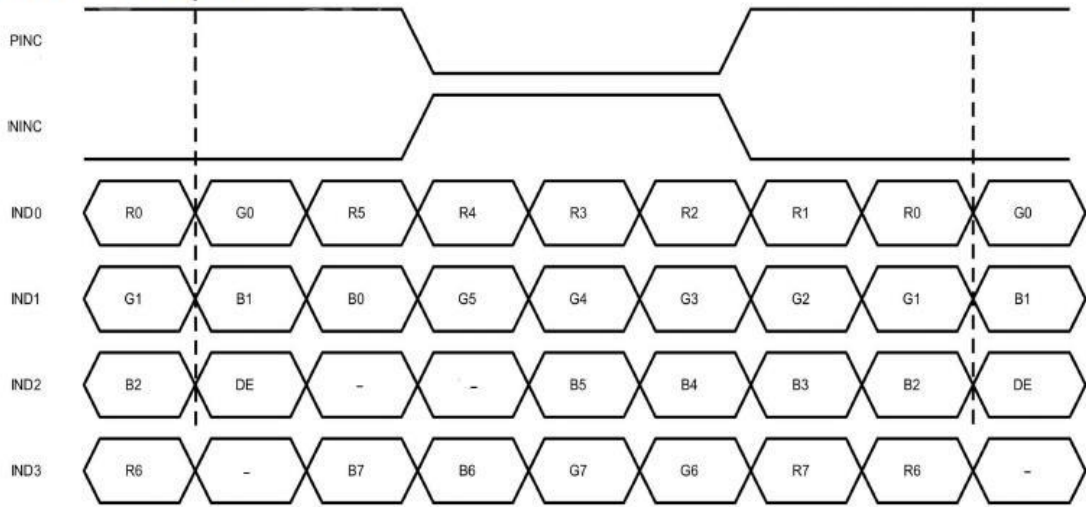
Pin No.	Symbol	Description
1	NC	No Connection.
2	VDD	Power Supply.
3	VDD	Power Supply.
4	VDD_EDID	VDD_EDID (Do not connect if not used.)
5	SCL_EDID	SCL_EDID (Do not connect if not used.)
6	SDA_EDID	SDA_EDID (Do not connect if not used.)
7	NC	No Connection.
8	LV0N	-LVDS Differential Data Input.
9	LV0P	+LVDS Differential Data Input.
10	GND	Ground.
11	LV1N	-LVDS Differential Data Input.
12	LV1P	+LVDS Differential Data Input.
13	GND	Ground.
14	LV2N	-LVDS Differential Data Input.
15	LV2P	+LVDS Differential Data Input.
16	GND	Ground.
17	LVCLKN	-LVDS Differential Clock Input.
18	LVCLKP	+LVDS Differential Clock Input.
19	GND	Ground.
20	LV3N	-LVDS Differential Data Input.
21	LV3P	+LVDS Differential Data Input.
22	GND	Ground.
23	LED_GND	Ground for LED Driving.
24	LED_GND	Ground for LED Driving.
25	LED_GND	Ground for LED Driving.
26	NC	No Connection.
27	LED_PWM	PWM Input Signal for LED Driver.

Pin No.	Symbol	Description
28	LED_EN	LED Enable Pin.
29	NC	Reserved For CABC.
30	NC	No Connection.
31	LED_VCC	Power Supply for LED Driver.
32	LED_VCC	Power Supply for LED Driver.
33	LED_VCC	Power Supply for LED Driver.
34	NC	No Connection.
35	BIST	BIST pin.
36	NC	No Connection.
37	NC	No Connection.
38	NC	No Connection.
39	NC	No Connection.
40	NC	No Connection.

2.3 Timing Characteristics

2.3.1 LVDS Data Input Format

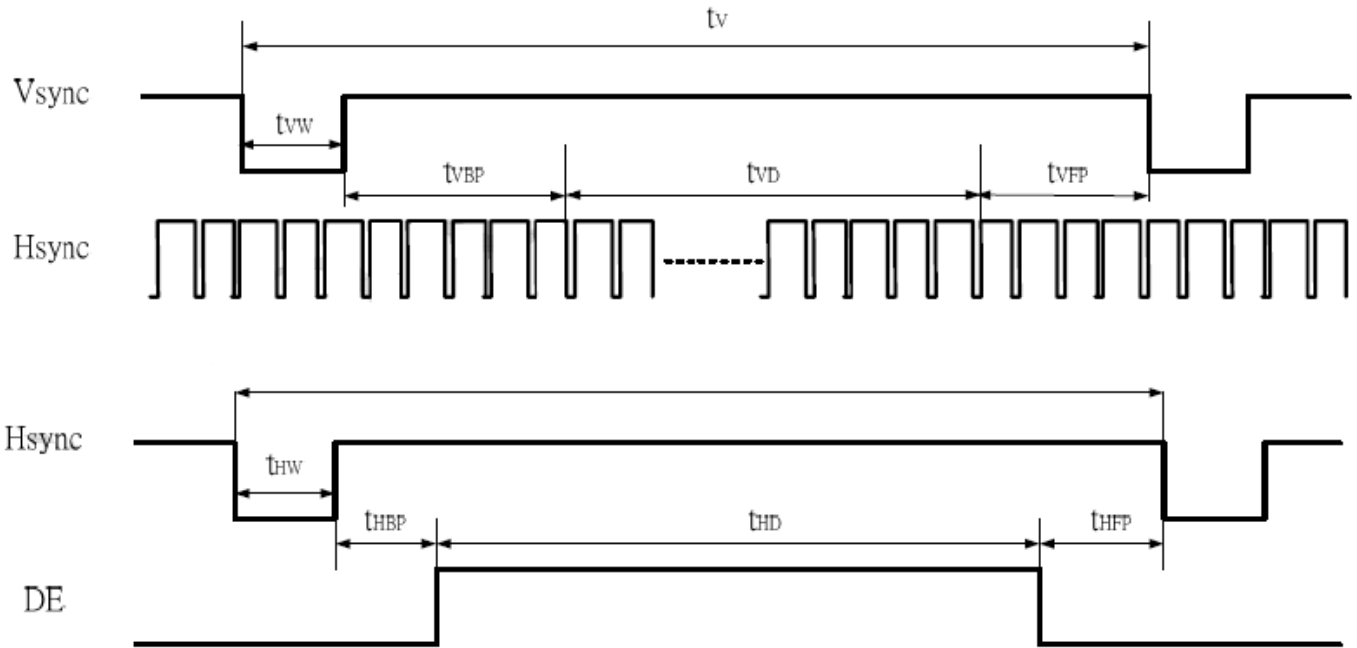
8-BIT LVDS INPUT



2.3.2 Interface Timings

Parameter	Symbol	Unit	Min.	Typ.	Max.
Frame Rate	--	Hz	-	60	-
Frame Period	T _V	line	815	823	1023
Vertical Display Time	T _{VD}	line	800		
Vertical Blanking Time	T _{VW} +T _{VB} +T _{VFP}	line	15	23	33
1 Line Scanning Time	T _H	clock	1410	1440	1470
Horizontal Display Time	T _{HD}	clock	1280		
Horizontal Blanking Time	T _{HW} +T _{HB} +T _{HFP}	clock	60	160	190
Clock Rate	1/T _C	MHz	68.9	71.1	73.4

2.3.3 Timing Diagram of Interface Signal (DE mode)



2.3.4 Power Sequence

Power ON/OFF Sequence

Interface signals are also shown in the chart. Signals from any system shall be Hi- resistance state or low level when VDD voltage is off.

Figure 1 Power Sequence

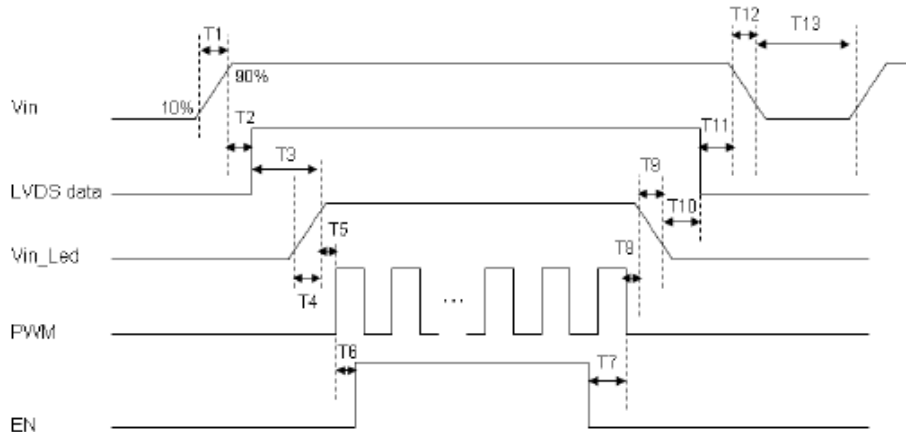
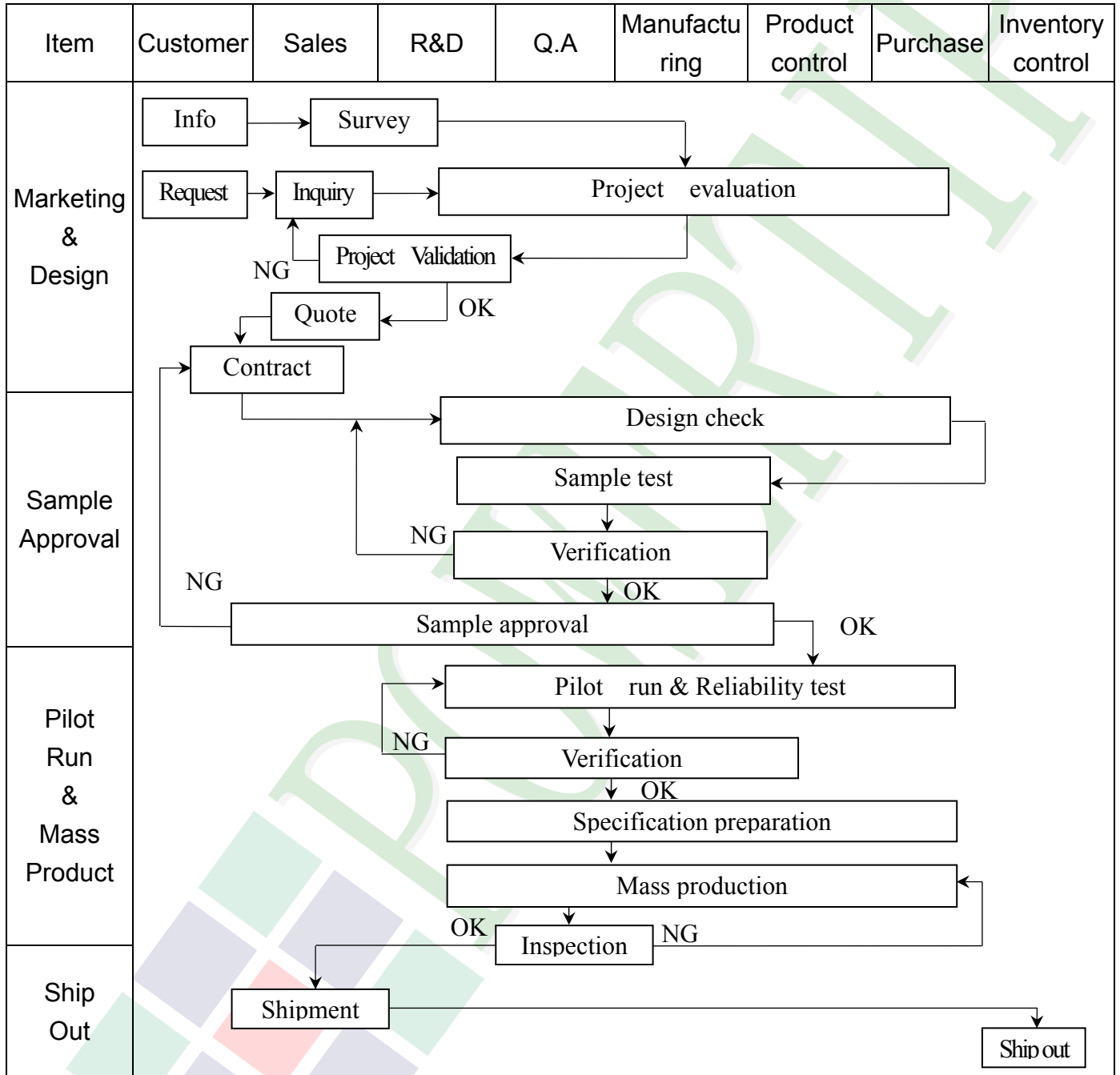


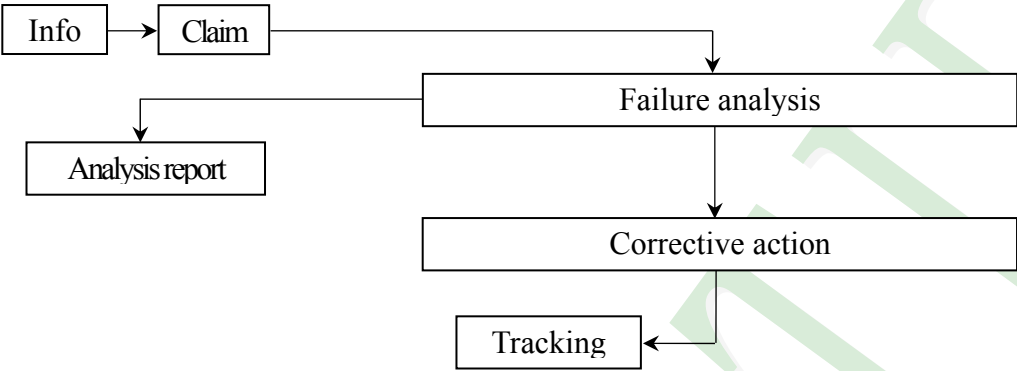
Table 1 Power Sequencing Requirements

Parameter	Symbol	Unit	Min	Typ.	Max
VIN Rise Time	T1	ms	0.5	--	10
VIN 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	200	--	--
Backlight Power Off Time	T9	ms	0.5	10	30
Backlight Off to Signal Disable	T10	ms	200	--	--
Signal Disable to Power Down	T11	ms	0	--	50
VIN Fall Time	T12	ms	0.5	10	30
Power Off	T13	ms	500	--	--

3. QUALITY ASSURANCE SYSTEM

3.1 Quality Assurance Flow Chart



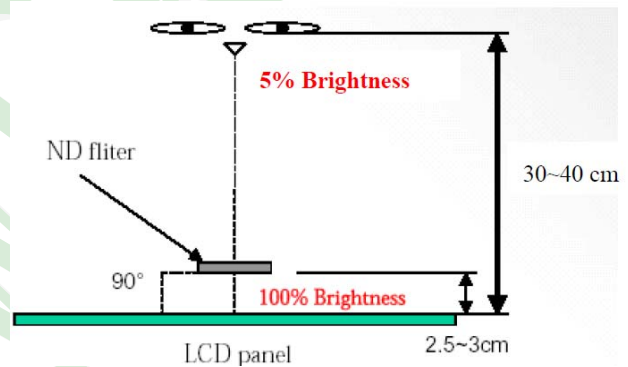
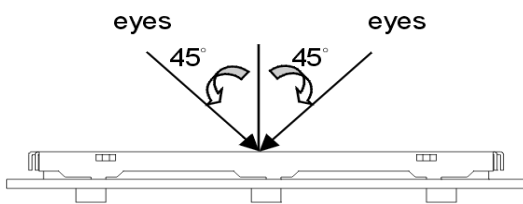
Item	Customer	Sales	R&D	Q.A	Manufacturing	Product control	Purchase	Inventory control
Sales Service	 <pre> graph TD Info[Info] --> Claim[Claim] Claim --> Failure[Failure analysis] Failure --> Report[Analysis report] Failure --> Action[Corrective action] Action --> Tracking[Tracking] </pre>							
Q.A Activity	1. ISO 9001 Maintenance Activities 3. Equipment calibration 5. Standardization Management				2. Process improvement proposal 4. Education And Training Activities			

3.2. Inspection Specification

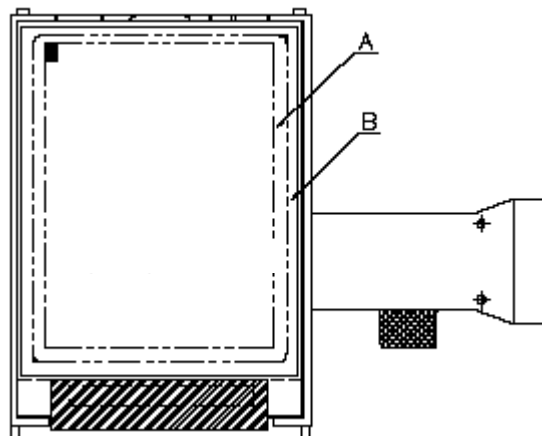
- ◆Scope: The document shall be applied to TFT-LCD Module for 3.5" -15" (Ver.B01).
- ◆Inspection Standard: MIL-STD-105E Table Normal Inspection Single Sampling Level II.
- ◆Equipment: Gauge, MIL-STD, Powertip Tester, Sample
- ◆Defect Level: Major Defect AQL: 0.4; Minor Defect AQL: 1.5
- ◆OUT Going Defect Level: Sampling.
- ◆Standard of the product appearance test:

a. Manner of appearance test:

- (1). The test best be under 20W×2 fluorescent light(about 300lux ~500lux)
 , and distance of view must be at 30~40 cm.
- (2). The test direction is base on about around 45° of vertical line.



(3). Definition of area.



A area: viewing area

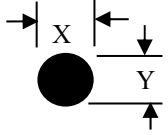
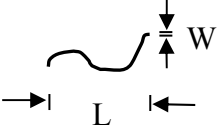
B area: Outside of viewing area

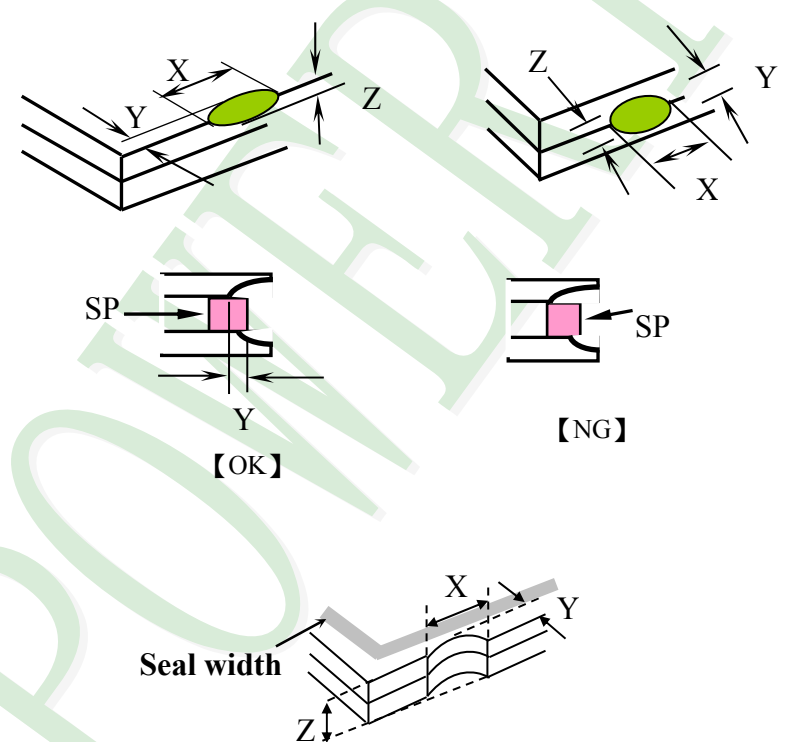
(4). Standard of inspection : (Unit : mm)

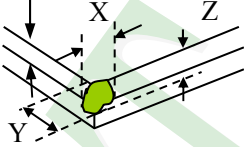
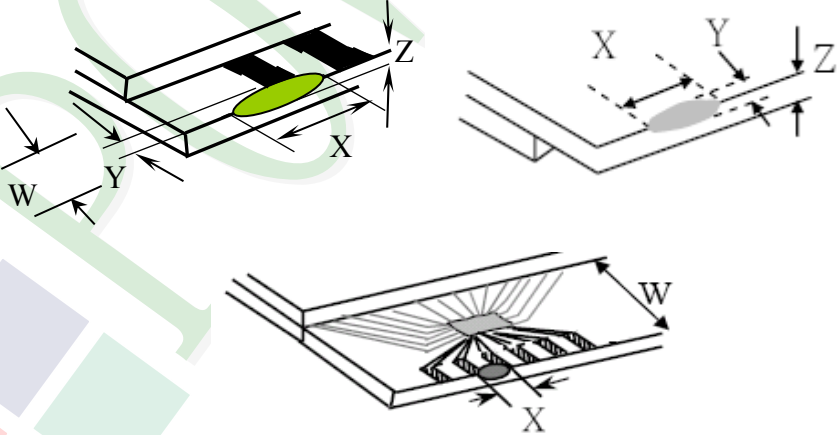
◆Specification For TFT-LCD Module 3.5” ~15” :

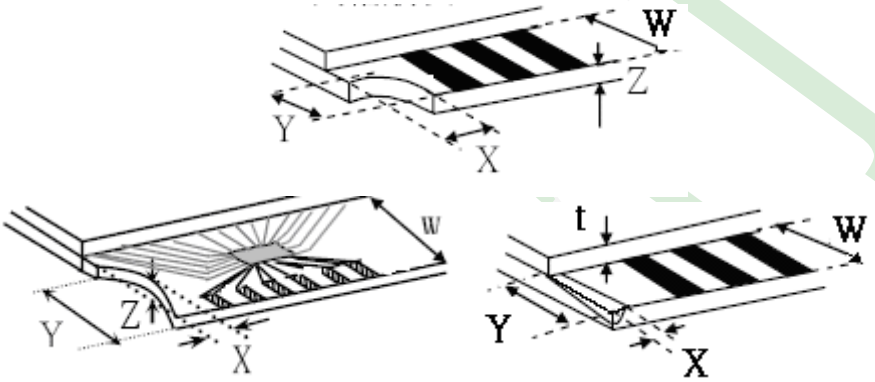
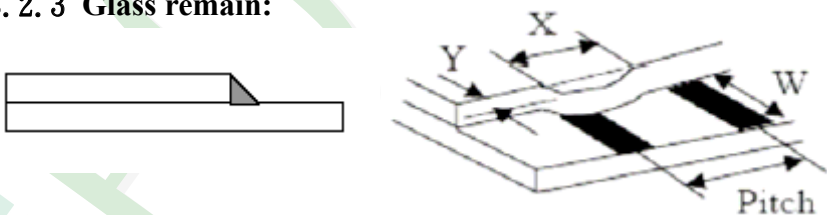
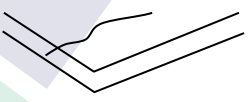
(Ver.B01)

NO	Item	Criterion	Level												
01	Product condition	1. 1The part number is inconsistent with work order of production.	Major												
		1. 2 Mixed product types.	Major												
		1. 3 Assembled in inverse direction.	Major												
02	Quantity	2. 1The quantity is inconsistent with work order of production.	Major												
03	Outline dimension	3. 1Product dimension and structure must conform to structure diagram.	Major												
04	Electrical Testing	4. 1 Missing line character and icon.	Major												
		4. 2 No function or no display.	Major												
		4. 3 Display malfunction.	Major												
		4. 4 LCD viewing angle defect.	Major												
		4. 5 Current consumption exceeds product specifications.	Major												
		4. 6Mura cannot be seen through 5% ND filter at 50% Gray , should be judged by the viewing angle of 90 degree.	Minor												
05	Dot defect (Bright dot, Dark dot) On -display	<table border="1" data-bbox="561 1196 1273 1507"> <thead> <tr> <th colspan="2">Item</th> <th>Acceptance (Q'ty)</th> </tr> </thead> <tbody> <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> </tbody> </table>	Item		Acceptance (Q'ty)	Dot Defect	Bright Dot	≤ 4	Dark Dot	≤ 5	Joint Dot	≤ 3	Total	≤ 7	Minor
		Item		Acceptance (Q'ty)											
Dot Defect	Bright Dot	≤ 4													
	Dark Dot	≤ 5													
	Joint Dot	≤ 3													
	Total	≤ 7													
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. 5. 4 Bright dot : Dots appear bright and unchanged in visible with 5% ND filter is defined.															

NO	Item	Criterion	Level																																																													
06	<p>Black or white Dot, scratch, contamination</p> <p>Round type</p>  $\Phi = (x + y) / 2$ <p>Line type</p> 	<p>6.1 Round type (Non-display or display):</p> <table border="1" data-bbox="512 434 1289 712"> <thead> <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> </thead> <tbody> <tr> <td>$\Phi \leq 0.25$</td> <td colspan="2">Ignore</td> </tr> <tr> <td>$0.25 < \Phi \leq 0.50$</td> <td>5</td> <td rowspan="3">Ignore</td> </tr> <tr> <td>$\Phi > 0.50$</td> <td>0</td> </tr> <tr> <td>Total</td> <td>5</td> </tr> </tbody> </table> <p>6.2 Line type(Non-display or display):</p> <table border="1" data-bbox="434 831 1366 1368"> <thead> <tr> <th rowspan="2">module size</th> <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> </thead> <tbody> <tr> <td rowspan="4">3.5" to less 9"</td> <td>---</td> <td>$W \leq 0.03$</td> <td colspan="2">Ignore</td> </tr> <tr> <td>$L \leq 10.0$</td> <td>$0.03 < W \leq 0.05$</td> <td>4</td> <td rowspan="3">Ignore</td> </tr> <tr> <td>$L \leq 5.0$</td> <td>$0.05 < W \leq 0.10$</td> <td>2</td> </tr> <tr> <td>---</td> <td>$W > 0.10$</td> <td colspan="2">As round type</td> </tr> <tr> <td colspan="3">Total</td> <td colspan="2">5</td> </tr> <tr> <td rowspan="4">9" to 15"</td> <td>---</td> <td>$W \leq 0.05$</td> <td colspan="2">Ignore</td> </tr> <tr> <td>$L \leq 10.0$</td> <td>$0.05 < W \leq 0.10$</td> <td>5</td> <td rowspan="3">Ignore</td> </tr> <tr> <td>---</td> <td>$W > 0.10$</td> <td colspan="2">As round type</td> </tr> <tr> <td colspan="3">Total</td> <td colspan="2">5</td> </tr> </tbody> </table>	Dimension (diameter : Φ)	Acceptance (Q'ty)		A area	B area	$\Phi \leq 0.25$	Ignore		$0.25 < \Phi \leq 0.50$	5	Ignore	$\Phi > 0.50$	0	Total	5	module size	Length (L)	Width (W)	Acceptance (Q'ty)		A area	B area	3.5" to less 9"	---	$W \leq 0.03$	Ignore		$L \leq 10.0$	$0.03 < W \leq 0.05$	4	Ignore	$L \leq 5.0$	$0.05 < W \leq 0.10$	2	---	$W > 0.10$	As round type		Total			5		9" to 15"	---	$W \leq 0.05$	Ignore		$L \leq 10.0$	$0.05 < W \leq 0.10$	5	Ignore	---	$W > 0.10$	As round type		Total			5		Minor
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	Total				5																																																											
07	Polarizer Bubble	<table border="1" data-bbox="478 1512 1324 1933"> <thead> <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> </thead> <tbody> <tr> <td>$\Phi \leq 0.25$</td> <td colspan="2">Ignore</td> </tr> <tr> <td>$0.25 < \Phi \leq 0.50$</td> <td>4</td> <td rowspan="3">Ignore</td> </tr> <tr> <td>$0.50 < \Phi \leq 0.80$</td> <td>1</td> </tr> <tr> <td>$\Phi > 0.80$</td> <td>0</td> </tr> <tr> <td>Total</td> <td colspan="2">5</td> </tr> </tbody> </table>	Dimension (diameter: Φ)	Acceptance (Q'ty)		A area	B area	$\Phi \leq 0.25$	Ignore		$0.25 < \Phi \leq 0.50$	4	Ignore	$0.50 < \Phi \leq 0.80$	1	$\Phi > 0.80$	0	Total	5		Minor																																											
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08	The crack of glass	<p>Symbols :</p> <p>X: The length of crack Z: The thickness of crack t: The thickness of glass</p> <p>Y: The width of crack. W: terminal length a: LCD side length</p>	Minor						
		<p>8.1 General glass chip: 8.1.1 Chip on panel surface and crack between panels:</p>  <table border="1" data-bbox="539 1590 1353 1881"> <thead> <tr> <th>X</th> <th>Y</th> <th>Z</th> </tr> </thead> <tbody> <tr> <td>$\leq a$</td> <td>Crack can't enter viewing area</td> <td>$\leq 1/2 t$</td> </tr> <tr> <td>$\leq a$</td> <td>Crack can't exceed the half of SP width.</td> <td>$1/2 t < Z \leq 2 t$</td> </tr> </tbody> </table>		X	Y	Z	$\leq a$	Crack can't enter viewing area	$\leq 1/2 t$
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<p>8.2 Protrusion over terminal:</p> <p>8.2.1 Chip on electrode pad:</p>  <table border="1" data-bbox="560 1711 1347 1883"> <thead> <tr> <th></th> <th>X</th> <th>Y</th> <th>Z</th> </tr> </thead> <tbody> <tr> <td>Front</td> <td>$\leq a$</td> <td>$\leq 1/2 W$</td> <td>$\leq t$</td> </tr> <tr> <td>Back</td> <td>$\leq a$</td> <td>$\leq W$</td> <td>$\leq 1/2 t$</td> </tr> </tbody> </table>		X	Y	Z	Front	$\leq a$	$\leq 1/2 W$	$\leq t$	Back	$\leq a$	$\leq W$	$\leq 1/2 t$	Minor
	X	Y	Z										
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		X	Y	Z											
$\leq 1/3 a$	$\leq W$	$\leq t$													
X	Y	Z													
$\leq a$	$\leq 1/3 W$	$\leq t$													

◆Specification For TFT-LCD Module 3.5" ~15" :
(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: 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

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

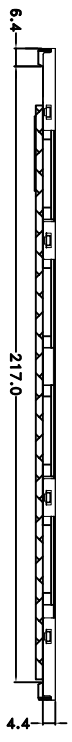
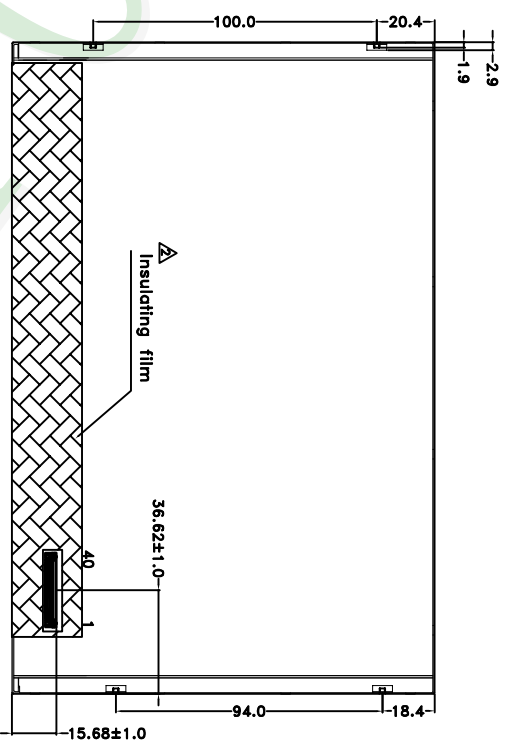
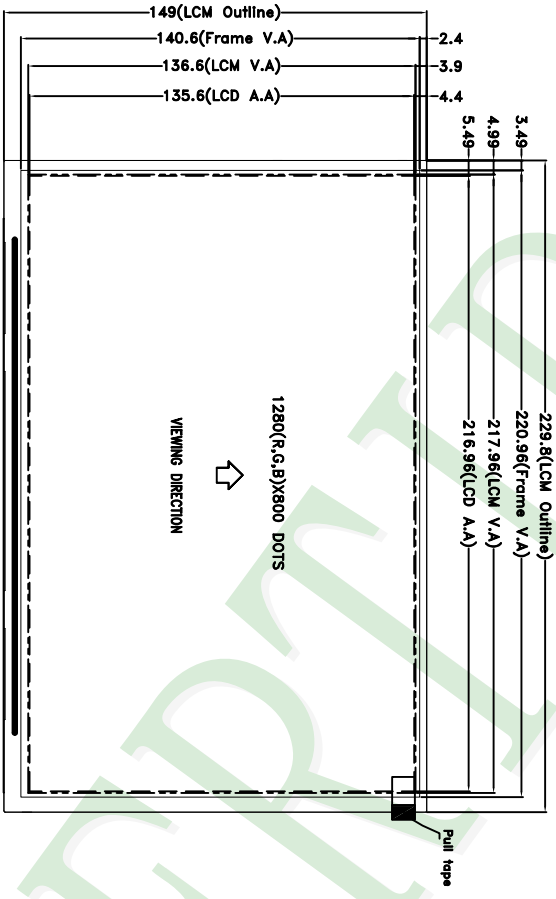
- 5.2.1 Avoid any strong mechanical shock which can break the glass.
- 5.2.2 Avoid static electricity which can damage the CMOS LSI—When working with the module, be sure to ground your body and any electrical equipment you may be using.
- 5.2.3 Do not remove the panel or frame from the module.
- 5.2.4 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 $320 \pm 10^{\circ}\text{C}$ and 3-5 sec.
- 5.2.9 To avoid liquid (include organic solvent) stained on LCM
- 5.2.10 Caution!(LCM products with Capacitive Touch Panel)
Strong EMI-sources such as switch-mode power supplies (SMPS) can lead to touch malfunction (e.g. ghost-touches).
Therefore, the touch needs to be thoroughly tested inside the target application.
- 5.2.11 CAUTION: Continuously displaying same static image will result in high possibility of image sticking/image burn-in effect due to TFT panel characteristic.

5.3 STORAGE

- 5.3.1 Store the panel or module in a dark place where the temperature is $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and the humidity is below 65% RH.
- 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: POSITIVE/TRANSMISSIVE
3.VIEW DIRECTION: 6 O'CLOCK
4.The tolerance unless classified ±0.3mm
5.Manufacturer/Type :Starcom/300E40-0010RA-G3
6.Mating Receptacle/Type (Reference) :11BA0-1211TA-G3 OR EQUIVALENT.

007			
006			
005			
004			
003			
002	MODIFY DRAWING	Kevin	2017/10/12
001	NEW DRAWING	Kevin	2017/01/16
REV	REV BY	REVISER	DATE

PART NO:	PH128800T004-ZFA
DRAWING NAME:	LMD-PH128800T004-ZFA
TITLE:	LCD MODULE DRAWING

Design	Kevin	久正光电股份有限公司 POWER TIP TECHNOLOGY CORPORATION	Surface	Material	Thickness	Quantity	Tolerance (mm)	Precision Level
Check	Stone							
Approve	Oliver	Unit	MM	1:1	63 ~ 250	250 ~ 1000	-	
		Scale	1:1	Page	1/1			

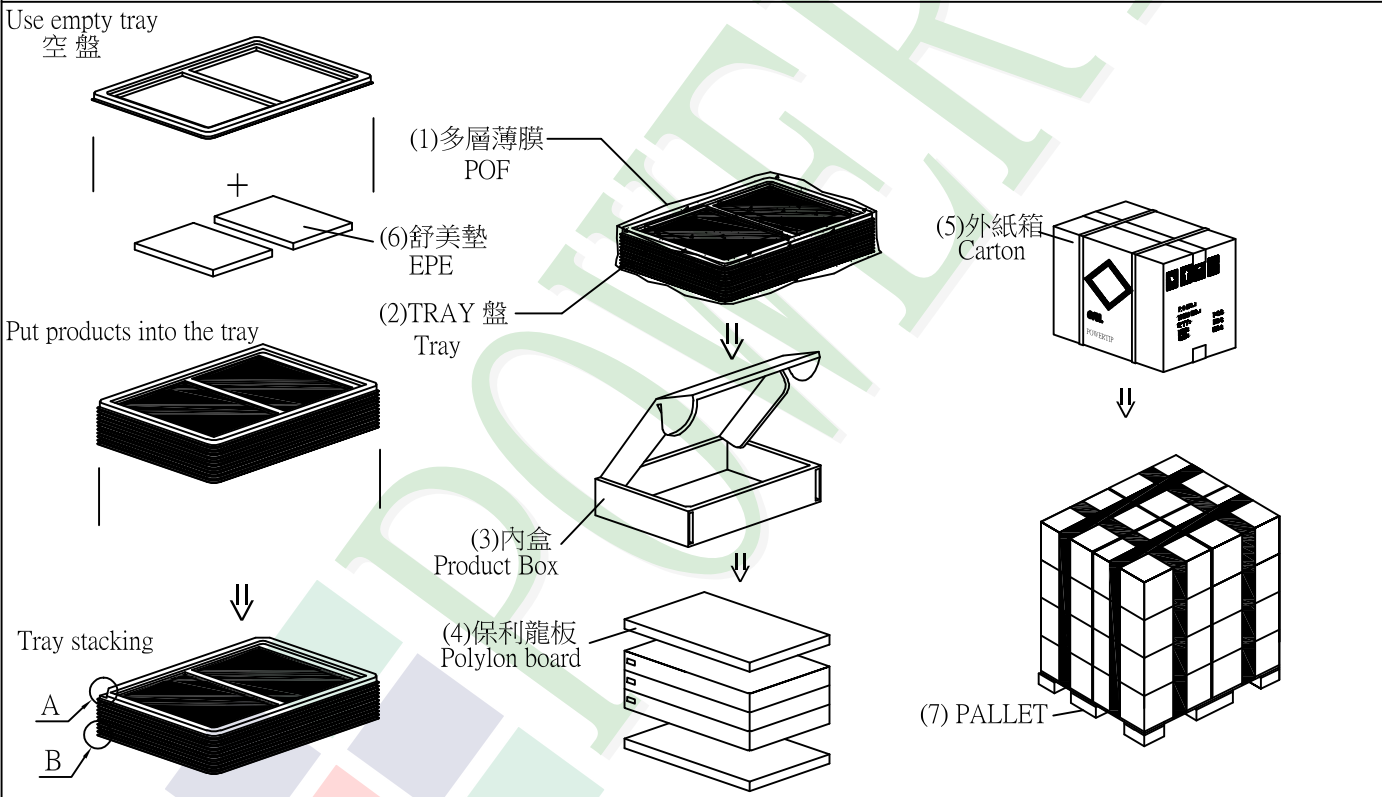
1. 包裝材料規格表 (Packaging Material) : (per carton)

No.	Item	Model	Dimensions (mm)	1Pcs Weight	Quantity	Total Weight
1	成品 (LCD)	PH128800T004-ZFA	229.8 X 149	0.222	288	63.936
2	多層薄膜(1)POF	OTFILM0BA03ABA	—————	—————	48	—————
3	TRAY 盤 (2)Tray	TY00000000394	517 X 377 X 18.8	0.2	192	38.4
4	內盒(3)Product Box	BX00000000071	558 X 393 X 68	0.6	48	28.8
5	保利龍板(4)Polylon board	OTPLB00PL08ABA	550 X 393 X 20	0.0284	32	0.9088
6	外紙箱(5)Carton	BX57041027CCBA	570 X 410 X 265	1.4208	16	22.7328
7	舒美墊(6)EPE	OTFOAMEP0001BA	333X 218 X 2.0	0.0032	224	0.7168
8	棧板(7)Carton	OTPALLET005ABA	1200 X 1000 X 140	8	1	8
9						

2. 總重量 (Total Weight) : 163.49 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	3	=	6
(2)Total LCD quantity in carton : quantity per box	6	x no of boxes	3	=	18
(3)Total LCM quantity in pallet : quantity per carton	18	x no. of cartons	16	=	288



特 記 事 項 (REMARK)

