POWERTIP TECH. CORP.

SPECIFICATIONS

CUSTOMER	:	
SAMPLE CODE (Ver.)	:	
MASS PRODUCTION CODE (Ver.)	:	**PG12864LRU-KCN-H-Q (Ver.0)**
DRAWING NO. (Ver.)		**PG-98007**

Customer Approved

Date:

Approved	QC Confirmed	Designer
		

■ Approval For Specifications Only.

* This specification is subject to change without notice.

Please contact Powertip or it's representative before designing your product based on this specification.

□ Approval For Specifications and Sample.

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RECORDS OF REVISION

Date	Ver.	Description	Page	Design by
2006/7/21	**0**	PG12864LRU-KCN-H-Q is the ROHS compliant part number based on Powertip's standard PG12864LRU-KCN-H		

Total：26Page

Contents

1. SPECIFICATIONS

1.1 Features

Item	Standard Value
Display Type	128 * 64 dots
LCD Type	STN, Y/G, Transflective, Positive, Extended Temp.
Driver Condition	LCD Module:1/64 Duty , 1/9 Bias
Viewing Direction	6 O'clock
Backlight	Yellow-green B/L
Weight	64 g
Interface	—
Other	—

1.2 Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	93.0(L) * 70.0(w) * 12.5(H)(Max)	mm
Viewing Area	72.0(L) * 40.0(w)	mm
Active Area	66.52(L) * 33.24(w)	mm
Dot Size	0.48(L) * 0.48(w)	mm
Dot Pitch	0.52(L) * 0.52(w)	mm

Note：For detailed information please refer to LCM drawing

1.3 Absolute Maximum Ratings

Item	Symbol	Condition	Min.	Max.	Unit
Power Supply Voltage	V_{DD}	—	-0.3	7.0	V
LCD Driver Supply Voltage	V_{LCD}	—	V_{DD}-19.0	V_{DD}+0.3	V
Input Voltage	V_{IN}	—	-0.3	V_{DD}+0.3	V
Operating Temperature	T_{OP}	Excluded B/L	-20	70	℃
Storage Temperature	T_{ST}	Excluded B/L	-30	80	℃
Storage Humidity	H_D	Ta＜40 ℃	-	90	%RH

1.4 DC Electrical Characteristics

V_{DD} = 5.0 V ± 0.5V，V_{SS} = 0V，Ta = 25℃

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Logic Supply Voltage	V_{DD}	—	4.5	5.0	5.5	V
"H" Input Voltage	V_{IH}	—	0.7 V_{DD}	-	V_{DD}	V
"L" Input Voltage	V_{IL}	—	V_{SS}	-	0.3 V_{DD}	V
"H" Output Voltage	V_{OH}	—	$V_{DD-0.4}$	-	-	V
"L" Output Voltage	V_{OL}	—	-	-	0.4	V
Supply Current	I_{DD}	V_{DD} = 5.0 V	-	4.2	6.5	mA
LCM Driver Voltage	V_{OP}	-20°C	-	-	-	V
		25°C*1	12.3	12.5	12.7	
		70°C	-	-	-	

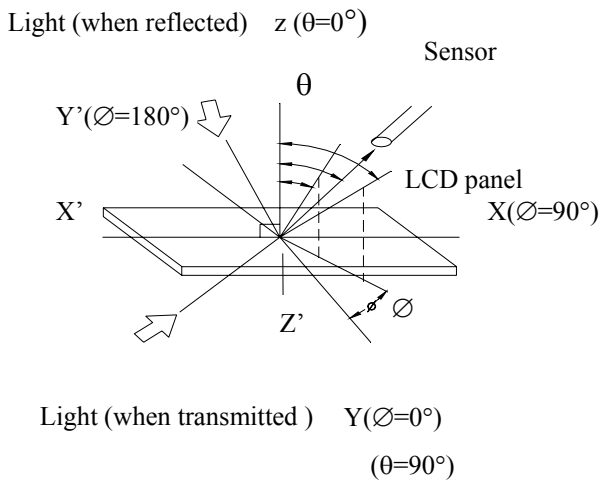
Note: *1. THE V_{OP} TEST POINT IS V_{DD} - V_O.

1.5 Optical Characteristics

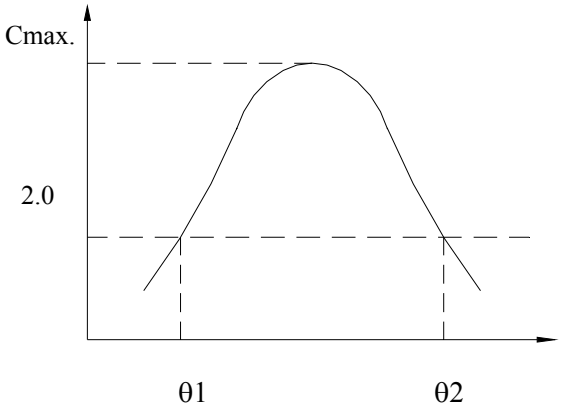
LCD Panel：1/64 Duty，1/9Bias，V_{LCD} =12.4V，Ta = 25℃

Item	Symbol	Conditions	Min.	Typ.	Max.	Reference
View Angle	θ	C≥2.0, ∅ = 0°	0	-	40°-	Notes 1 & 2
Contrast Ratio	C	θ = 5°, ∅ = 0°	5	7	-	Note 3
Response Time(rise)	tr	θ = 5°, ∅ = 0°	-	200ms	-	Note 4
Response Time(fall)	tf	θ = 5°, ∅ = 0°	-	150 ms	-	Note 4

Note 1: Definition of angles θ and ∅



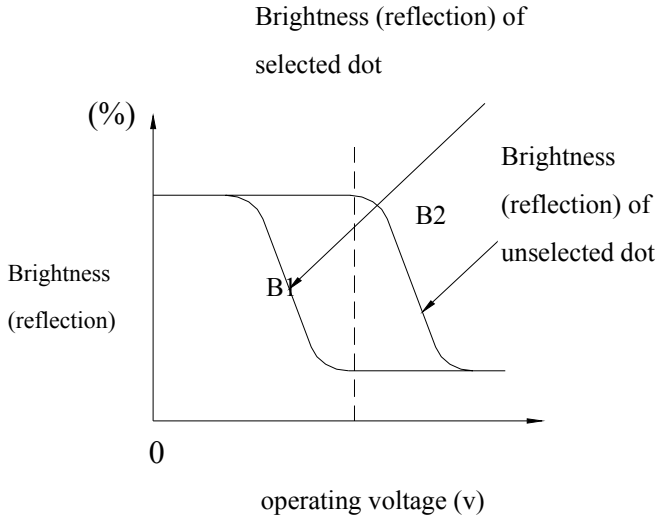
Note 2: Definition of viewing angles θ1 and θ2



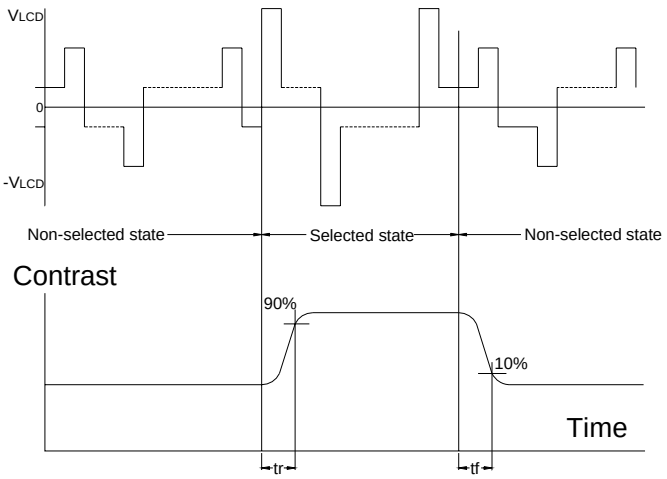
Note : Optimum viewing angle with the naked eye and viewing angle θ at Cmax. Above are not always the same

Note 3: Definition of contrast C

$$C = \frac{\text{Brightness (reflection) of unselected dot (B2)}}{\text{Brightness (reflection) of selected dot (B1)}}$$



Note 4: Definition of response time



Note: Measured with a transmissive LCD panel which is displayed 1 cm^2

V_{LCD} : Operating voltage f_{FRM} : Frame frequency

t_r : Response time (rise) t_f : Response time (fall)

1.6 Backlight Characteristics

LCD Module with LED Backlight

Maximum Ratings

Item	Symbol	Conditions	Min.	Max.	Unit
Forward Current	IF	Ta =25℃	-	975	mA
Reverse Voltage	VR	Ta =25℃	-	8	V
Power Dissipation	PO	Ta =25℃	-	4.48	W

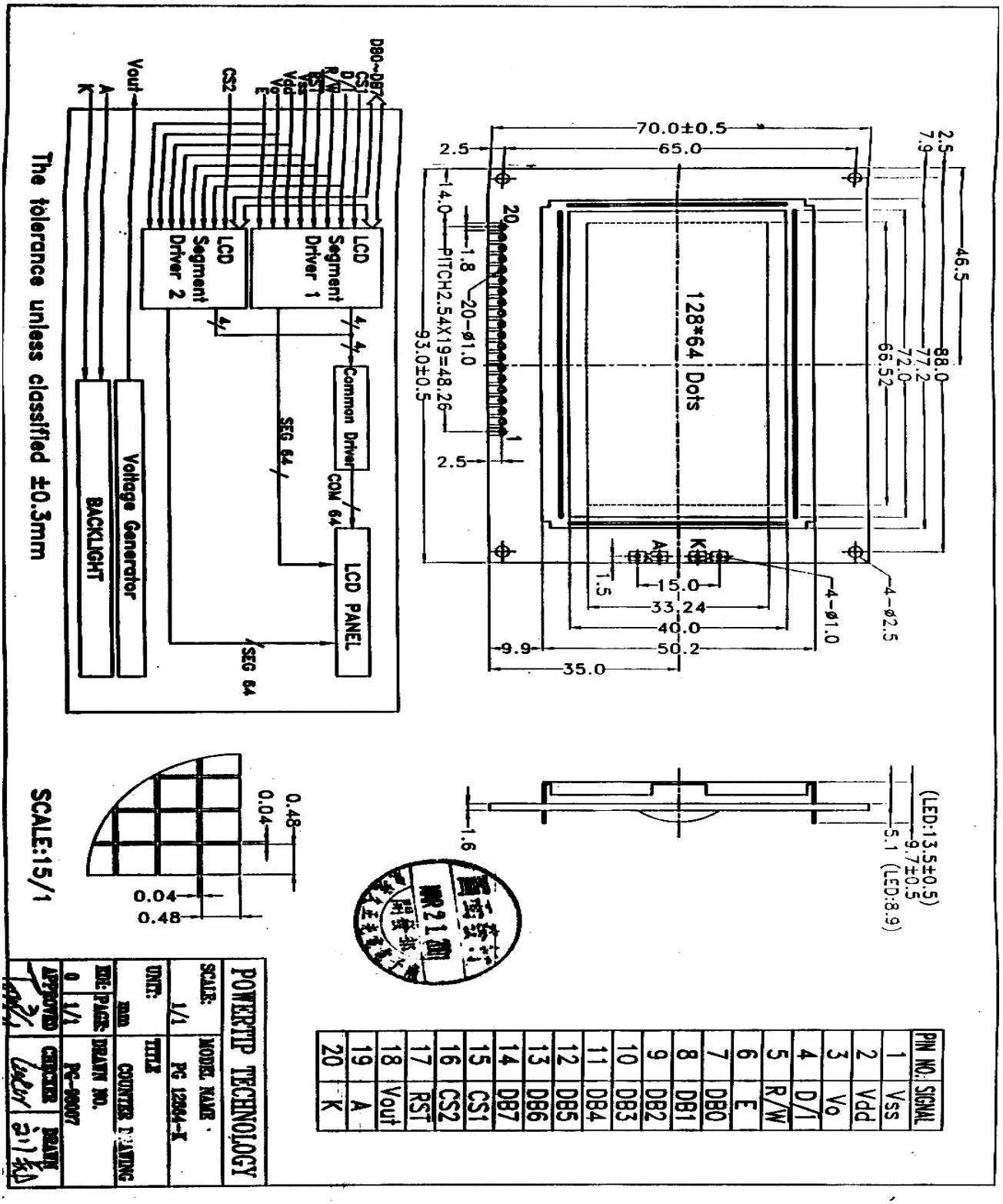
Electrical / Optical Characteristics

Ta =25℃

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF= 390 mA	-	4.2	4.6	V
Reverse Current	IR	VR= 8 V	-	-	0.39	mA
Wavelength	λp	IF= 390 mA	569	-	576	nm
Luminous Intensity (without LCD)	Iv	IF=390 mA	184	230	-	cd/m^2
Color	Yellow-green					

2. MODULE STRUCTURE

2.1 Counter Drawing

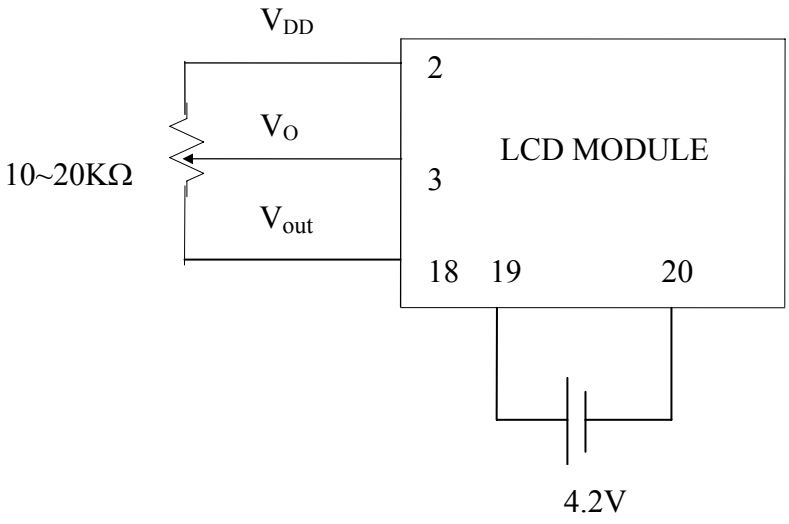


PIN NO.	SIGNAL
1	Vss
2	Vdd
3	Vo
4	D/I
5	R/W
6	E
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	CS1
16	CS2
17	RST
18	Vout
19	A
20	K

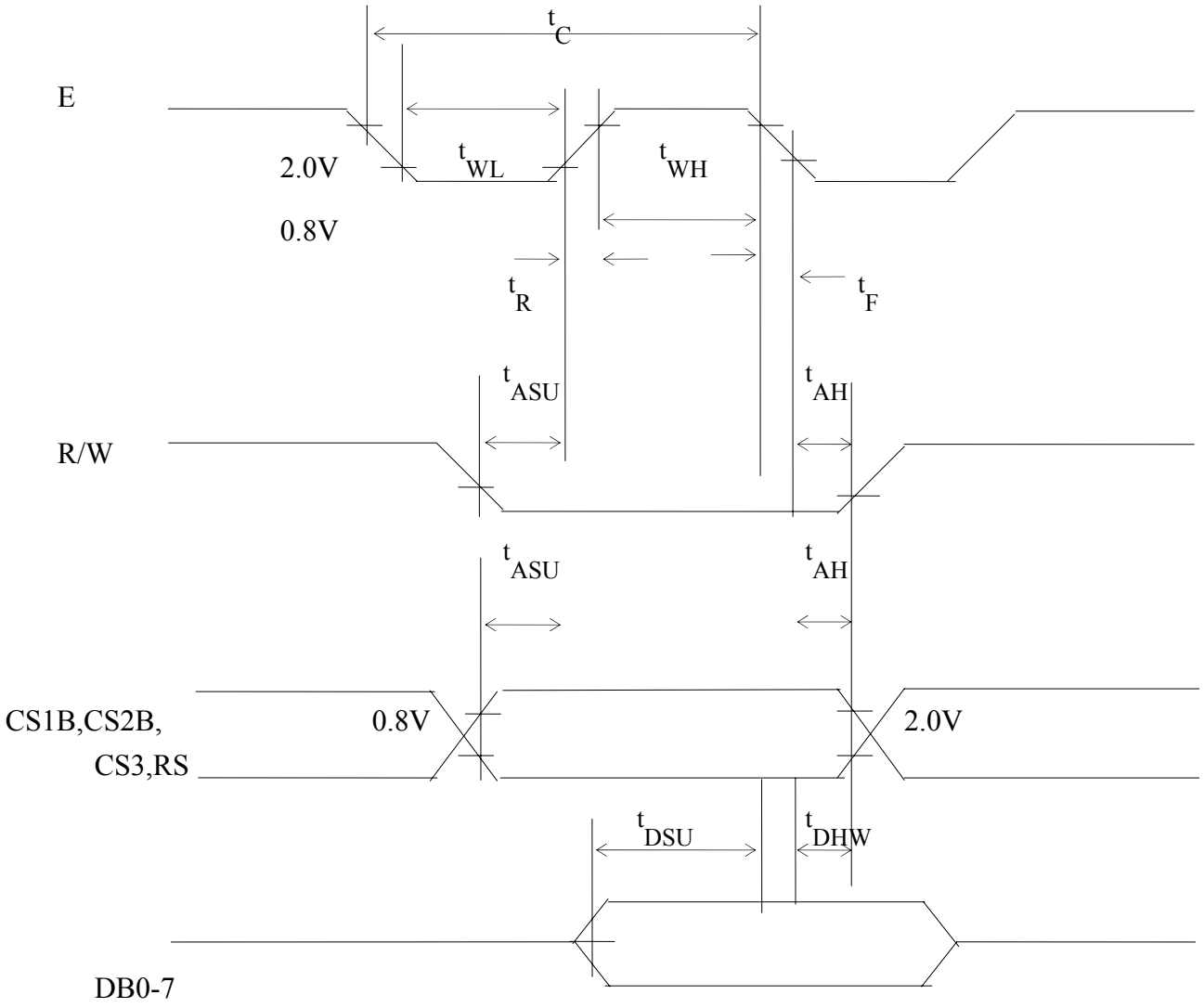
2.2 Interface Pin Description

Pin No.	Symbol	Function
1	VSS	Signal ground (GND)
2	VDD	Power supply for logic (VDD> VSS)
3	Vo	Operating voltage for LCD (variable)
4	D/ $\overline{I}$	Register selection input High =Data register Low =Instruction register (for write) Busy flag address counter (for read)
5	R/ $\overline{W}$	R/ $\overline{W}$ signal input is used to select the read/write mode High =Read mode, Low =Write mode
6	E	Start enable signal to read or write the data
7-14	DB0-DB7	Data bus
15	CS1	Chip enable for D2 (segment 1 to segment 64)
16	CS2	Chip enable for D3 (segment 65 to segment 128)
17	$\overline{RST}$	Reset signal
18	Vout	Negative voltage power supply
19	A	Power supply for LED B/L(+)
20	K	Power supply for LED B/L(-)

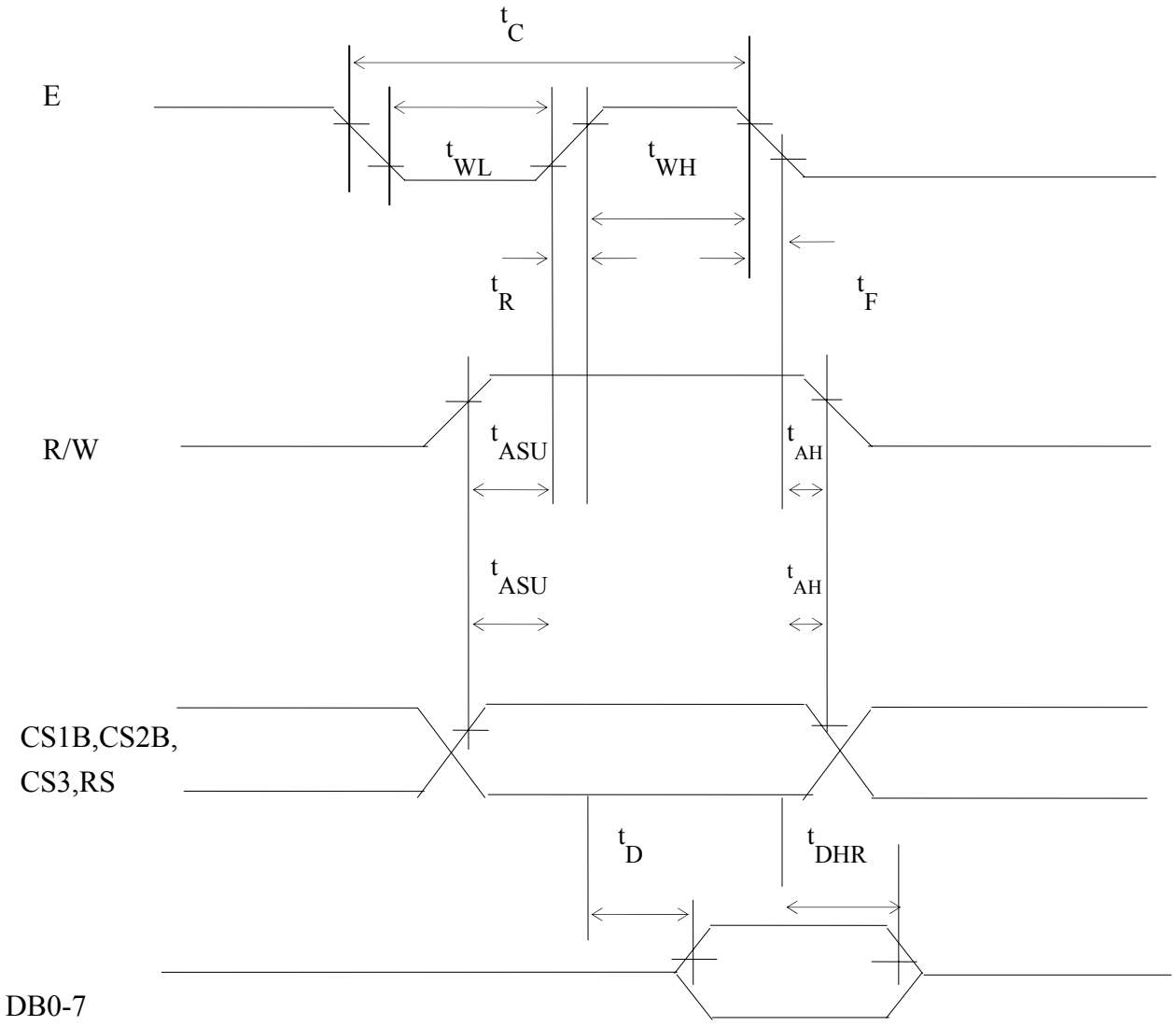
Contrast Adjust



2.3 Timing Characteristics



MPU write timing



MPU read timing

Characteristic	Symbol	Min.	Typ	Max	Unit
E Cycle	t_C	1000	-	-	ns
E High Level Width	t_{WH}	450	-	-	ns
E Low Level Width	t_{WL}	450	-	-	ns
E Rise Time	t_R	-	-	25	ns
E Fall Time	t_F	-	-	25	ns
Address Set-Up time	t_{ASU}	140	-	-	ns
Address Hold Time	t_{AH}	10	-	-	ns
Data Set-Up Time	t_{DSU}	200		-	ns
Data Delay Time	t_D	-	-	320	ns
Data Hold Time (Write)	t_{DHW}	10	-	-	ns
Data Hold Time (Read)	t_{DHR}	20	-	-	ns

2.4 Display command

Instructions	RS	R/W	DB7	DB6	DB5	DB4	DB3	DB2	DB1	DB0	Functions
Display on/off	0	0	0	0	1	1	1	1	1	0/1	Controls the display on or Off. Internal status and display RAM data is not affected. 0: OFF , 1: ON
Set address (Y address)	0	0	0	1	Y address (0~63)						Sets the Y address in the Y address counter.
Set Page (X address)	0	0	1	0	1	1	1	Page (0-7)			Sets the X address at the X register.
Display Start Line (Z address)	0	0	1	1	Display start line (0~63)						Indicates the display data RAM displayed at the top of the screen.
Status Read	0	1	BUSY	0	ON/OFF	RESET	0	0	0	0	Reads status. BUSY 1 : In operation 0 : Ready ON/OFF 1 : Display OFF 0 : Display ON RESET 1 : Reset 0 : Normal
Write Display Data	1	0	Write Data								Writes data (DB0:7) into display data RAM. After writing instruction, Y address is increased by 1 automatically.
Read Display Data	1	1	Read Data								Reads data (DB0:7) from display data RAM to the data bus.

Detailed Explanation

Display On/Off

	RS	R/W	DB7…… .DB0							
Code	0	0	0	0	1	1	1	1	1	D

The display data appears when D is 1 and disappears when D is 0. Though the data is not on the screen with D=0, it remains in the display data RAM. Therefore, you can make it appear by changing D=0

into D=1.

Display Start Line (Z Address)

	RS	R/W	DB7							DB0
Code	0	0	1	1	AC5	AC4	AC3	AC2	AC1	AC0

Z address(AC0-AC5) of the display data RAM is set in the display start line register and displayed at the top of the screen.When the display duty cycle is 1/64 or others(1/32-1/64),the data of total line number of LCD screen, form the line specified by display start line instruction, is displayed.
See figure 1.

Set page (X address)

	RS	R/W	DB7							DB0
Code	0	0	1	0	1	1	1	AC2	AC1	AC0

X address (AC0-AC2) of the display data RAM is set in the X address register.Writing or reading to or from MPU is executed in this specified page until the next page is set. See figure 2.

Set Adress (Y Address)

	RS	R/W	DB7							DB0
Code	0	0	0	1	AC5	AC4	AC3	AC2	AC1	AC0

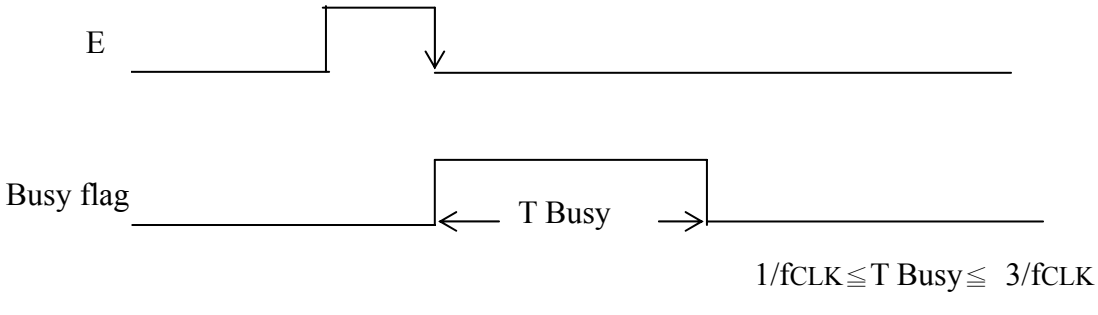
Y address(AC0-AC5) of the display data RAM is set in the Y address Counter. An address is set by instruction and increased by 1 automatically by read or write operations of display data.

Status Read

	RS	R/W	DB7							DB0
Code	0	1	BUSY	0	ON/OFF	REST	0	0	0	0

- Busy

When busy is 1, the Chip is executing internal operation and no instructions are accepted
When busy is 0, the Chip is ready to accept any instructions.



- ON/OFF

When on/off is 1, the display is OFF.

When on/off is 0, the display is ON.

- RESET

When RESET is 1, the system is being initialized.

In this condition, no instructions except status read can be accepted.

When RESET is 0,initializing has finished and the system is in the usual operation condition.

Write Display Data

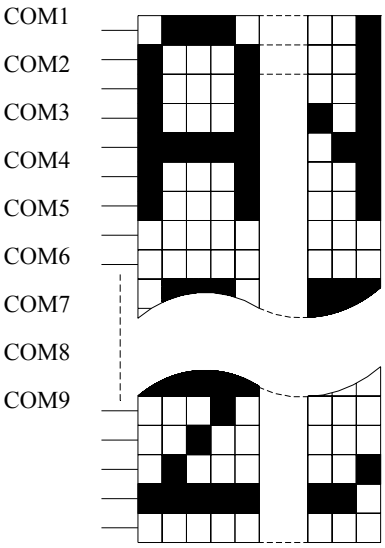
	RS	R/W	DB7							DB0
Code	0	1	D7	D6	D5	D4	D3	D2	D1	D0

Write data(D0-D7) into the display data RAM.After writing instruction, Y address is increased by 1 automatically.

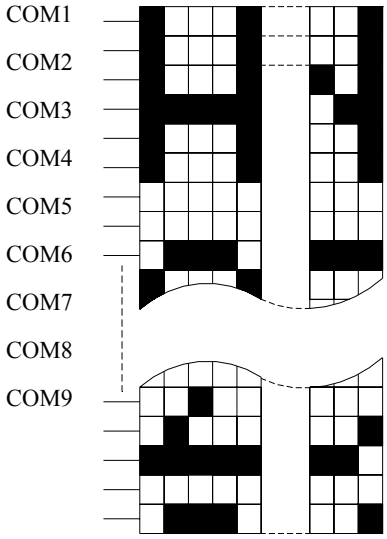
Read Display Data

	R/W	D/I	DB7							DB0
Code	1	1	D7	D6	D5	D4	D3	D2	D1	D0

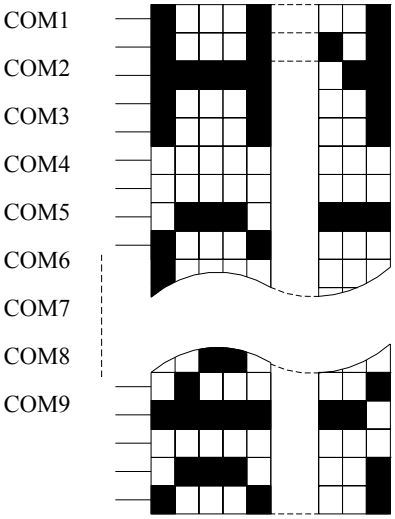
Reads data(D0-D7) from the display data RAM. After reading instruction, Y address is increased by 1 automatically



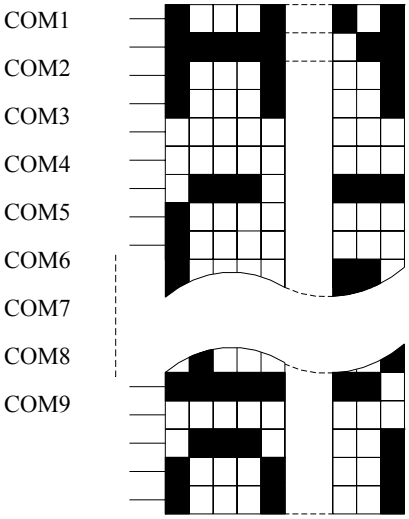
Start line = 0



Start line = 1



Start line = 2



Start line = 3

Figure 1 Relation between Start Line and Display

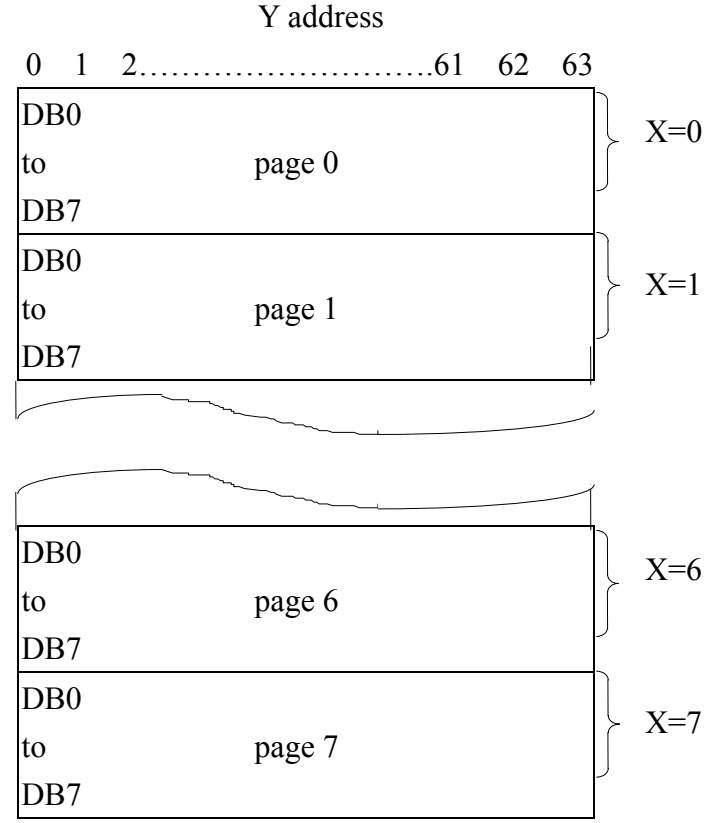


Figure 2 Address Configuration of Display Data RAM

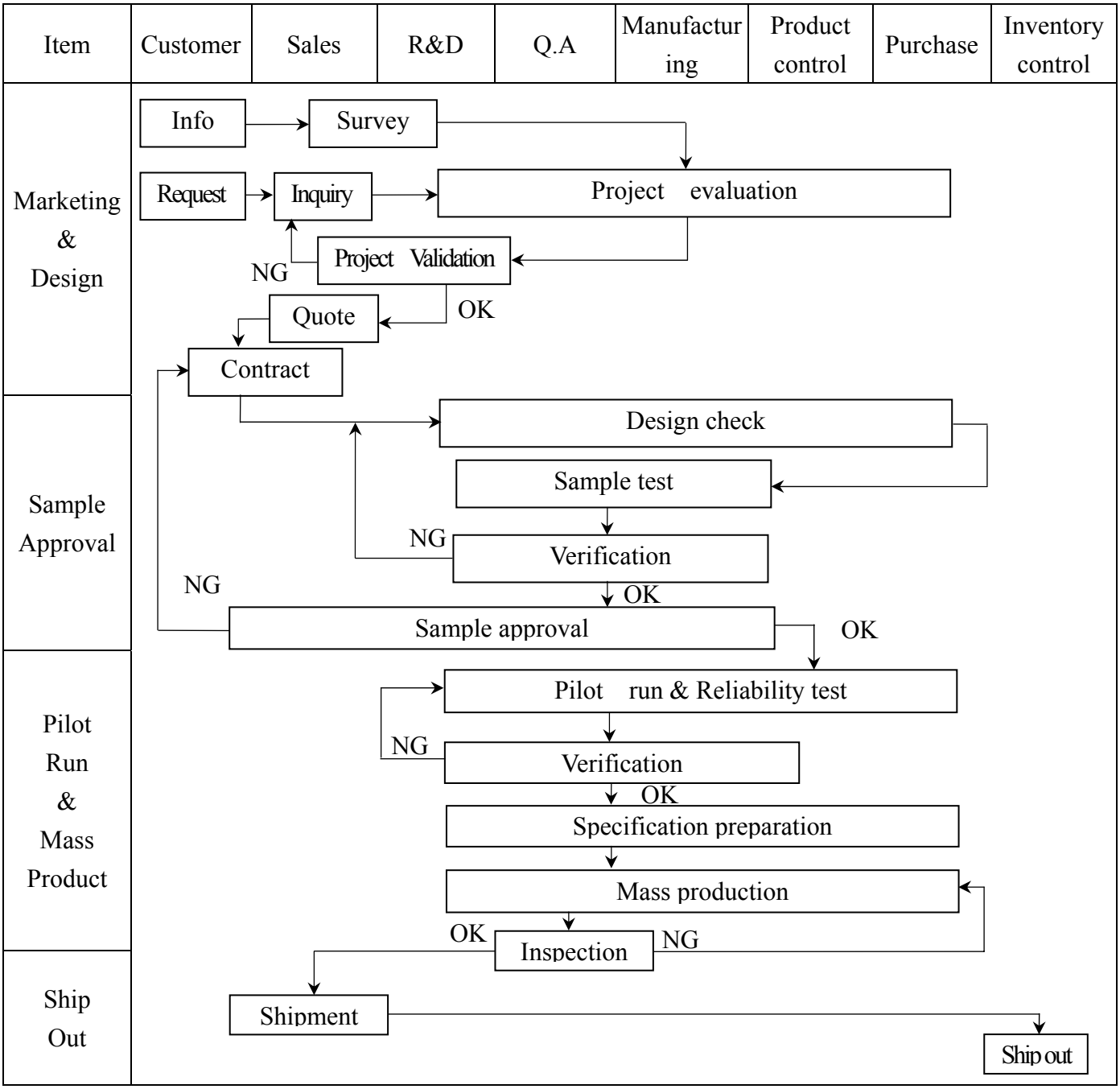
Note: “128*64” consist of 2 “64*64”

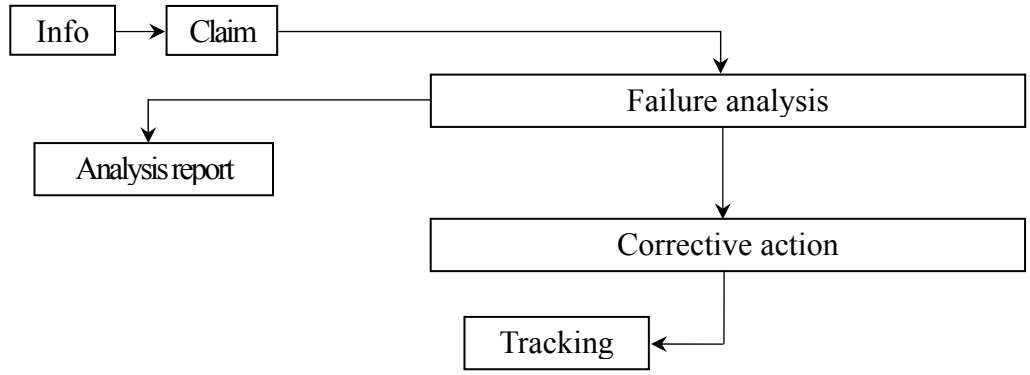
CS1⇒ Chip enable for left 64*64 (segment1 to segment 64)

CS2⇒ Chip enable for right 64*64 (segment 65 to segment 128)

3. QUALITY ASSURANCE SYSTEM

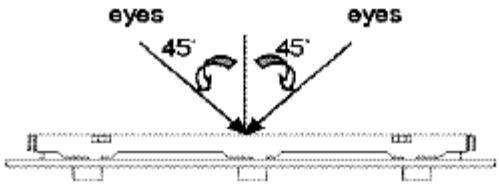
3.1 Quality Assurance Flow Chart

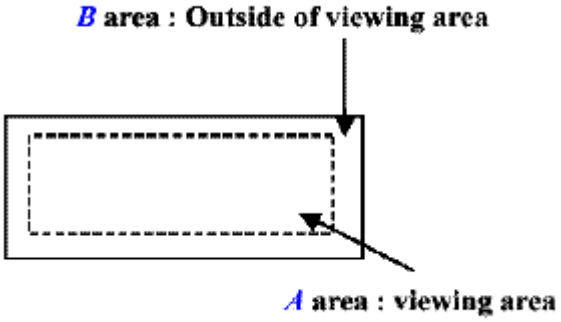


Item	Customer	Sales	R&D	Q.A	Manufactu ring	Product control	Purchase	Inventory control
Sales Service								
Q.A Activity	1. ISO 9001 Maintenance Activities 3. Equipment calibration 5. Standardization Management			2. Process improvement proposal 4. Education And Training Activities				

3.2 Inspection Specification

◆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 40W×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. (Fig. 1)
(3). Definition of area . (Fig. 2)

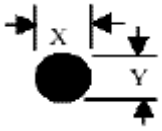


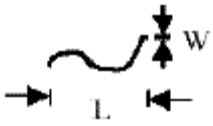


◆ Specification:

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、dot 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
05	Black or white dot、scratch、contamination Round type	5.1 Round type: 5.1.1 display only : • White and black spots on display ≦ 0.25mm, no more than Four white or black spots present. • Densely spaced : NO more than two spots or lines within 3mm	Minor

◆Specification :

<table>
<tr><th>NO</th><th>Item</th><th>Criterion</th><th>level</th></tr>
<tr><td>05</td><td>Black or white dot、scratch、contamination
Round type
 

Φ=(x+y)/2
 
</td><td>5.1.2 Nom-display :
<table><tr><td>Dimension (diameter : Φ)</td><td>Acceptance(Q’ty)</td></tr><tr><td>Φ ≦0.10mm</td><td>Accept no dense</td></tr><tr><td>0.10mm＜ Φ ≦0.20mm</td><td>3</td></tr><tr><td>0.20mm＜ Φ ≦0.25mm</td><td>2</td></tr><tr><td>Total</td><td>4</td></tr></table>5.1.3 Line type:
<table><tr><td colspan="2">Dimension (diameter : Φ)</td><td colspan="2">Acceptance (Q’ty)</td></tr><tr><td>Length</td><td>width</td><td>A area</td><td>B area</td></tr><tr><td>---</td><td>w≦0.03mm</td><td>Accept no dense</td><td>Don’t count</td></tr><tr><td>L≦3.0mm</td><td>0.03mm＜ Φ ≦0.05mm</td><td rowspan="2">4</td><td>Don’t count</td></tr><tr><td>L≦2.5mm</td><td>0.05mm＜ Φ ≦0.075mm</td><td>Don’t count</td></tr><tr><td>---</td><td>w＞0.075mm</td><td colspan="2">As round type</td></tr></table></td><td>Minor</td></tr>
<tr><td>06</td><td>Polarizer Bubble</td><td><table><tr><td rowspan="2">Dimension (diameter : Φ)</td><td colspan="2">Acceptance(Q’ty)</td></tr><tr><td>A area</td><td>B area</td></tr><tr><td>Φ ≦0.20mm</td><td>Accept no dense</td><td>Don’t count</td></tr><tr><td>0.20mm＜ Φ ≦0.50mm</td><td>3</td><td>Don’t count</td></tr><tr><td>0.50mm＜ Φ ≦1.00mm</td><td>2</td><td>Don’t count</td></tr><tr><td>Φ ＞1.00mm</td><td>0</td><td>Don’t count</td></tr><tr><td>Total quantity</td><td>4</td><td>Don’t count</td></tr></table></td><td>Minor</td></tr>
<tr><td>07</td><td>The crack of glass</td><td>● Glass Crack:
7.1 Crack on the circuit of electrode terminal :
 

<table><tr><td></td><td>X</td><td>Y</td><td>Z</td></tr><tr><td>Front</td><td>X≦1/5 a</td><td>Y≦ 1/2 D</td><td>Z≦ t</td></tr><tr><td>Back</td><td colspan="3">Neglect</td></tr></table></td><td>Minor</td></tr>
</table>

◆Specification :

<table>
<tr><th>NO</th><th>Item</th><th>Criterion</th><th>Level</th></tr>
<tr><td rowspan="2">07</td><td>The crack of glass

X: The length of Crack

Y: The width of crack

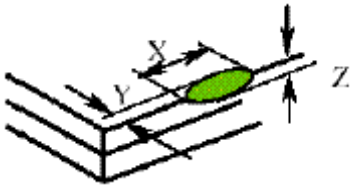
Z: The thickness of crack

D: terminal length

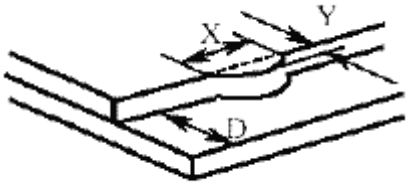
T: The thickness of glass

A : The length of glass</td><td>● Glass Crack:

7.2 General glass crack and corner edge:

7.2.1
 

<table><tr><th>X</th><th>Y</th><th>Z</th></tr><tr><td>Neglect</td><td>Out A area</td><td>Neglect</td></tr></table>
7.2.2
 

<table><tr><th>X</th><th>Y</th><th>Z</th></tr><tr><td>Neglect</td><td>Out A area</td><td>Neglect</td></tr></table></td><td>Minor</td></tr>
<tr><td>7.3 Glass remain:
 

<table><tr><th>X</th><th>Y</th></tr><tr><td>Neglect</td><td>≦ 1/3 d</td></tr></table></td><td>Minor</td></tr>
</table>

◆Specification :

<table>
<tr><th>NO</th><th>Item</th><th>Criterion</th><th>Level</th></tr>
<tr><td>07</td><td>The crack of glass

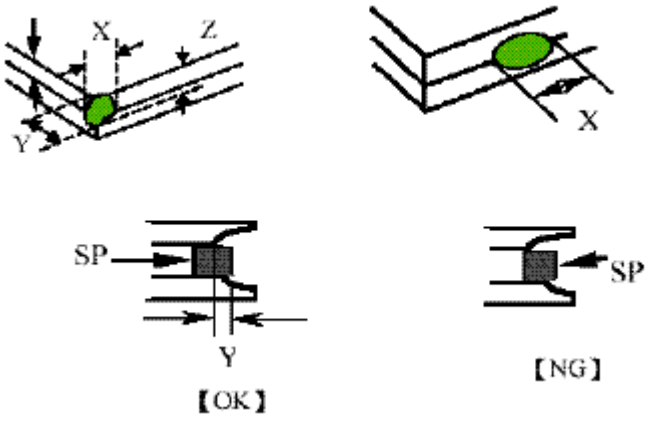
X: The length of Crack

Y: The width of crack

Z: The thickness of crack

D: terminal length

T: The thickness of glass

A : The length of glass</td><td>7.4 Corner crack and medial crack:
 

<table>
<tr><th>X</th><th>Y</th><th>Z</th></tr>
<tr><td>≦1/5a</td><td>Crack can’t enter viewing area</td><td>≦1/2t</td></tr>
<tr><td>≦1/5a</td><td>Crack can’t exceed the half of width of SP width of SP</td><td>1/2t<Z≦2t</td></tr>
</table></td><td>Minor</td></tr>
<tr><td>08</td><td>Backlight elements</td><td>8.1 Backlight can’t work normally.</td><td>Major</td></tr>
<tr><td></td><td></td><td>8.2 Backlight doesn’t light or color is wrong.</td><td>Major</td></tr>
<tr><td></td><td></td><td>8.3 Illumination source flickers when lit.</td><td>Major</td></tr>
<tr><td>09</td><td>General appearance</td><td>9.1 pin type must match type in specification sheet</td><td>Major</td></tr>
<tr><td></td><td></td><td>9.2 No short circuits in components on PCB or FPC</td><td>Major</td></tr>
<tr><td></td><td></td><td>9.3Product packaging must the same as specified on packaging specification sheet.</td><td>Major</td></tr>
<tr><td></td><td></td><td>9.4 The folding and peeled off in polarizer are not acceptable</td><td>Major</td></tr>
<tr><td></td><td></td><td>9.5 The PCB or FPC between B/L assembled distance (PCB or FPC) is ≦1.5mm</td><td>Major</td></tr>
</table>

4. RELIABILITY TEST

4.1 Reliability Test Condition

<table>
<tr><th>NO.</th><th>TEST ITEM</th><th colspan="2">TEST CONDITION</th></tr>
<tr><td>1</td><td>High Temperature Storage Test</td><td colspan="2">Keep in 80 ±2℃ 96 hrs
Surrounding temperature, then storage at normal condition 4hrs</td></tr>
<tr><td>2</td><td>Low Temperature Storage Test</td><td colspan="2">Keep in -30 ±2℃ 96 hrs
Surrounding temperature, then storage at normal condition 4hrs</td></tr>
<tr><td>3</td><td>High Humidity Storage</td><td colspan="2">Keep in +60℃/90%RH duration for 96 hrs
Surrounding temperature, then storage at normal condition 4hrs
(Excluding the polarizer)Or
Keep in +40℃/90%RH duration for 96 hrs
Surrounding temperature, then storage at normal condition 4hrs</td></tr>
<tr><td>4</td><td>Vibration Test</td><td colspan="2">1. Sine wave 10～55HZ frequency (1 min)
2. The amplitude of vibration :1.5 mm
3. Each direction (XYZ) duration for 2 Hrs</td></tr>
<tr><td rowspan="2">5</td><td rowspan="2">ESD Test</td><td>Air Discharge:
Apply 6 KV with 5 times
Discharge foreach polarity +/-</td><td>Contact Discharge:
Apply 250V with 5 times
discharge foreach polarity +/-</td></tr>
<tr><td colspan="2">1. Temperature ambinace: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 s)
(Tolerance lf the output voltage indication: ±5%)</td></tr>
<tr><td>6</td><td>Temperature Cycling Test</td><td colspan="2">-20℃ → 25℃ → 70℃ → 25℃
(30mins) (5mins) (30mins) (5mins)
10 Cycle
Surrounding temperature, then storage at normal condition 4hrs</td></tr>
<tr><td>7</td><td>Vibration Test (Packaged)</td><td colspan="2">1. Sine wave 10～55HZ frequency (1 min)
2. The amplitude of vibration :1.5 mm
3. Each direction (XYZ) duration for 2 Hrs</td></tr>
<tr><td>8</td><td>Drop Test (Packaged)</td><td colspan="2"><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>Drop direction :※3 comer /1 edges /6 sides etch 1times</td></tr>
</table>

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.

6. PACKING Specification.

LCM Model	PG12864LRU-KCN-H-Q
Drawing NO.	DPK-06786

LCM包裝規格書
LCM Packaging Specifications

Approve	Check	Contact
DATE	初版	版次Ver
06'11'15	06'11'15	0

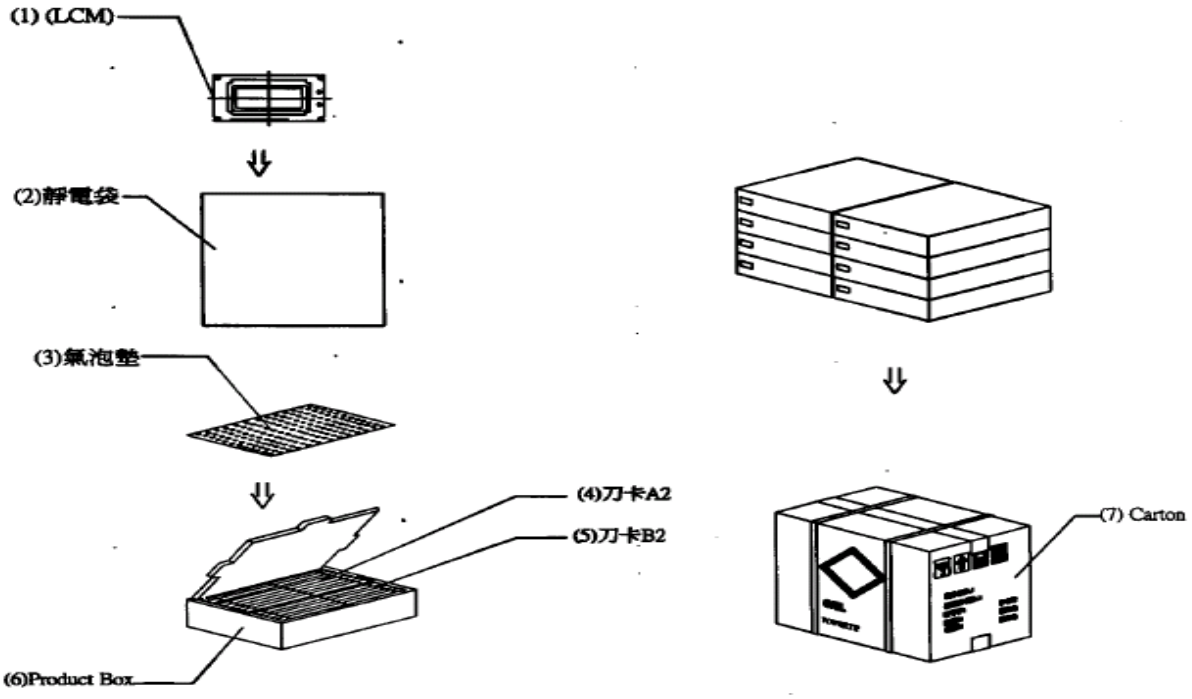
1.包裝材料規格表 (Packaging Material) : (per carton)

No.	Item	Model	Dimensions (mm)	Quantity
1	成品(1) (LCM)	PG12864LRU-KCN-H-Q	(93*70*14)	224
2	靜電袋 (2)BAG	BAG150100ARABA	150*100*0.05	224
3	氣泡墊(3)BAG	BAG290240BRBBA	240*290*5	16
4	刀卡A2(4)BX	BX29500072BZBA	295*72*3	104
5	刀卡B2(5)BX	BX24500072BZBA	245*72*3	24
6	C2內盒(6)Product Box	BX31025580AABA	310*255*86	8
7	外紙箱(7)Carton	BX52532536CCBA	525 * 325 *360	1
8				
9				

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

(1)LCM quantity per box : no per box 14 x no of box 2 = 28

(2)Total LCM quantity in carton : quantity per box 28 x no of boxes 8 = 224



特 .記 事 項 (REMARK)

1. Label Specifications :

MODEL:
LOT NO:
QUANTITY:
CHECK:

每啤盒裝28PCS

POWERTIP TECH. CORP.