

SPECIFICATIONS

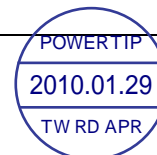
CUSTOMER	:	CTW1281
SAMPLE CODE	:	SE128128WRF011H01Q
MASS PRODUCTION CODE	:	PE128128WRF011H01Q
SAMPLE VERSION	:	02
SPECIFICATIONS EDITION	:	005
DRAWING NO. (Ver.)	:	LMD- PE128128WRF011H01Q (Ver:002)
PACKAGING NO. (Ver.)	:	PKG-PE128128WRF011H01Q (Ver:001)

Customer Approved

Date:

Approved	Checked	Designer
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- ☐ Preliminary specification for design input
☒ Specification for sample approval



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History of Version

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Total : 26 Page

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Note: For detailed information please refer to IC data sheet: Sitronix ST7571

1. SPECIFICATIONS

1.1 Features

Item	Standard Value
Display Type	128 * 128 Dots
LCD Type	FSTN, Positive, White, Transflective
Driver Condition	LCD Module : 1/128 Duty , 1/12 Bias
Viewing Direction	6 O'clock
Backlight Type	White LED B/L
Interface	3 / 4-line Serial interface
Driver IC	ST7571 (4 Gray Scale)
ROHS	THIS PRODUCT CONFORMS THE ROHS OF PTC Detail information please refer web side : http://www.powertip.com.tw/news/LatestNews.asp

1.2 Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	36.6 (L) * 42.7 (w) * 2.8 (H)	mm
Viewing Area	33.5 (L) * 33.5 (w)	mm
Active Area	28.785 (L) * 28.785 (w)	mm

Note : For detailed information please refer to LCM drawing

1.3 Absolute Maximum Ratings

Module

Item	Symbol	Condition	Min.	Max.	Unit
System Power Supply Voltage	VDD	-	-0.3	+3.6	V
Operating Temperature	T _{OP}	-	-20	70	°C
Storage Temperature	T _{ST}	-	-30	80	°C
Storage Humidity	H _D	Ta < 40 °C	20	90	%RH

1.4 DC Electrical Characteristics

Module

VSS = 0V, Ta = 25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Logic Supply Voltage	VDD	—	2.4	2.8	3.3	V
“H” Input Voltage	V _{IH}	—	0.7*VDD	-	VDD	V
“L” Input Voltage	V _{IL}	—	VSS	-	0.3*VDD	V
“H” Output Voltage	V _{OH}	—	0.7*VDD	-	VDD	V
“L” Output Voltage	V _{OL}	—	VSS	-	0.3*VDD	V
Supply current	I _{DD}	VDD= 2.8V;V _{OP} = 11.7V; Pattern= Full display	-	0.5	-	mA
		VDD= 2.8V;V _{OP} = 11.7V; Pattern= Horizontal line*1	-	0.7	1.1	mA
LCM driving voltage	V _{OP} *1	-20°C	-	13.9	-	V
		25°C	11.5	11.7	11.9	
		70°C	-	11.0	-	

NOTE: *1 The Maximum current display

*2 The VOP test point is V0~XV0.

1.5 Optical Characteristics

FSTN LCD panel

LCD Panel : 1/128 Duty , 1/12 Bias , $V_{OP} = 11.7$, $T_a = 25^\circ\text{C}$

Item		Symbol	Condition	Min.	Typ.	Max.	unit	
Response time	Rise	Tr	$T_a = 25^\circ\text{C}$ $\theta_X, \theta_Y = 0^\circ$	-	120	180	ms	Note2
	Fall	Tf		-	265	398		
Viewing angle	Top	θ_{Y+}	$CR \geq 2$	-	35	-	Deg.	Note1
	Bottom	θ_{Y-}		-	35	-		
	Left	θ_{X-}		-	40	-		
	Right	θ_{X+}		-	40	-		
Contrast ratio		CR	$T_a = 25^\circ\text{C}$ $\theta_X, \theta_Y = 0^\circ$	2	4	-		Note3
Average Brightness Pattern=white display (With B/L)		IV	IF= 30 mA	105	145	-	cd/m ²	Note4
Uniformity (With B/L)		ΔB	IF= 30 mA	70	-	-	%	Note4

Note4:

1 : $\Delta B = B(\text{min}) / B(\text{max}) * 100\%$

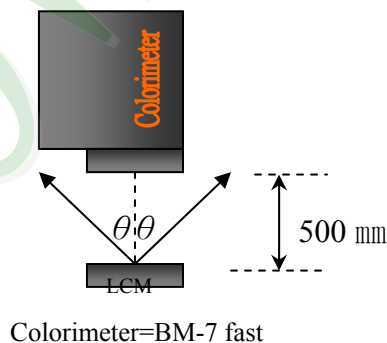
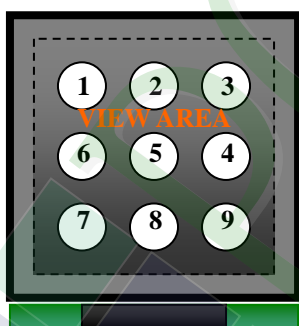
2 : Measurement Condition for Optical Characteristics:

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

b : Measurement Distance: 500 ± 50 mm , ($\theta = 0^\circ$)

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 $\pm 4\%$

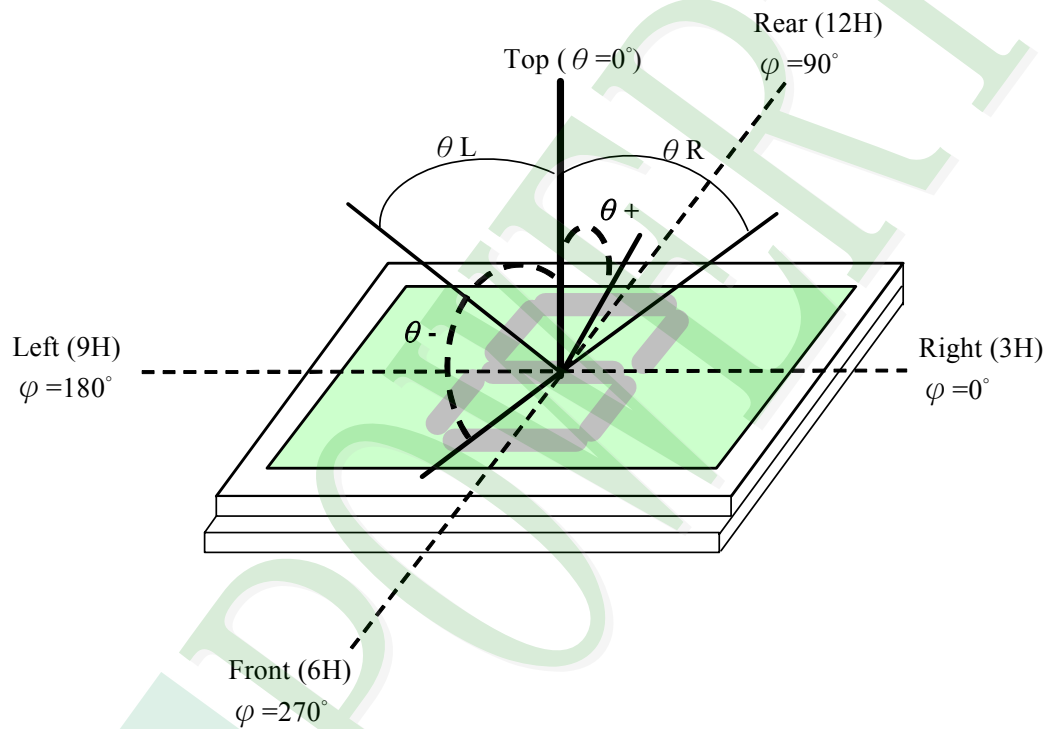




Note 1.

Optical characteristics-2

Viewing angle

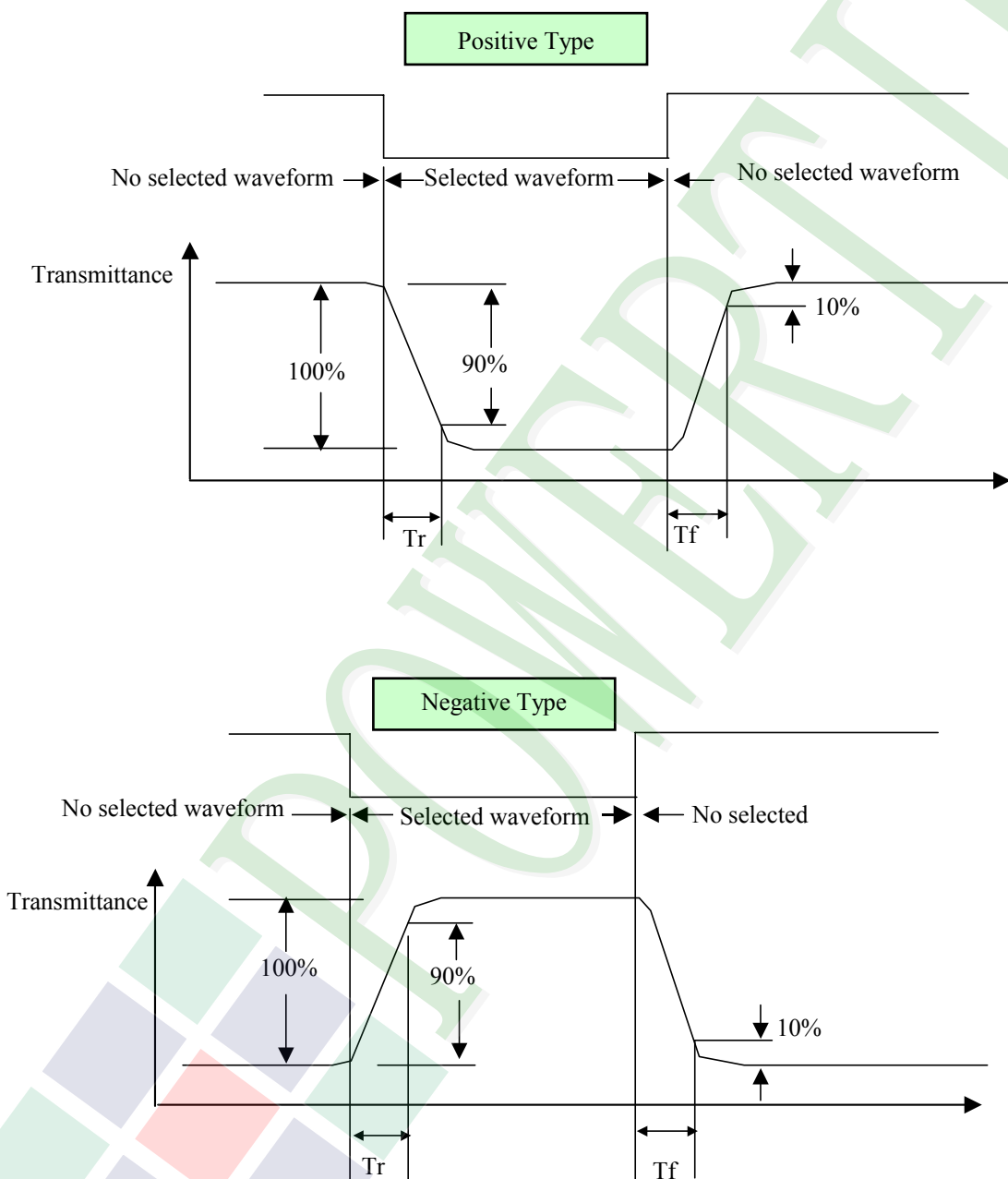




Note 2.

Optical characteristics-3

Fig.2 Definition of response time





Electrical characteristics-2

2 Drive waveform

V_{op} : Drive voltage

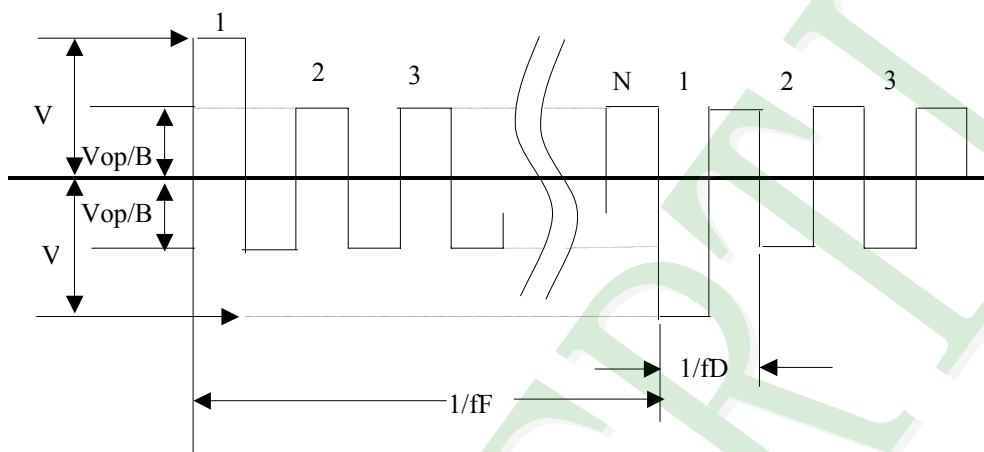
f_F : Frame frequency

$1/B$: Bias

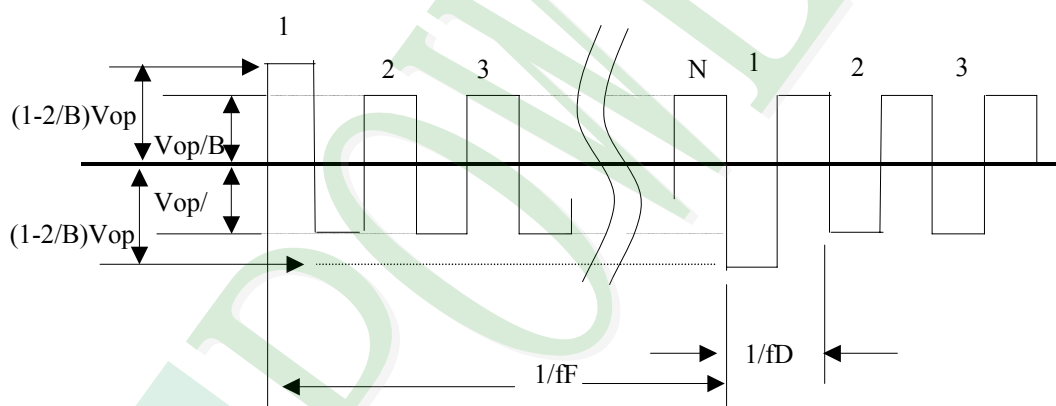
f_D : Drive frequency

N : Duty

(1) Selected waveform



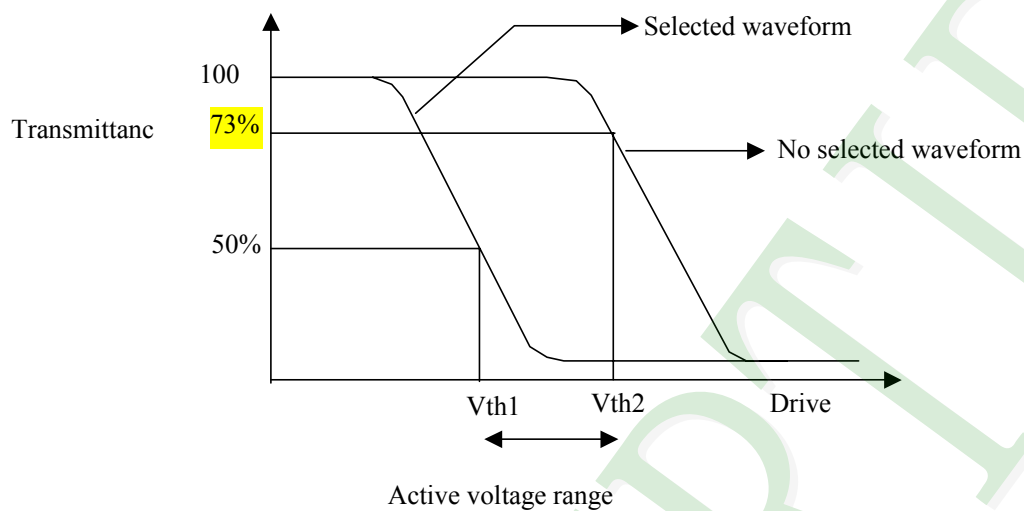
(2) Non- Selected wave form



Note:

Frame frequency is defined as follows: Common side supply voltage peak - to - peak / 2 = 1 period

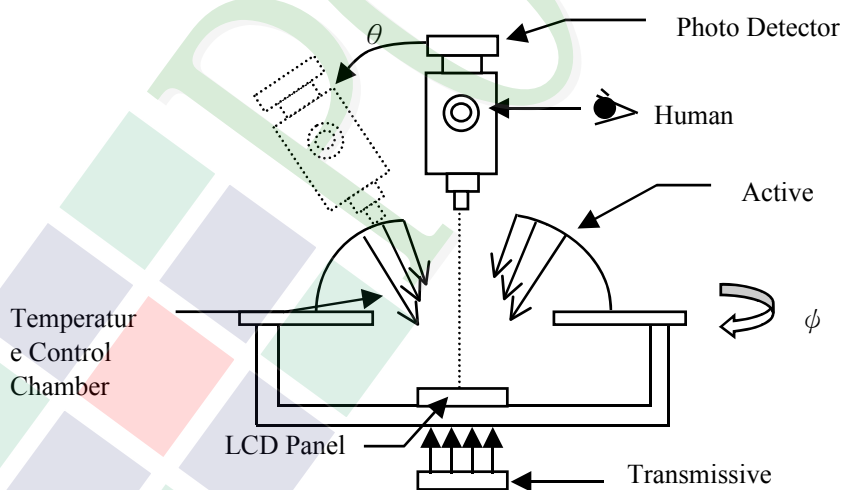
Note 3. : Definition of Vth



	Vth1	Vth2
View direction	10°	40°
Drive waveform	(Selected waveform)	(No selected waveform)
Transmittance	50%	73%

※1 Contrast ratio
= (Brightness in OFF state) / (Brightness in ON state)

Outline of Electro-Optical Characteristics Measuring System



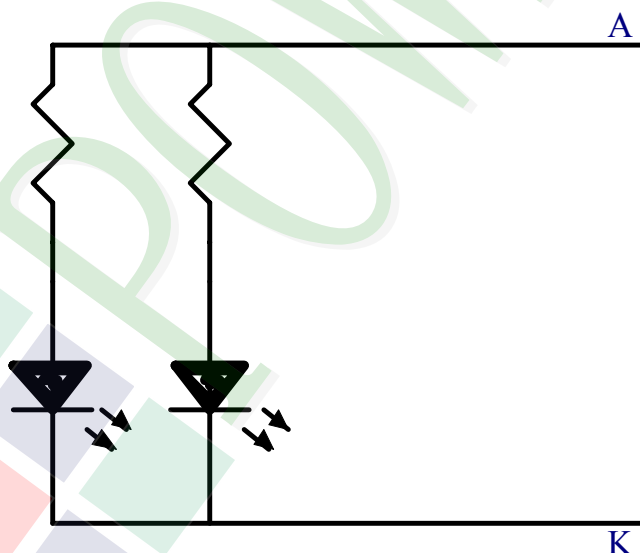
1.6 Backlight & LED Characteristics

Maximum Ratings

Item	Symbol	Conditions	Min.	Max.	Unit
Forward Current	IF	Ta =25℃		40	mA
Power Dissipation	PD	Ta =25℃		120	mW

Electrical / Optical Characteristics

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF= 30 mA	3.1	3.3	3.5	V
Average Brightness (without LCD)	IV		500	700		cd/m ²
Color of CIE Coordinate (Without LCD)	X		0.260	-	0.315	-
	Y		0.260	-	0.315	
Color	White					



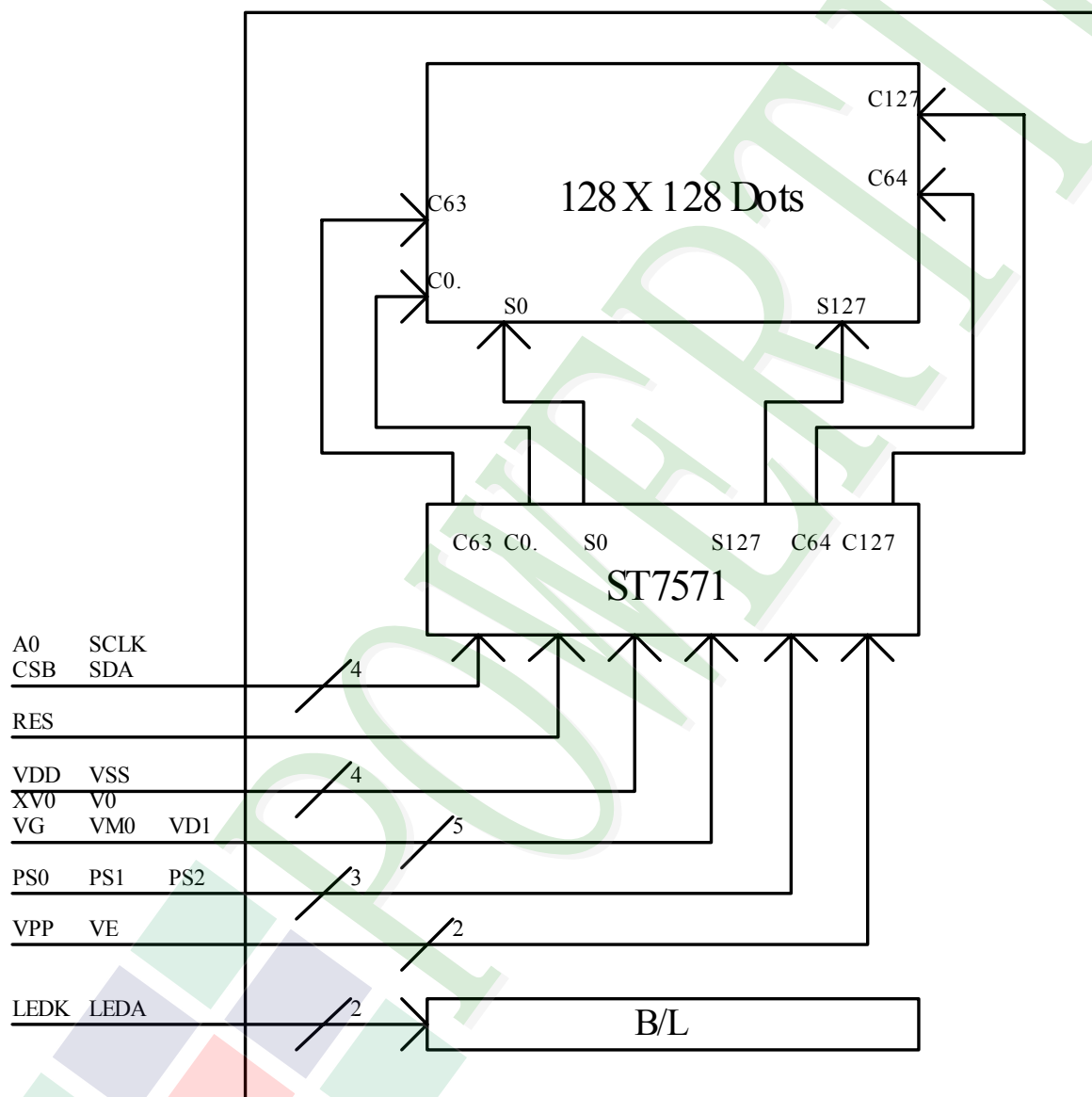
2. MODULE STRUCTURE

2.1 Counter Drawing

2.1.1 LCM Mechanical Diagram

* See Appendix

2.1.2 Block Diagram

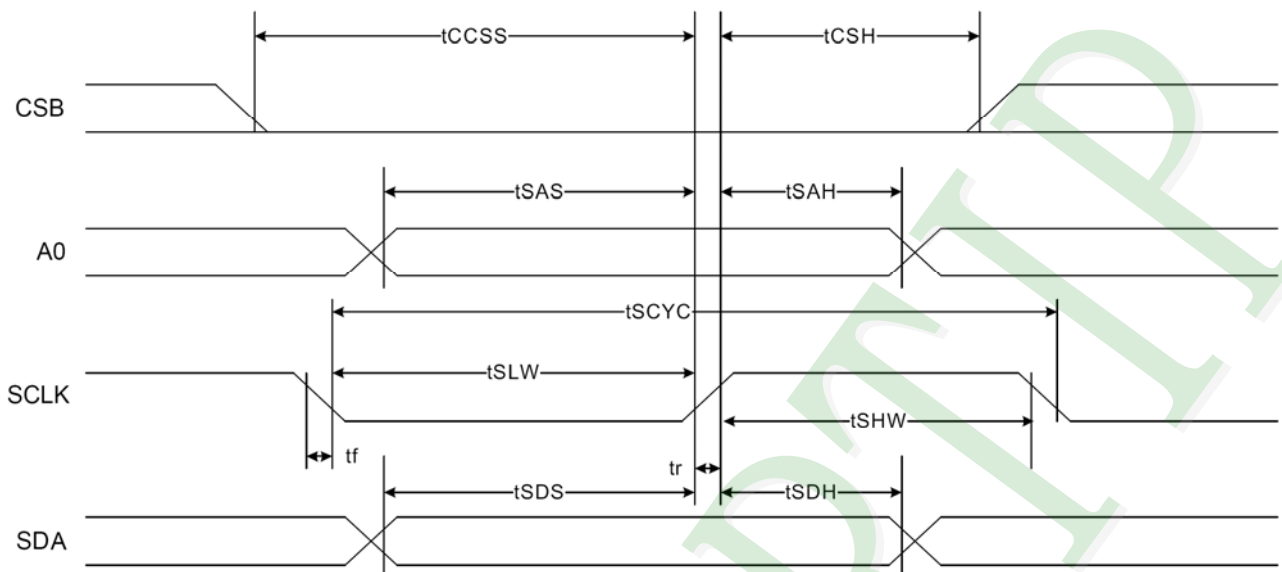


2.2 Interface Pin Description

Pin No	Symbol	Function
1	NC	Dummy
2	LEDA	Backlight LED Anode input pin.
3	LEDK	Backlight LED cathode input pin
4	NC	Dummy
5	VE	When writing OTP, VE should be pull low. If not used, please let it open
6	VPP	When writing OTP, it needs external power supply voltage If not used, please let it open
7	VG	Connect a capacitor to VSS
8	VD1	Connect a capacitor to VSS
9	XV0	Connect a capacitor to V0
10	V0	Connect a capacitor to XV0
11	VM0	Connect a capacitor to VSS
12	VDD	Power supply for system.
13	VSS	System ground
14	VDD	Power supply for system.
15	SDA	serial input data
16	SCLK	serial clock input
17	VDD	Power supply for system.
18	A0	Register select input pin
19	RST	Reset input pin
20	CSB	Chip select input pins
21	PS2	PS0 PS1 PS2 Interface mode D/C Data R/W Serial clock
22	PS1	L L L 3 Line Serial - SDA Write only SCLK
23	PS0	L H L 4 Line Serial A0 SDA - SCLK
24	NC	Dummy

2.3 Timing Characteristics

SERIAL INTERFACE(4-Line Interface)



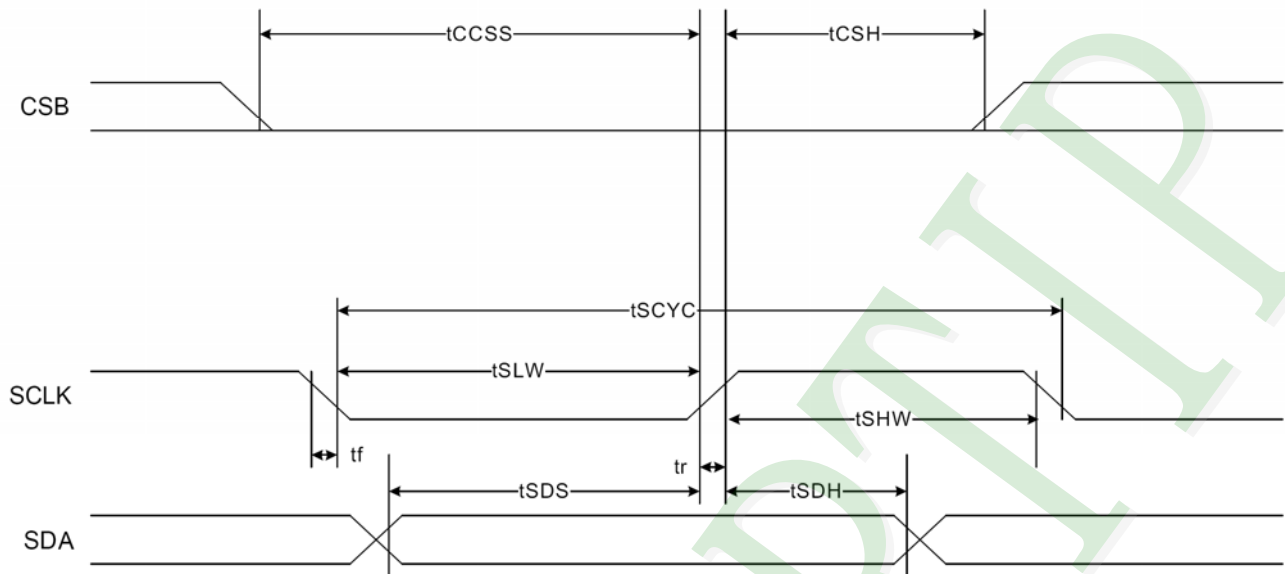
(VDD = 1.8V~3.3V, Ta = -30~85°C)

Item	Signal	Symbol	Condition	Rating		Units
				Min.	Max.	
Serial Clock Period	SCLK	tSCYC		200	—	ns
SCLK "H" pulse width		tSHW		80	—	
SCLK "L" pulse width		tSLW		80	—	
Address setup time	A0	tSAS		60	—	
Address hold time		tSAH		30	—	
Data setup time	SDA	tSDS		60	—	
Data hold time		tSDH		30	—	
CS-SCLK time	CSB	tCSS		40	—	
CS-SCLK time		tCSH		100	—	

*1 The input signal rise and fall time (tr, tf) are specified at 15 ns or less.

*2 All timing is specified using 20% and 80% of VDD as the standard.

SERIAL INTERFACE(3-Line Interface)



(VDD = 1.8V~3.3V, Ta = -30~85°C)

Item	Signal	Symbol	Condition	Rating		Units
				Min.	Max.	
Serial Clock Period	SCLK	tSCYC		200	—	ns
SCLK "H" pulse width		tSHW		80	—	
SCLK "L" pulse width		tSLW		80	—	
Data setup time	SDA	tSDS		60	—	
Data hold time		tSDH		30	—	
CS-SCLK time	CSB	tCSS		40	—	
CS-SCLK time		tCSH		100	—	

*1 The input signal rise and fall time (tr, tf) are specified at 15 ns or less.

*2 All timing is specified using 20% and 80% of VDD as the standard.

RESET TIMING

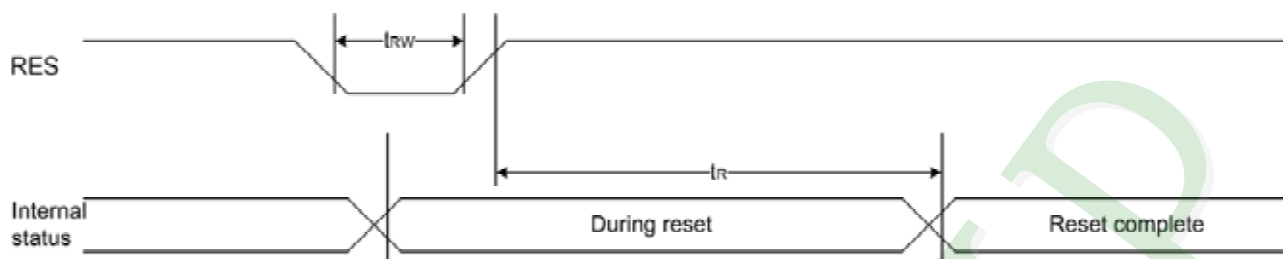


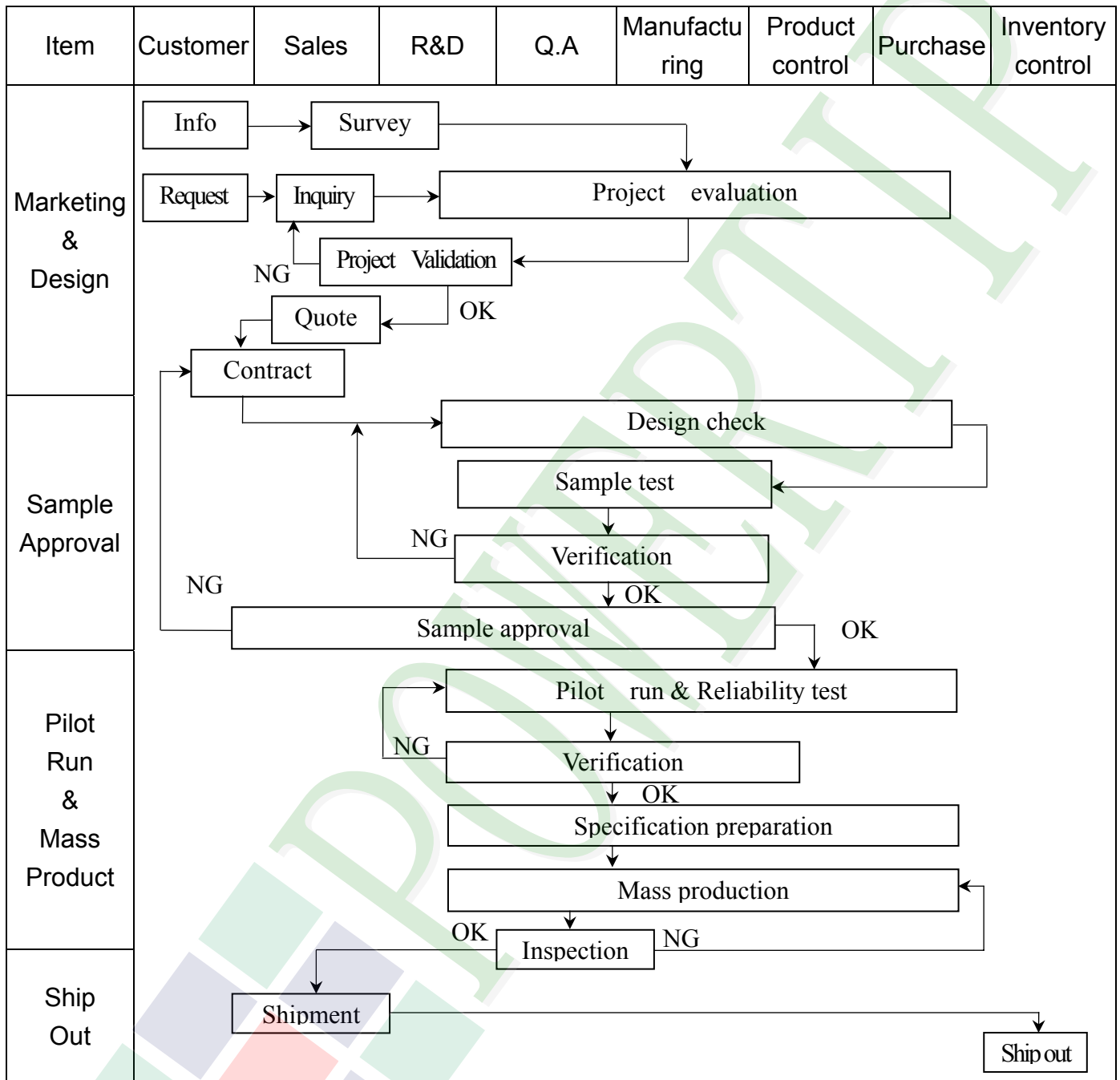
Fig. 36

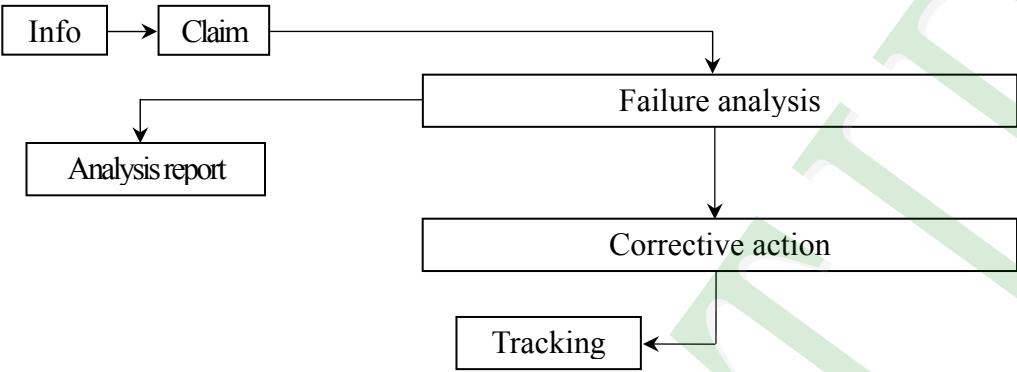
(VDD = 1.8V~3.3V, Ta = -30 to 85°C)

Item	Signal	Symbol	Condition	Rating			Units
				Min.	Typ.	Max.	
Reset time		tR		120	—	—	ms
Reset "L" pulse width	RES	tRW		2.0	—	—	us

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 --> Analysis[Analysis report] Claim --> Failure[Failure analysis] Failure --> Corrective[Corrective action] Corrective --> 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 LCD Module for Monotype and Color STN(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 .

◆ **Manner of appearance test** :

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

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

(3). The test direction is base on about around 45° of vertical line. (Fig. 1)

(4). Definition of area . (Fig. 2)

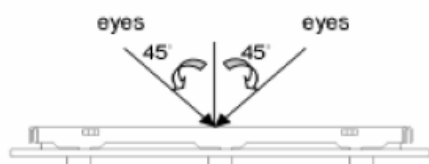


Fig.1

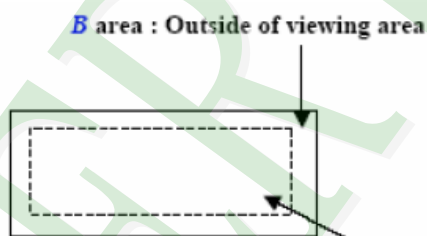


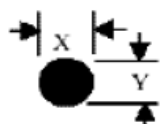
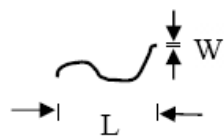
Fig. 2 A area : viewing area

◆ **Specification:**

NO	Item	Criterion	Level
01	Product condition	1. 1 The part number is inconsistent with work order of Production.	Major
		1. 2 Mixed production types.	Major
		1. 3 Assembled in inverse direction.	Major
02	Quantity	2. 1 The quantity is inconsistent with work order of production.	Major
03	Outline dimension	3. 1 Product 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 Output data is error.	Major
		4. 4 LCD viewing angle defect.	Major
		4. 5 Current consumption exceeds product specifications.	Major

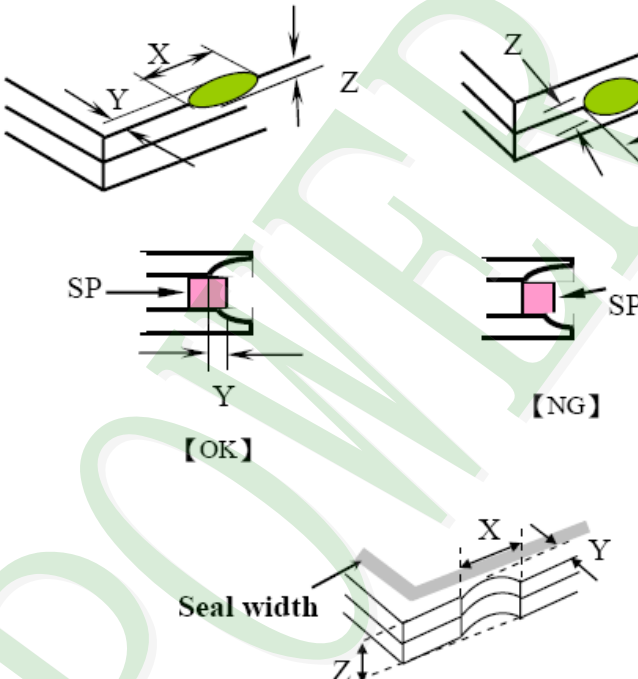
◆ Specification For Monotype and Color STN :

(Ver. B01)

NO	Item	Criterion	Level																																			
05	<p>Black or white dot 、 scratch 、 contamination</p> <p>Round type</p>  <p>$\Phi=(x+y)/2$</p> <p>Line type</p> 	<p>5. 1 Round type:</p> <p>5. 1. 1 display only :</p> <ul style="list-style-type: none">• White and black spots on display ≤ 0.30 mm , no more than 4 white or black spots present.• Densely spaced : NO more than two spots or lines within 3 mm. <p>5. 1. 2 Non-display :</p> <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>$\Phi \leq 0.10$</td><td>Accept no dense</td><td rowspan="4">Ignore</td></tr><tr><td>$0.10 < \Phi \leq 0.20$</td><td>3</td></tr><tr><td>$0.20 < \Phi \leq 0.30$</td><td>2</td></tr><tr><td>Total quantity</td><td>4</td></tr></table> <p>5. 1. 3 Line type:</p> <table><tr><th colspan="2">Dimension</th><th colspan="2">Acceptance (Q'ty)</th></tr><tr><th>Length (L)</th><th>Width (W)</th><th>A area</th><th>B area</th></tr><tr><td>---</td><td>$W \leq 0.03$</td><td>Accept no dense</td><td rowspan="4">Ignore</td></tr><tr><td>$L \leq 3.0$</td><td>$0.03 < W \leq 0.05$</td><td rowspan="2">4</td></tr><tr><td>$L \leq 2.5$</td><td>$0.05 < W \leq 0.075$</td></tr><tr><td>---</td><td>$W > 0.075$</td><td colspan="2">As round type</td></tr></table>	Dimension (diameter : Φ)	Acceptance (Q'ty)		A area	B area	$\Phi \leq 0.10$	Accept no dense	Ignore	$0.10 < \Phi \leq 0.20$	3	$0.20 < \Phi \leq 0.30$	2	Total quantity	4	Dimension		Acceptance (Q'ty)		Length (L)	Width (W)	A area	B area	---	$W \leq 0.03$	Accept no dense	Ignore	$L \leq 3.0$	$0.03 < W \leq 0.05$	4	$L \leq 2.5$	$0.05 < W \leq 0.075$	---	$W > 0.075$	As round type		Minor
Dimension (diameter : Φ)	Acceptance (Q'ty)																																					
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---	$W > 0.075$	As round type																																				
06	<p>Polarizer Bubble</p>	<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>$\Phi \leq 0.20$</td><td>Accept no dense</td><td rowspan="5">Ignore</td></tr><tr><td>$0.20 < \Phi \leq 0.50$</td><td>3</td></tr><tr><td>$0.50 < \Phi \leq 1.00$</td><td>2</td></tr><tr><td>$\Phi > 1.00$</td><td>0</td></tr><tr><td>Total quantity</td><td>4</td></tr></table>	Dimension (diameter : Φ)	Acceptance (Q'ty)		A area	B area	$\Phi \leq 0.20$	Accept no dense	Ignore	$0.20 < \Phi \leq 0.50$	3	$0.50 < \Phi \leq 1.00$	2	$\Phi > 1.00$	0	Total quantity	4	Minor																			
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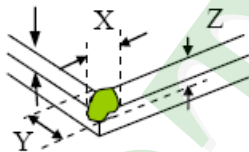
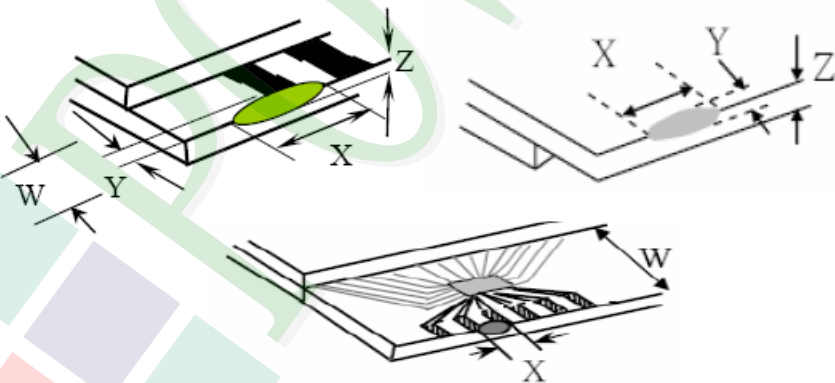
◆ Specification For Monotype and Color STN :

(Ver. B01)

NO	Item	Criterion	Level						
07	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>7.1 General glass chip :</p> <p>7.1.1 Chip on panel surface and crack between panels:</p> <div></div> <table><tr><th>X</th><th>Y</th><th>Z</th></tr><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></table>		X	Y	Z	$\leq a$	Crack can't enter viewing area	$\leq 1/2 t$
X	Y	Z							
$\leq a$	Crack can't enter viewing area	$\leq 1/2 t$							
$\leq a$	Crack can't exceed the half of SP width.	$1/2 t < Z \leq 2 t$							

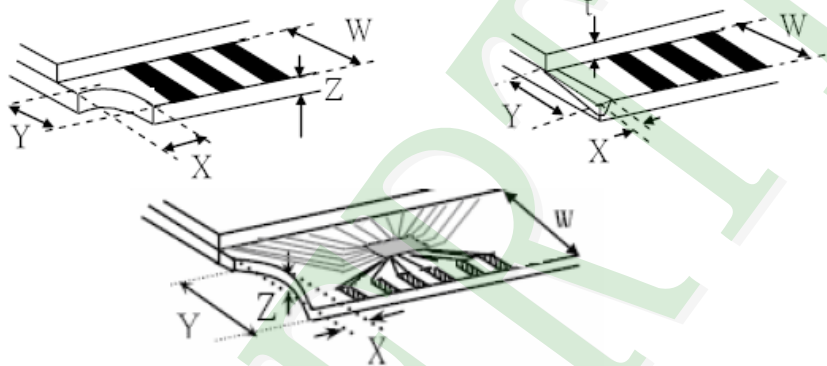
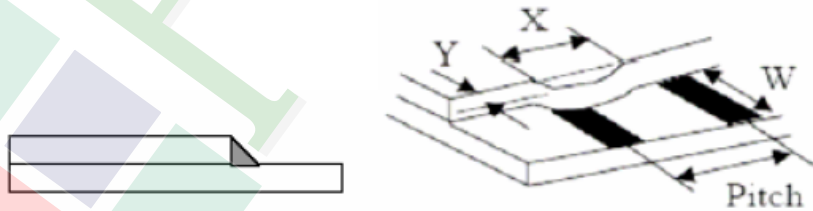
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		<p>7.1.2 Corner crack :</p>  <table><tr><th>X</th><th>Y</th><th>Z</th></tr><tr><td>$\leq 1/5 \ a$</td><td>Crack can't enter viewing area</td><td>$Z \leq 1/2 \ t$</td></tr><tr><td>$\leq 1/5 \ a$</td><td>Crack can't exceed the half of SP width.</td><td>$1/2 \ t < Z \leq 2 \ t$</td></tr></table>		X	Y	Z	$\leq 1/5 \ a$	Crack can't enter viewing area	$Z \leq 1/2 \ t$	$\leq 1/5 \ a$	Crack can't exceed the half of SP width.	$1/2 \ t < Z \leq 2 \ t$			
X	Y	Z													
$\leq 1/5 \ a$	Crack can't enter viewing area	$Z \leq 1/2 \ t$													
$\leq 1/5 \ a$	Crack can't exceed the half of SP width.	$1/2 \ t < Z \leq 2 \ t$													
		<p>7.2 Protrusion over terminal :</p> <p>7.2.1 Chip on electrode pad :</p>  <table><tr><th></th><th>X</th><th>Y</th><th>Z</th></tr><tr><td>Front</td><td>$\leq a$</td><td>$\leq 1/2 \ W$</td><td>$\leq t$</td></tr><tr><td>Back</td><td colspan="3">Neglect</td></tr></table>		X	Y	Z	Front	$\leq a$	$\leq 1/2 \ W$	$\leq t$	Back	Neglect			
	X	Y	Z												
Front	$\leq a$	$\leq 1/2 \ W$	$\leq t$												
Back	Neglect														

◆ Specification For Monotype and Color STN :

(Ver. B01)

NO	Item	Criterion	Level									
07	The crack of glass	<p>Symbols :</p> <div> <div> <p>X : The length of crack</p> <p>Z : The thickness of crack</p> <p>t : The thickness of glass</p> </div> <div> <p>Y : The width of crack.</p> <p>W : terminal length</p> <p>a : LCD side length</p> </div> </div>	Minor									
		<p>7.2.2 Non-conductive portion :</p>  <table border="1"> <tr> <td>X</td> <td>Y</td> <td>Z</td> </tr> <tr> <td>$\leq 1/3 a$</td> <td>$\leq W$</td> <td>$\leq t$</td> </tr> </table> <p>☉ If the chipped area touches the ITO terminal, over 2/3 of the ITO must remain and be inspected according to electrode terminal specifications.</p> <p>7.2.3 Glass remain :</p>  <table border="1"> <tr> <td>X</td> <td>Y</td> <td>Z</td> </tr> <tr> <td>$\leq a$</td> <td>$\leq 1/3 W$</td> <td>$\leq t$</td> </tr> </table>		X	Y	Z	$\leq 1/3 a$	$\leq W$	$\leq t$	X	Y	Z
X	Y	Z										
$\leq 1/3 a$	$\leq W$	$\leq t$										
X	Y	Z										
$\leq a$	$\leq 1/3 W$	$\leq t$										



◆ Specification For Monotype and Color STN :

(Ver. B01)

NO	Item	Criterion	Level
08	Backlight elements	8. 1 Backlight can't work normally.	Major
		8. 2 Backlight doesn't light or color is wrong.	Major
		8. 3 Illumination source flickers when lit.	Major
09	General appearance	9. 1 Pin type must match type in specification sheet.	Major
		9. 2 No short circuits in components on PCB or FPC.	Major
		9. 3 Product packaging must the same as specified on packaging specification sheet.	Minor
		9. 4 The folding and peeled off in polarizer are not acceptable.	Minor
		9. 5 The PCB or FPC between B/L assembled distance (PCB or FPC) is ≤ 1.5 mm.	Minor

4. RELIABILITY TEST

4.1 Reliability Test Condition

(Ver.B01)

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 +60 ℃ / 90% R.H duration for 96 hrs Surrounding temperature, then storage at normal condition 4hrs. (Excluding the polarizer)											
4	Temperature Cycling Storage Test	<div style="text-align: center;"><div><div>-30℃ → +25℃ → +80℃ → +25℃</div><div>(30mins) (5mins) (30mins) (5mins)</div><div>← 10 Cycle →</div></div> Surrounding temperature, then storage at normal condition 4hrs.</div>											
5	ESD Test	Air Discharge: Apply 2 KV with 5 times Discharge for each polarity +/-	Contact Discharge: Apply 250 V with 5 times 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. Discharge, mode of operation : Single Discharge (time between successive discharges at least 1 sec) (Tolerance if the output voltage indication : ±5%)											
6	Vibration Test (Packaged)	1. Sine wave 10 55 Hz frequency (1 min/sweep) 2. The amplitude of vibration :1.5 mm 3. Each direction (X、Y、Z) duration for 2 Hrs											
7	Drop Test (Packaged)	<table><tr><th>Packing Weight (Kg)</th><th>Drop Height (cm)</th></tr><tr><td>0 ~ 45.4</td><td>122</td></tr><tr><td>45.4 ~ 90.8</td><td>76</td></tr><tr><td>90.8 ~ 454</td><td>61</td></tr><tr><td>Over 454</td><td>46</td></tr></table>		Packing Weight (Kg)	Drop Height (cm)	0 ~ 45.4	122	45.4 ~ 90.8	76	90.8 ~ 454	61	Over 454	46
		Packing Weight (Kg)	Drop Height (cm)										
0 ~ 45.4	122												
45.4 ~ 90.8	76												
90.8 ~ 454	61												
Over 454	46												
		Drop Direction :※1 corner / 3 edges / 6 sides each 1time											

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

5.3 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.

Ver.001

Documents NO.

PKG-PE128128WRF011H01Q

LCM包裝規格書

LCM Packaging Specifications

Approve

Check

Contact

Linda

Mag

Stone

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

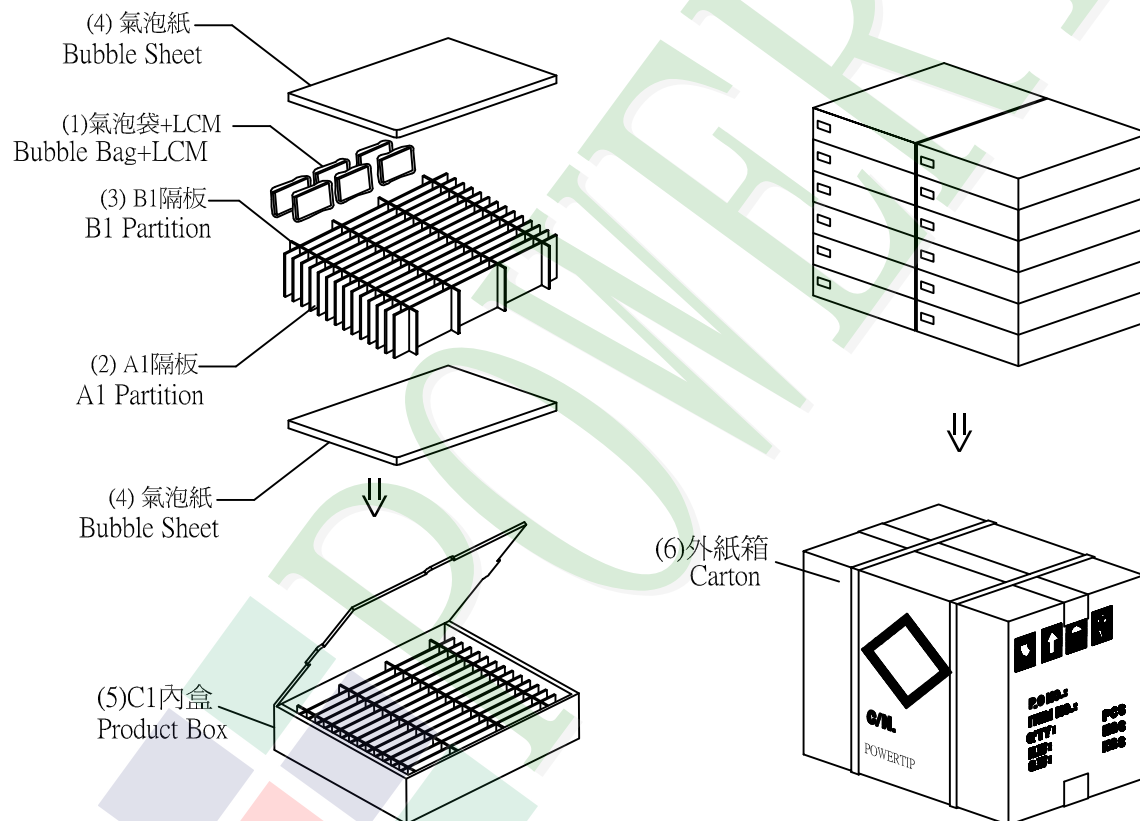
No.	Item	Model	Dimensions (mm)	1Pcs Weight	Quantity	Total Weight
1	成品 (LCM)	PE128128WRF011H01Q	36.6 X 42.7	0.007	540	3.78
2	氣泡袋(1)Bubble Bag	BAG100065BRABA	65 X 100	0.0006	540	0.324
3	A1隔板(2)A1 Partition	BX29300045BMBA	293 X 45 X 2.5	0.01	168	1.68
4	B1隔板(3)B1 Partition	BX24500045BKBA	245 X 45 X 2.5	0.008	48	0.384
5	氣泡紙(4)Bubble Sheet	BAG280240BWABA	280 X 240	0.006	24	0.144
6	C1內盒(5)Product Box	BX31025555AABA	310 X 255 X 55	0.171	12	2.052
7	外紙箱(6)Carton	BX52732536CCBA	527 X 325 X 360	1.092	1	1.092
8						
9						

2.一 整箱總重量 (Total LCD Weight in carton) : 9.46 Kg±10%

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

(1)Quantity Of Spacer : A1隔板 X 14 , B1隔板 X 4

(2)Total LCM quantity in carton : quantity per box 45 x no of boxes 12 = 540



特 記 事 項 (REMARK)

1. Label Specifications :

MODEL:
LOT NO:
QUANTITY:
CHECK: