SPECIFICATIONS

CUSTOMER	:	PTC
SAMPLE CODE	:	SC1604LRS-AWA-B-Q
MASS PRODUCTION CODE	:	PC1604LRS-AWA-B-Q
SAMPLE VERSION	:	01
SPECIFICATIONS EDITION	:	001
DRAWING NO. (Ver.)	:	JLMD- PC1604LRS-AWA-B-Q_001
PACKAGING NO. (Ver.)	:	JPKG - PC1604LRS-AWA-B-Q_001

Customer Approved

Date:

POWERTIP
2013.10.11
JS RD APPROVED

Approved	Checked	Designer
閆偉	劉進	譚超敏

☐ Preliminary specification for design input

■ Specification for sample approval

POWERTIP TECH. CORP.

RECORDS OF REVISION

Date (mm / dd / yyyy)	Ver.	Edi.	Description	Page	Design by
04/05/2004	0	-	New Sample	-	
10/09/2013	01	001	Change The Format	-	譚超敏

Total：29

Contents

1. SPECIFICATIONS

1.1 Features

Item	Standard Value
Display Type	16*04 Characters
LCD Type	STN Gray Positive Transflective Normal Temp.
Driver Condition	LCD Module：1/16 Duty，1/4 Bias
Viewing Direction	6 O'clock
Backlight	YG LED B/L
Weight	60.0g
Interface	-
Other(controller / driver IC)	ST7066U
ROHS	THIS PRODUCT CONFORMS THE ROHS OF PTC Detail information please refer web site : http://www.powertip.com.tw/news.php?area_id_view=1085560481/

1.2 Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	87.0(L) *60.0(w) * 14.0(H)(Max)	mm
Viewing Area	62.0(L) * 25.6(w)	mm
Active Area	56.2(L) * 20.8 (w)	mm
Dot Size	0.55(L) * 0.55(w)	mm
Dot Pitch	0.60 (L) * 0.60(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}-10.0	V_{DD}+0.3	V
Input Voltage	V_{IN}	-	-0.3	V_{DD}+0.3	V
Operating Temperature	T_{OP}	Excluded B/L	0	50	℃
Storage Temperature	T_{ST}	Excluded B/L	-20	70	℃
Storage Humidity	H_D	Ta＜40 ℃	-	90	%RH

1.4 DC Electrical Characteristics

V_{dd} =5.0 V ± 10% ， 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}	-	0.7V_{DD}	-	V_{DD}	V
"L" Input Voltage	V_{IL}	-	-0.3	-	0.6	V
"H" Output Voltage	V_{OH}	I_{OH}=-0.1mA	3.9	-	V_{DD}	V
"L" Output Voltage	V_{OL}	I_{OL}=0.1mA	-	-	0.4	V
Supply Current	I_{dd}	V_{DD}=5.0V	-	1.5	3.0	mA
LCM Driver Voltage	V_{OP}*1	0℃	-	-	-	V
		25℃	3.9	4.0	4.2	
		50℃	-	-	-	

NOTE: *1 The VOP test point is VDD-VO.

1.5 Optical Characteristics

LCD Panel：1/16Duty，1/5Bias，V_{op} =4.7V，Ta =25℃

Item		Symbol	Conditions	Min.	Typ.	Max.	Unit	Reference
Response Time	Rise	tr	-	-	150	-	ms	Note2
	Fall	tf		-	330	-		
Viewing angle range	Rear	θ +	C>2.0	45	-	-	Deg.	Note1
	Front	θ -		45	-	-		
	Left	θ L		30	-	-		
	Right	θ R		30	-	-		
Contrast Ratio		C	-	5	7	-	-	Note3

Note 1.

Optical characteristics-2

Viewing angle

Rear (12H)
$\varphi = 90°$

Top ($\theta = 0°$)

θ L

θ R

$\theta +$

Left (9H)
$\varphi = 180°$

$\theta -$

Right (3H)
$\varphi = 0°$

Front (6H)
$\varphi = 270°$
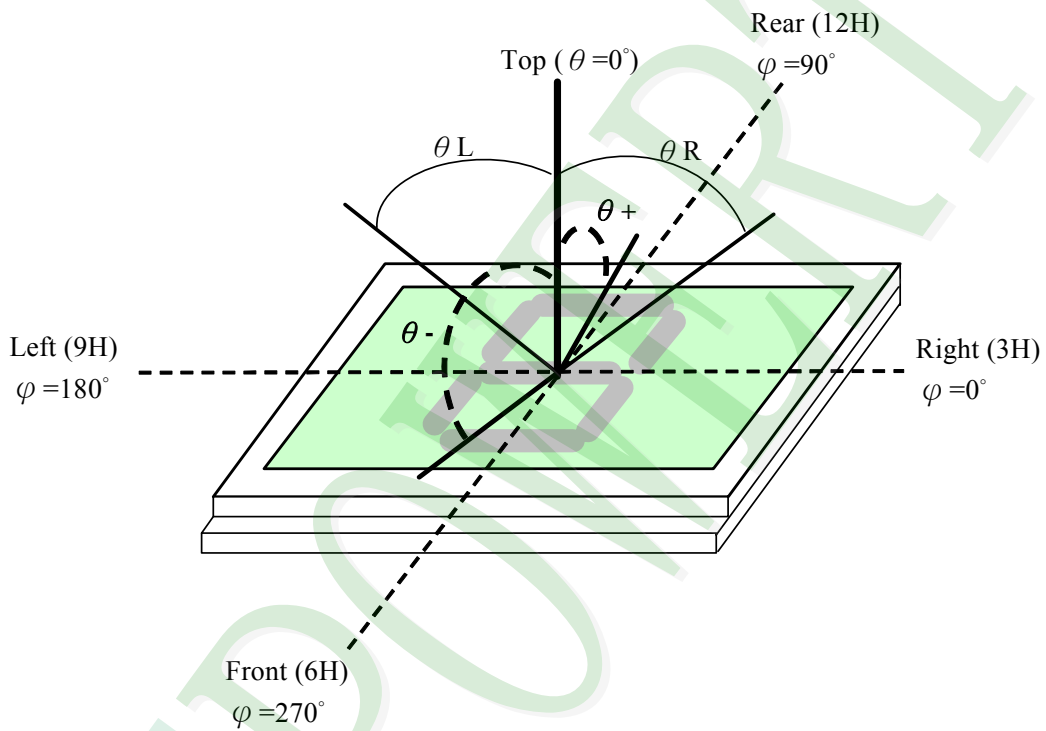
Viewing angle

Note 2.

Optical characteristics-3
 Fig.2 Definition of response time

Positive Type

No selected waveform → ← Selected waveform → ← No selected waveform

Transmittance

100%　　90%　　　　　　　10%

Tr　　　　Tf

Negative Type

No selected waveform → ← Selected waveform → ← No selected

Transmittance

100%　　90%　　　　　　　10%

Tr　　　　Tf
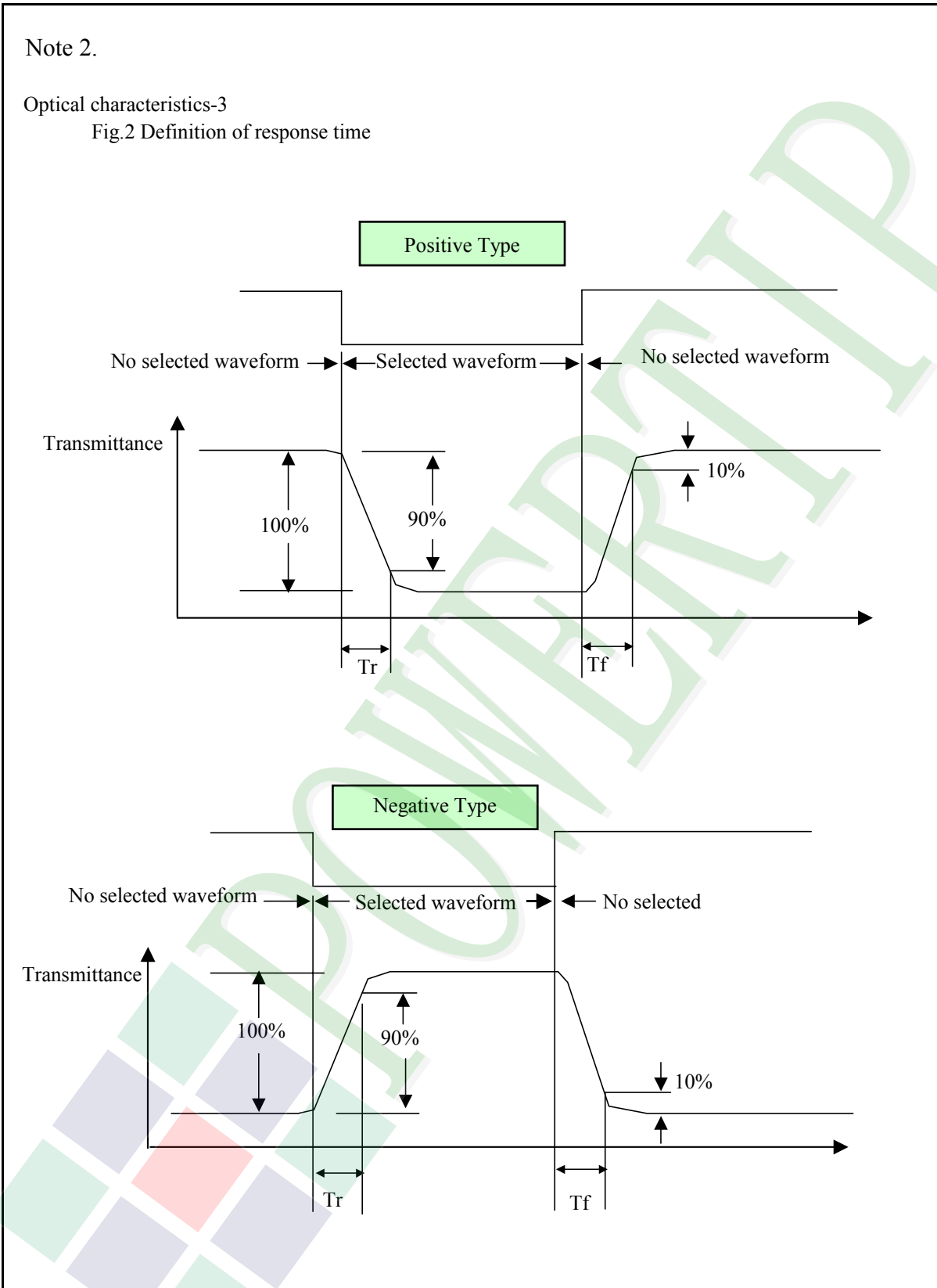
Electrical characteristics-2

　　　※2 Drive waveform

　　Vop: Drive voltage　　　fF: Frame frequency

　　1/B: Bias　　　　　　　fD: Drive frequency

　　N: Duty

(1) Selected waveform
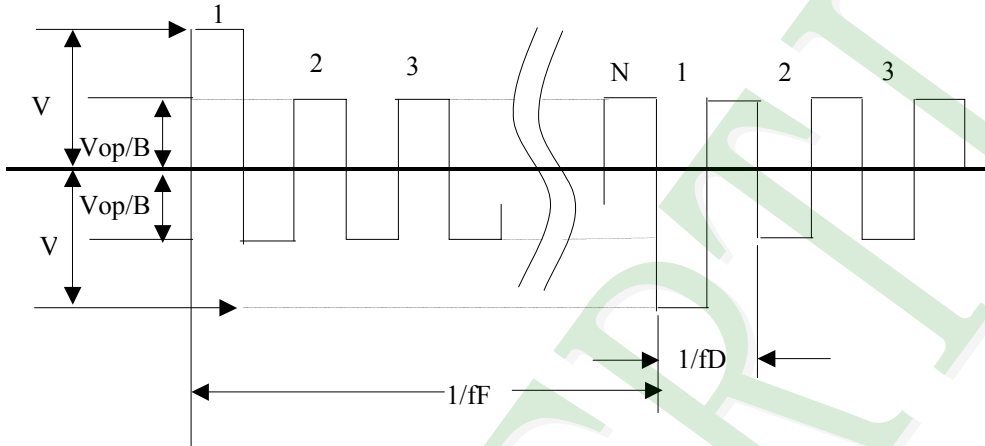
(2) Non- Selected wave form
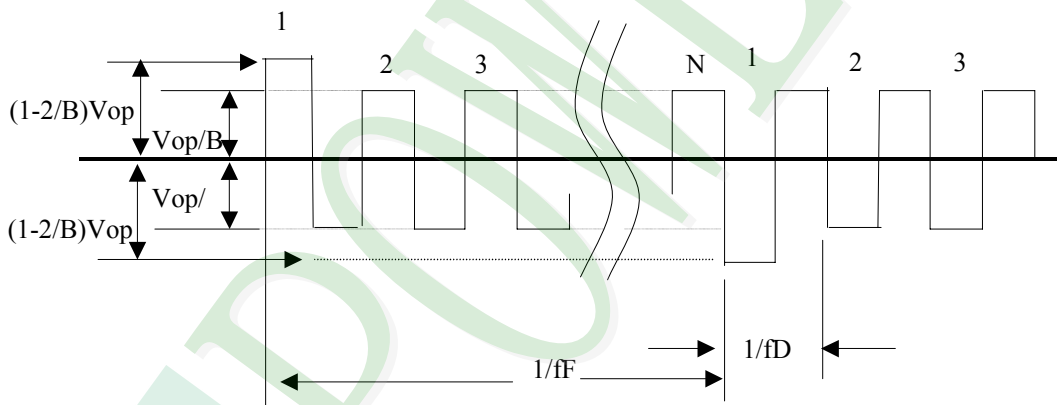
Note:

Frame frequency is defined as follows: Common side supply

voltage peak - to - peak /2 = 1 period

Note 3. : Definition of Vth

Transmittanc

100

73%

50%

Selected waveform

No selected waveform

Vth1   Vth2   Drive

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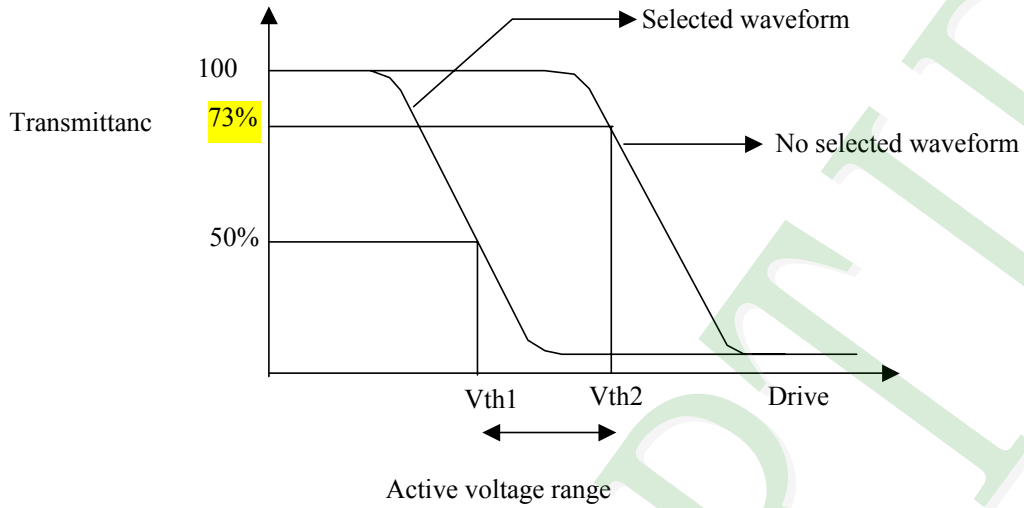
	Vth1	Vth2
View direction	10°	40°
Drive waveform	(Selected waveform)	(No selected waveform)
Transmittance	50%	73%

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

Outline of Electro-Optical Characteristics Measuring System

θ

Photo Detector

Human

Active

ϕ

Temperature Control Chamber

LCD Panel

Transmissive

Measuring System: Autronic DMS-803
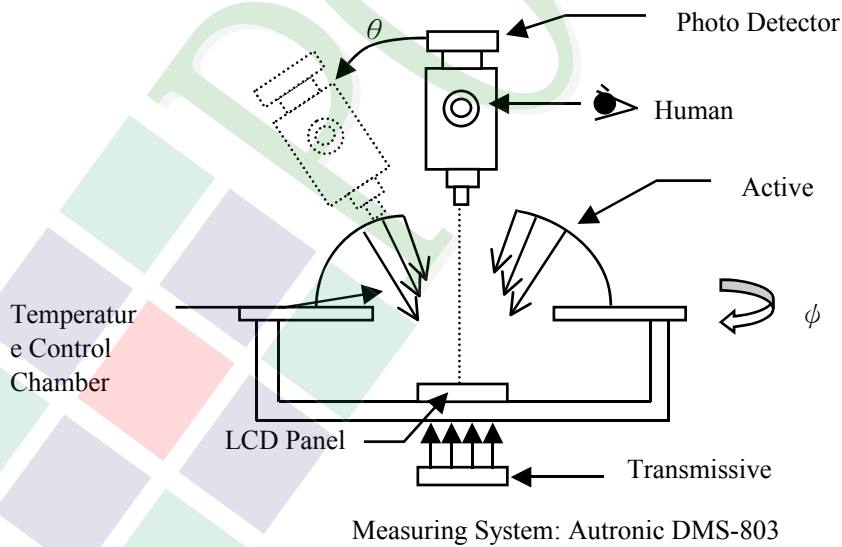
1.6 Backlight Characteristics

Maximum Ratings

Item	Symbol	Conditions	Min.	Max.	Unit
Forward Current	IF	Ta =25℃	-	550	mA
Reverse Voltage	VR	Ta =25℃	-	8	V
Power Dissipation	PD	Ta =25℃	-	2.5	W
Operating temperature	Top	-	-20	70	℃
Storage temperature	Tst	-	-40	80	℃
Solder Temp.for 3 Second	-	-	-	260	℃

Electrical / Optical Characteristics

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF=220mA	-	4.2	4.6	V
Wavelength	λp	IF=220mA	571	-	576	nm
Reverse Current	IR	VR=8V	-	-	0.2	mA
Luminous Intensity (without LCD)	IV	IF=220mA	120	150	-	cd/m^2
Color			Yellow-green			

Internal Circuit Diagram:
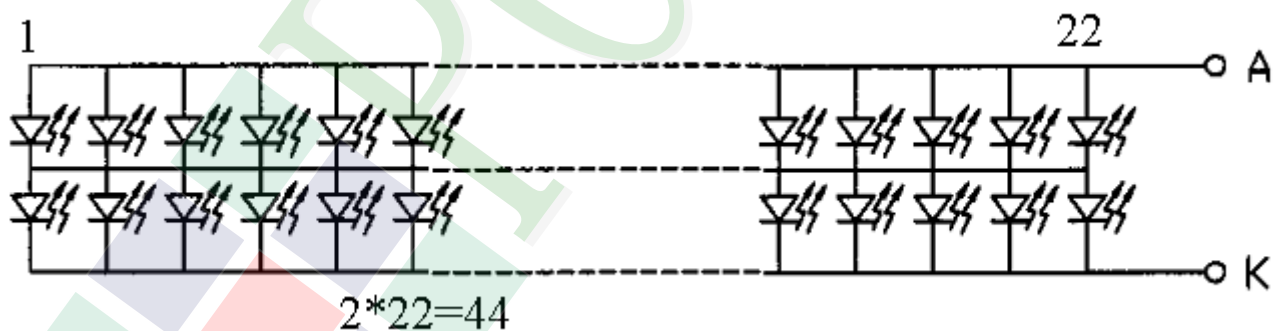
2. MODULE STRUCTURE

2.1 Counter Drawing

2.1.1 LCM Mechanical Diagram

* See Appendix

2.1.2 Block Diagram
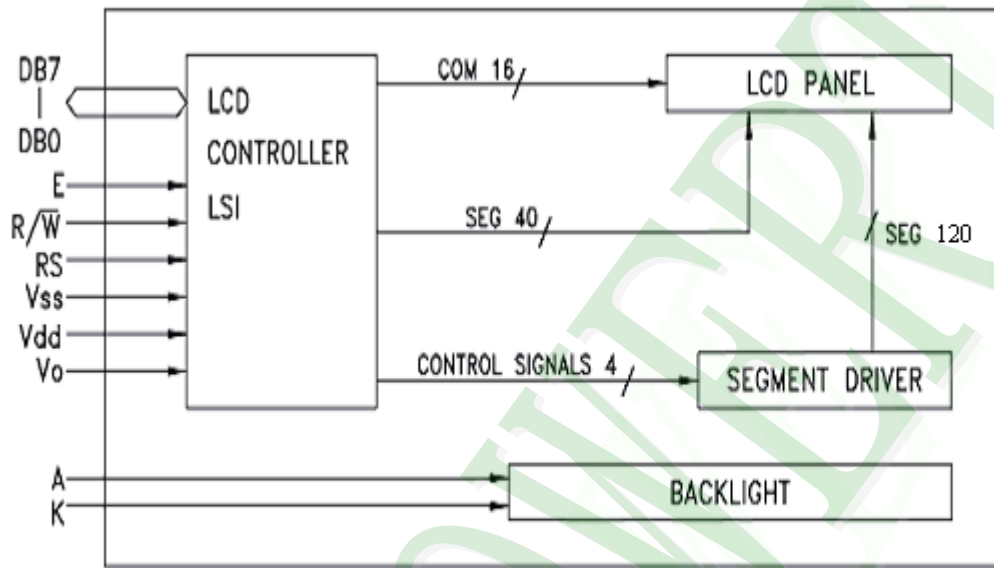
2.2 Interface Pin Description

Pin No.	Symbol	Signal Description
1	VSS	Power Supply ($V_{SS}=0$)
2	VDD	Power Supply ($V_{DD}>V_{SS}$)
3	VO	Operating voltage for LCD (variable)
4	RS	Register Selection input High = Data register Low = Instruction register (for write) Busy flag address counter (for read)
5	R/$\overline{W}$	Read/Write 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
7~10	DB0 ~ DB3	Four low order bi-directional three-state data bus lines. Used for data transfer between the MPU and the LCD module. These four are not used during 4-bit operation.
11~14	DB4 ~ DB7	Four high order bi-directional three-state data bus lines. Used for data transfer between the MPU and the LCD module. DB7 can be used as a busy flag.
15	A	Power supply for LED B / L (+)
16	K	Power supply for LED B / L (-)

Contrast Adjust
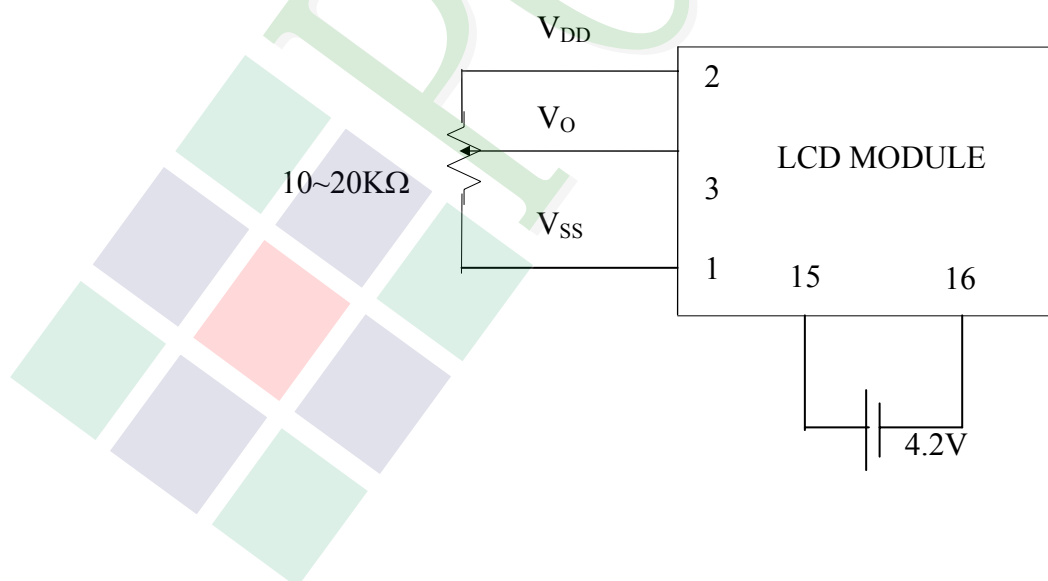
2.3 Timing Characteristics

- Writing data from MPU to ST7066U
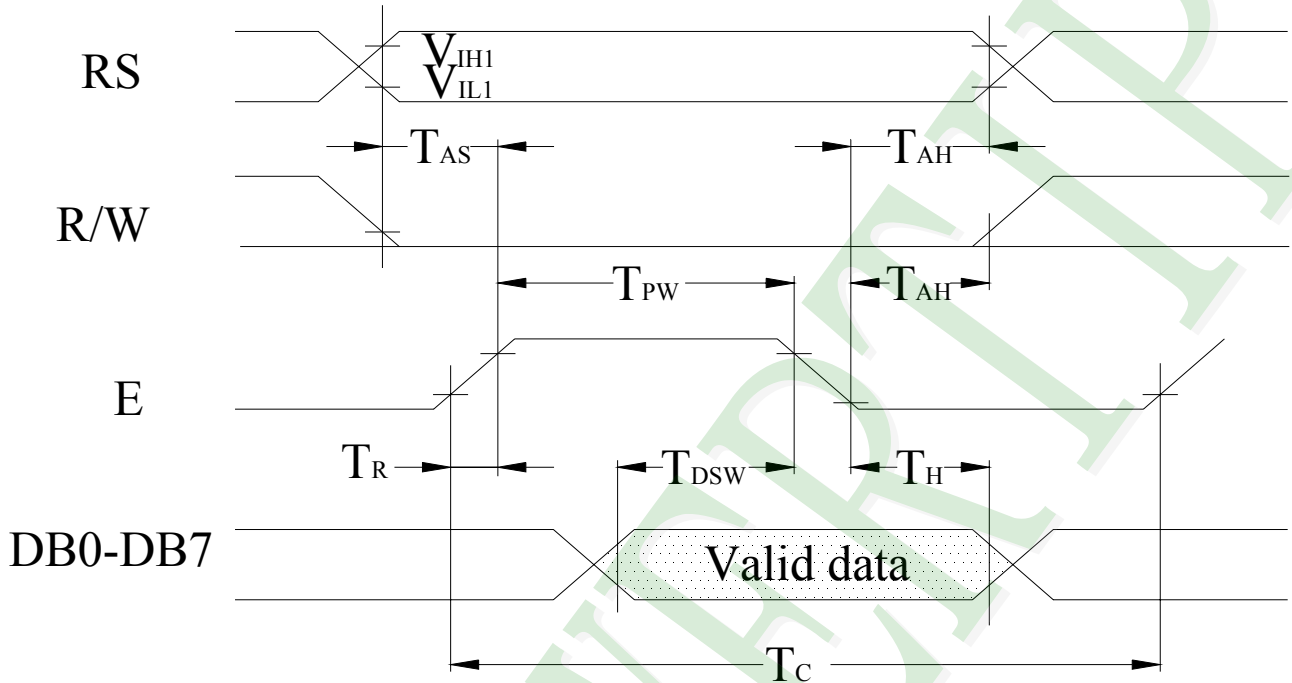
- Reading data from ST7066U to MPU
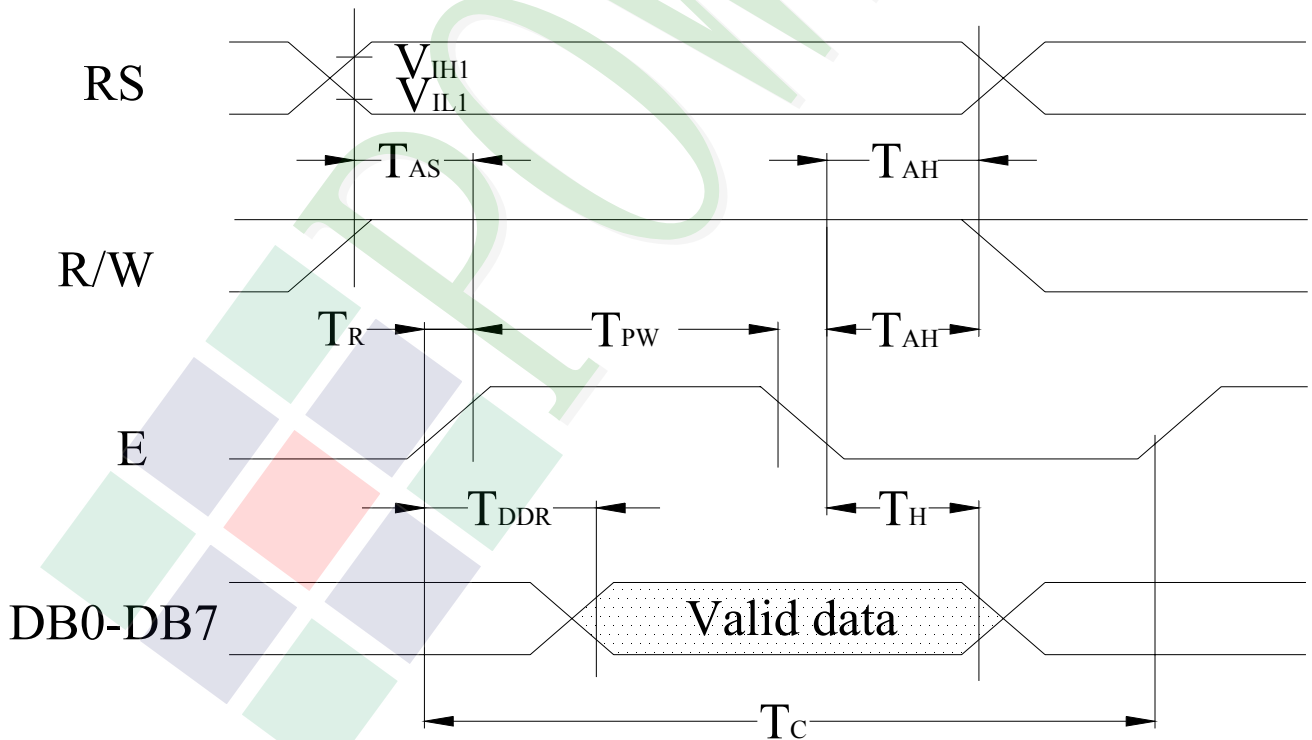
- Write Mode (Writing data from MPU to ST7066U)

(V$_{DD}$ = +5V,Ta=25°C)

Symbol	Characteristics	Test Condition	Min.	Typ.	Max.	Unit
T$_C$	Enable Cycle Time	Pin E	1200	-	-	ns
T$_{PW}$	Enable Pulse Width	Pin E	140	-	-	ns
T$_R$, T$_F$	Enable Rise / Fall Time	Pin E	-	-	25	ns
T$_{AS}$	Address Setup Time	Pins: RS , RW,E	0	-	-	ns
T$_{AH}$	Address Hold Time	Pins :RS,RW,E	10	-	-	ns
T$_{DSW}$	Data Setup Time	Pins:DB0~DB7	40	-	-	ns
T$_H$	Data Hold Time	Pins:DB0~DB7	10	-	-	ns

- Read Mode (Reading data from ST7066U to MPU)

(V$_{DD}$ = +5V,Ta=25°C)

Symbol	Characteristics	Test Condition	Min.	Typ.	Max.	Unit
T$_C$	Enable Cycle Time	Pin E	1200	-	-	ns
T$_{PW}$	Enable Pulse Width	Pin E	140	-	-	ns
T$_R$, T$_F$	Enable Rise / Fall Time	Pin E	-	-	25	ns
T$_{AS}$	Address Setup Time	Pins: RS , RW,E	0	-	-	ns
T$_{AH}$	Address Hold Time	Pins :RS,RW,E	10	-	-	ns
T$_{DDR}$	Data Setup Time	Pins:DB0~DB7	-	-	100	ns
T$_H$	Data Hold Time	Pins:DB0~DB7	10	-	-	ns

For 4-bit interface date, only four bus lines (DB4 to DB7) are used for transfer.

Example of busy flag check timing sequence
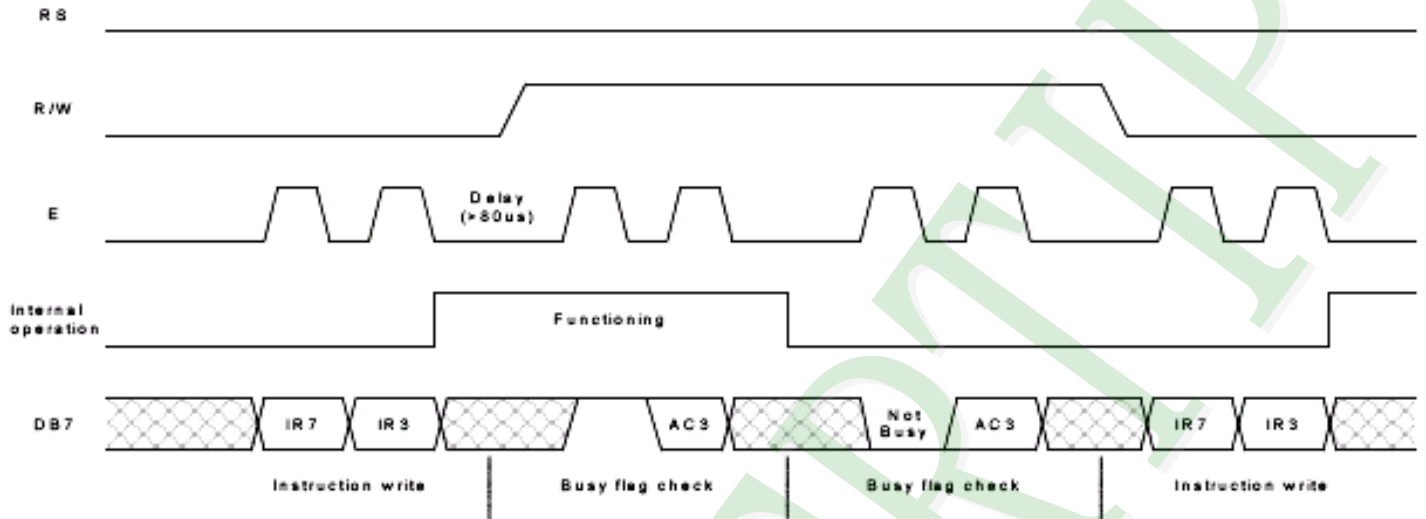
For 8-bit interface date, all eight bus lines (DB0 to DB7) are used .

Example of busy flag check timing sequence
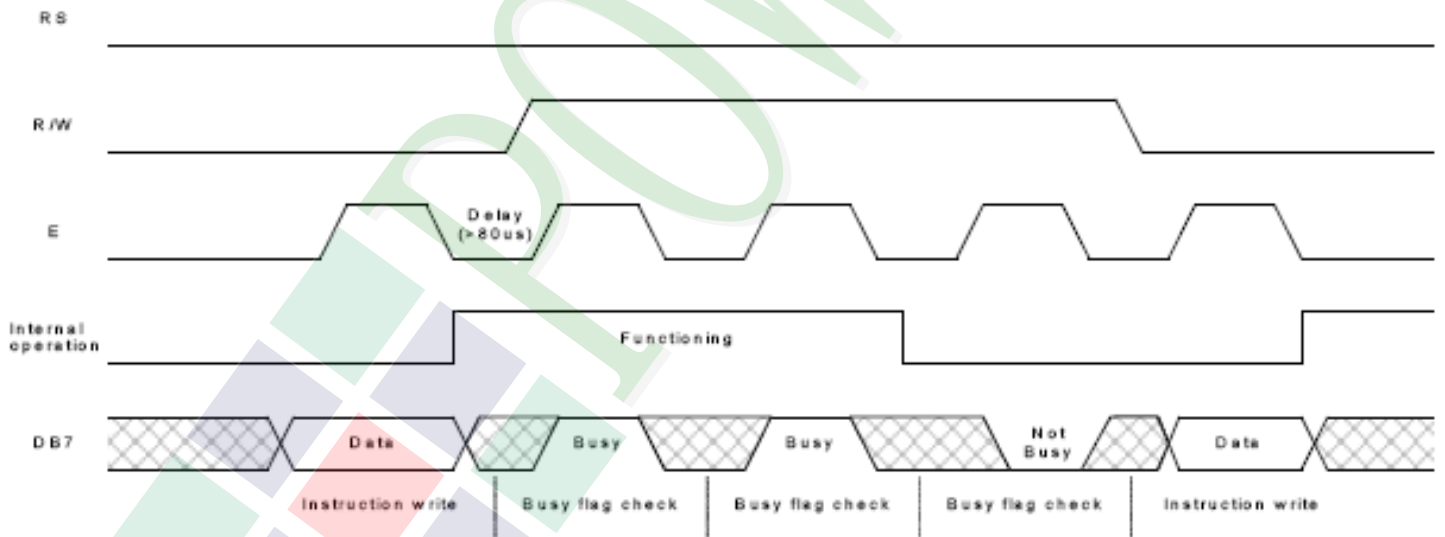
2.4 Display Command

Instructions	Instruction Code										Description	Description Time (270KHz)
	RS	R/W	DB7	DB6	DB5	DB4	DB3	DB2	DB1	DB0		
Clear Display	0	0	0	0	0	0	0	0	0	1	Write "20H" to DDRAM. and set DDRAM address to "00H" from AC.	1.52ms
Return Home	0	0	0	0	0	0	0	0	1	×	Set DDRAM address to "00H" from AC and return cursor to it's original position if shifted. The contents of DDRAM are not changed.	1.52ms
Entry Mode Set	0	0	0	0	0	0	0	1	I/D	S	Sets cursor move direction and specifies display shift. These operations are performed during data write and read .	37μs
Display ON/OFF	0	0	0	0	0	0	1	D	C	B	D=1 : entire display on C=1 : cursor on B=1 : cursor position on	37μs
Cursor or Display Shift	0	0	0	0	0	1	S/C	R/L	×	×	Set cursor moving and display shift control bit, and the direction, without changing of DDRAM data.	37μs
Function Set	0	0	0	0	1	DL	N	F	×	×	DL: interface data is 8/4 bits NL: number of line is 2/1 F: font size is 5×11/5×8	37μs
Set CGRAM Address	0	0	0	1	AC5	AC4	AC3	AC2	AC1	AC0	Set CGRAM address in address counter.	37μs
Set DDRAM Address	0	0	1	AC6	AC5	AC4	AC3	AC2	AC1	AC0	Set DDRAM address in address counter.	37μs

Read Busy Flag and Address	0	1	BF	AC 6	AC 5	AC 4	AC 3	AC 2	AC 1	AC 0	Whether during internal operation or not can be known by reading BF. The contents of address counter can also be read.	0μs
Write Data to RAM	1	0	D7	D6	D5	D4	D3	D2	D1	D0	Write data into internal RAM (DDRAM/CGRAM).	37μs
Read Data from RAM	1	1	D7	D6	D5	D4	D3	D2	D1	D0	Read data from internal RAM (DDRAM/CGRAM).	37μs

Note:

Be sure the ST7066U is not in the busy state (BF=0) before sending an instruction from the MPU to the ST7066.

If an instruction is sent without checking the busy flag , the time between the first instruction and next instruction will take much longer than the instruction time itself.

Before checking BF, be sure to wait at least 80us.. Do not keep "E" always "High" for checking BF.

Refer to Instruction Table for the list of each instruction execution time.

2.5 Character Pattern

NO.7066-0A

2.6 Jumper(Setting different use)
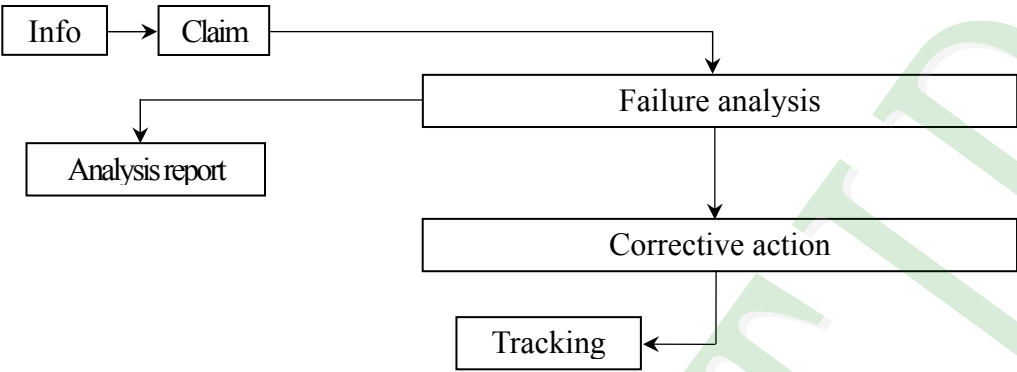
2.6.1 SHORT :J1/J3/JM/JF SHORT

2.6.2 OPEN: all the jumper unnoted

3. QUALITY ASSURANCE SYSTEM

3.1 Quality Assurance Flow Chart

Item	Customer	Sales	R&D	Q.A	Manufacturing	Product control	Purchase	Inventory control

Flow chart rows:

Marketing & Design:
Info → Survey → Project evaluation
Request → Inquiry → Project evaluation
Project Validation (NG → Inquiry, OK → Quote)
Quote → Contract

Sample Approval:
Contract → Design check
Design check → Sample test
Sample test → Verification (NG → Design check, OK → Sample approval)
Sample approval (NG → Contract, OK → Pilot run & Reliability test)

Pilot Run & Mass Product:
Pilot run & Reliability test → Verification (NG → Pilot run, OK → Specification preparation)
Specification preparation → Mass production
Mass production → Inspection (OK → Shipment, NG → Mass production)

Ship Out:
Shipment
Ship out

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							

Sales Service flow:

Info → Claim → Failure analysis → Corrective action → Tracking

Analysis report ← Failure analysis

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

B area : Outside of viewing area

Fig. 2 A area : viewing area
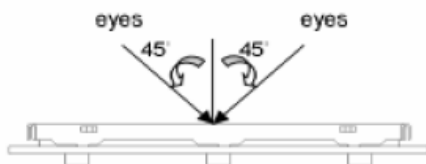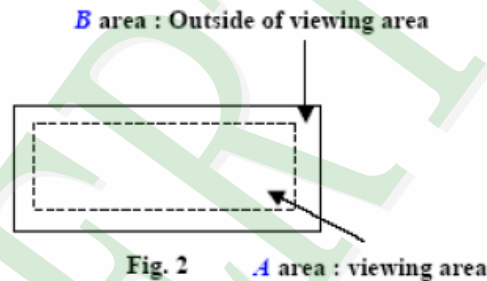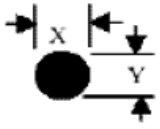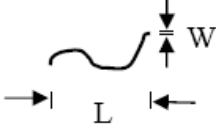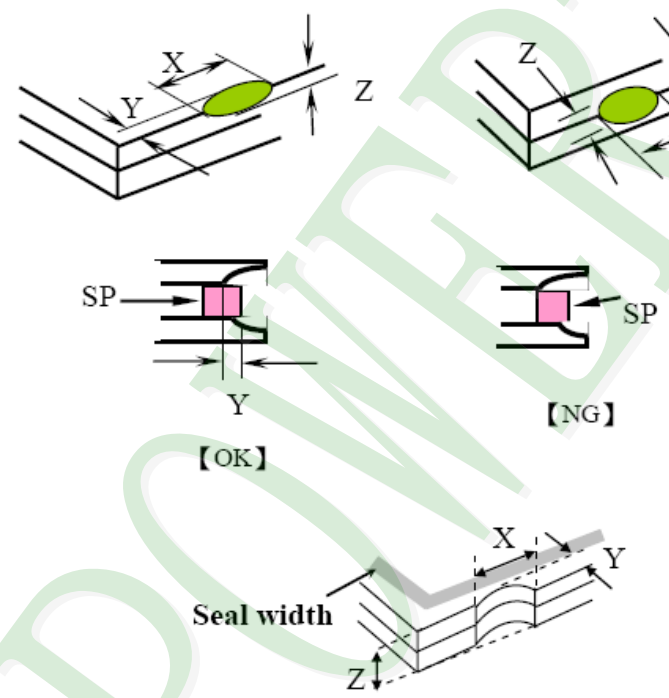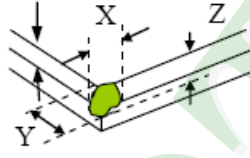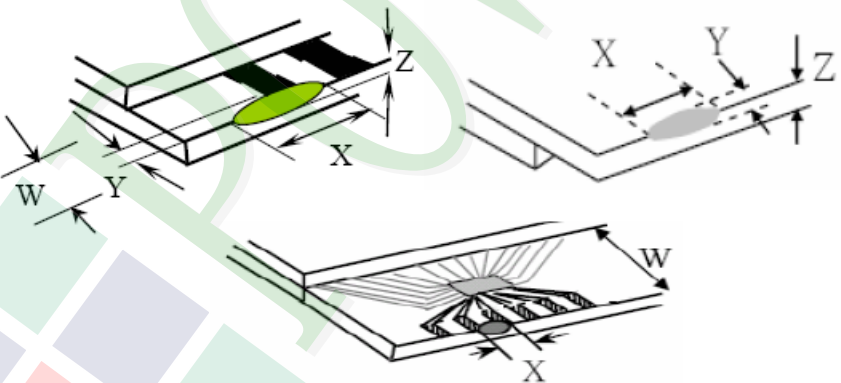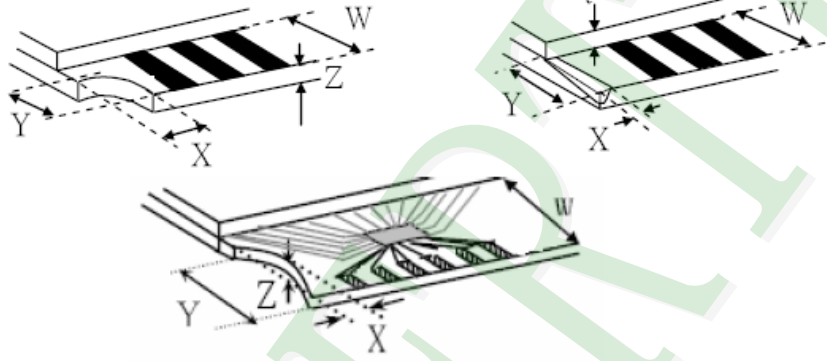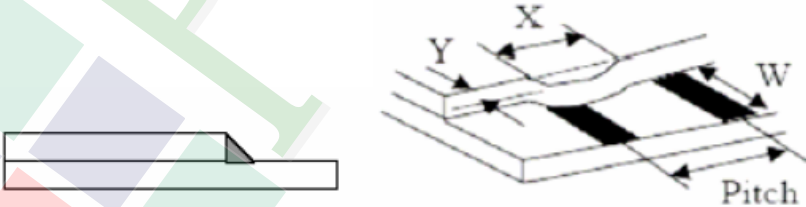
◆ Specification:

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：

NO	Item	Criterion	Level

05	Black or white dot、scratch、contamination
	
	Round type
	
	Φ=(x+y)/2
	
	Line type
		5.1 Round type:
		  5.1.1 display only :
		   ・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.
		
		5.1.2 Non-display :
		
		5.1.3 Line type:
			Minor

06	Polarizer Bubble		Minor

5.1.2 Non-display :

Dimension (diameter : Φ)	Acceptance (Q'ty)	
	A area	B area
Φ ≦ 0.10	Accept no dense	Ignore
0.10 ＜ Φ ≦ 0.20	3	
0.20 ＜ Φ ≦ 0.30	2	
Total quantity	4	

5.1.3 Line type:

Dimension		Acceptance (Q'ty)	
Length (L)	Width (W)	A area	B area
---	W ≦ 0.03	Accept no dense	Ignore
L ≦ 3.0	0.03 ＜ W ≦ 0.05	4	
L ≦ 2.5	0.05 ＜ W ≦ 0.075		
---	W ＞ 0.075	As round type	

Dimension (diameter : Φ)	Acceptance (Q'ty)	
	A area	B area
Φ ≦ 0.20	Accept no dense	Ignore
0.20 ＜ Φ ≦ 0.50	3	
0.50 ＜ Φ ≦ 1.00	2	
Φ ＞ 1.00	0	
Total quantity	4	

NO	Item	Criterion	Level
07	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 7.1 General glass chip： 7.1.1 Chip on panel surface and crack between panels: 	Minor

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

◆**Specification For Monotype and Color STN：** (Ver. B01)

NO	Item	Criterion	Level
07	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 7.1.2 Corner crack： 7.2 Protrusion over terminal： 7.2.1 Chip on electrode pad：	Minor

7.1.2 Corner crack table:

X	Y	Z
$\leqq 1/5\ a$	Crack can't enter viewing area	$Z \leqq 1/2\ t$
$\leqq 1/5\ a$	Crack can't exceed the half of SP width.	$1/2\ t < Z \leqq 2\ t$

7.2.1 Chip on electrode pad table:

	X	Y	Z
Front	$\leqq a$	$\leqq 1/2\ W$	$\leqq t$
Back	Neglect		

◆Specification For Monotype and Color STN：　　　　　　　　　　　　　(Ver. B01)

NO	Item	Criterion	Level
07	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 7.2.2 Non-conductive portion： ⊙ If the chipped area touches the ITO terminal, over 2/3 of the ITO must remain and be inspected according to electrode terminal specifications. 7.2.3 Glass remain： 	Minor

7.2.2 table:

X	Y	Z
≦1/3 a	≦W	≦t

7.2.3 table:

X	Y	Z
≦ a	≦ 1/3 W	≦ t

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 $\leqq 1.5$ mm.	Minor

4. RELIABILITY TEST

4.1 Reliability Test Condition (Ver.B01)

NO.	TEST ITEM	TEST CONDITION	
1	High Temperature Storage Test	Keep in +70℃±2℃ 96 hrs Surrounding temperature, then storage at normal condition 4hrs.	
2	Low Temperature Storage Test	Keep in −20℃ ±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 4hrs. (Excluding the polarizer)	
4	Temperature Cycling Storage Test	−20(min) → +25℃ →+70℃(max) → +25℃ (30mins)　　(5mins)　　(30mins)　　(5mins) ← 10 Cycle → Surrounding temperature, then storage at normal condition 4hrs.	
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)	Packing Weight (Kg) / Drop Height (cm) table below Drop Direction :※1 corner / 3 edges / 6 sides each 1time	

Drop Test table:

Packing Weight (Kg)	Drop Height (cm)
0 ~ 45.4	122
45.4 ~ 90.8	76
90.8 ~ 454	61
Over 454	46

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 $320\pm10\,°C$ 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 $25°C \pm5°C$ 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
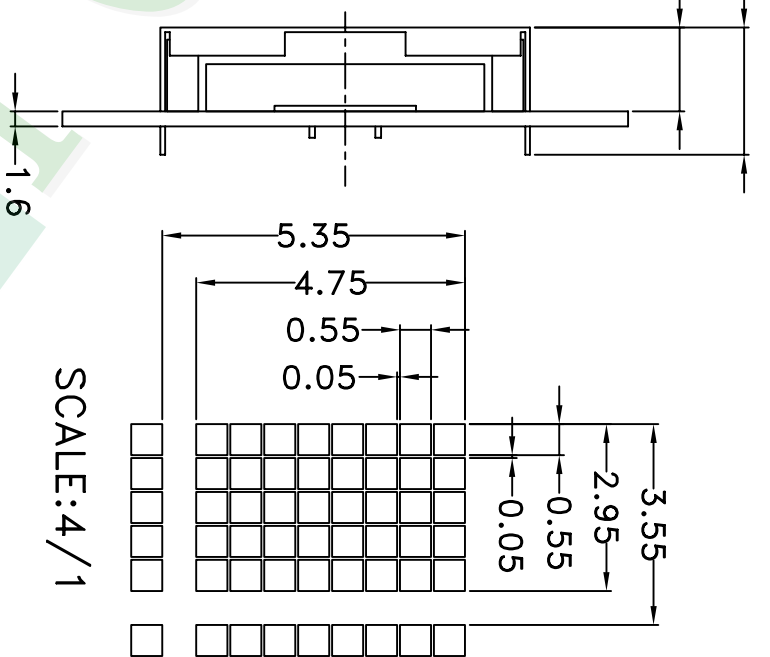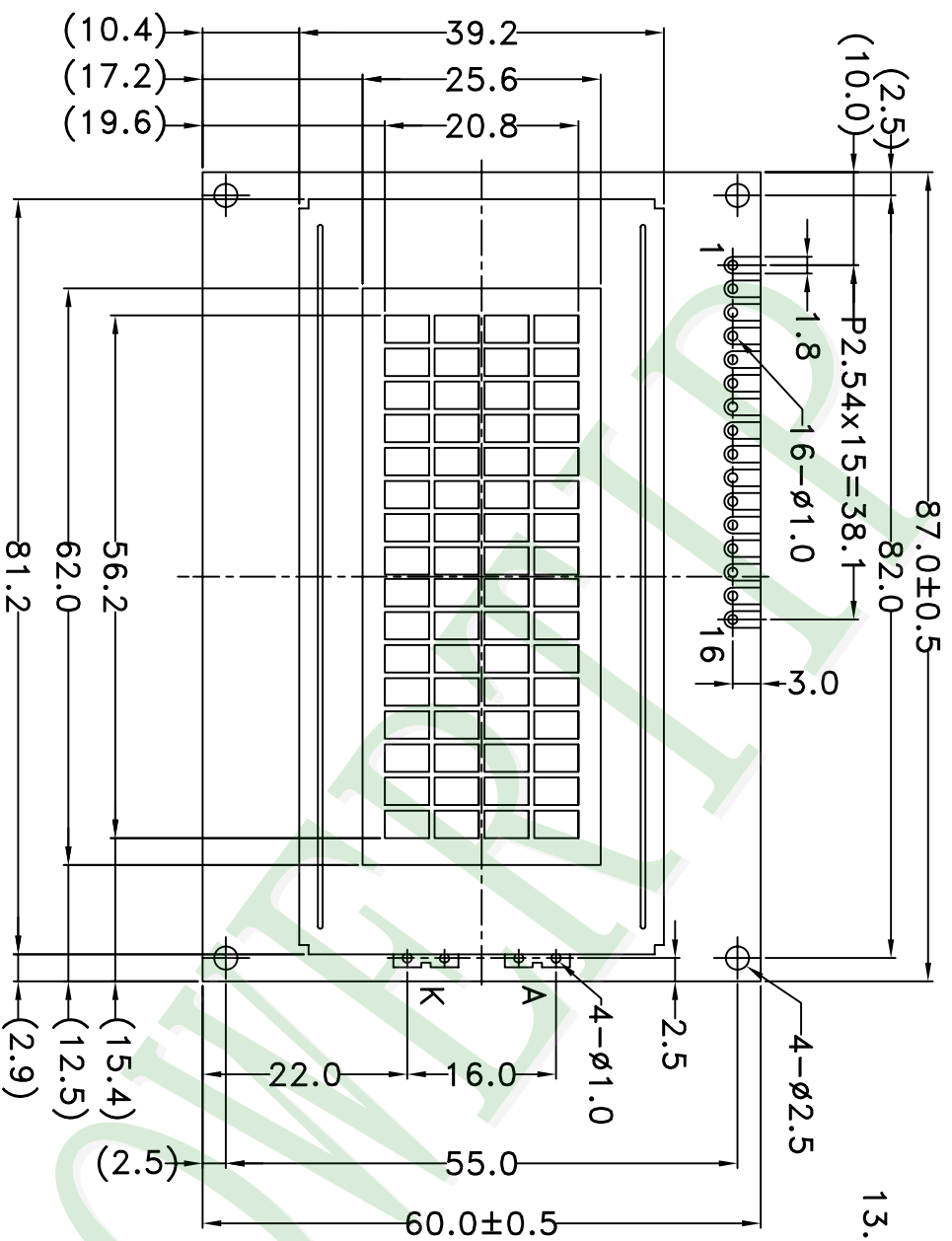
NOTES:
1. LCD type:STN Gray;Positive,Transflective.
2. Viewing direction:6H;
3. The tolerance unless classified ±0.3mm;
4. This product conforms ROHS;

SCALE:4/1

	007				
	006				
	005				
	004				
	003				
	002				
REV	001	NEW DRAWING			
	REV	REV BY	REVISER	DATE	

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

PART NO: PC1604LRS-AWA-B-Q
DRAWING NAME: JLMD-PC1604LRS-AWA-B-Q
TITLE: LCD Module Drawing

Design	Sally		
Check	Terry		
Approve	Ryan		

Unit	Material	Surface	
MM			
Scale	Thickness	Quantity	
1:1			
Page			
1/1			

最小公差 長度 (mm)
精度 精級

	1 ~ 4	4 ~ 16	16 ~ 63	63 ~ 250	250 ~ 1000
	-	-	-	-	-

PT-A-054-01

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)	PC1604LRS-AWA-B-Q	87.0 X 60.0 X 13.5	0.06	192	11.52
2	靜電袋(1)Antistatic Bag	BAG150100ARABA	150 X 120	0.0018	192	0.3456
3	A2-1隔板(3)A2-1 Partition	BX29500072BZBA	295 X 72 X 3.0	0.0109	104	1.1336
4	B2-1隔板(4)B2-1 Partition	BX24500072BZBA	245 X 72 X 3.0	0.0094	24	0.2256
5	氣泡紙(5)Bubble Sheet	BAG280240BWABA	280 X 240	0.006	16	0.096
6	C2內盒(6)Product Box	BX31025580AABA	310 X 255 X 86	0.16	8	1.28
7	外紙箱(7)Carton	BX52732536CCBA	527 X 325 X 360	0.83	1	0.83
8						
9						

2.一 整箱總重量 (Total LCD Weight in carton) : 15.43 Kg±10%

3.單箱數量規格表 (Packaging Specifications and Quantity) :
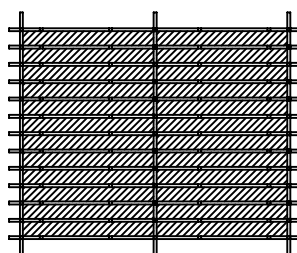 (1)Quantity Of Spacer : A2-1隔板 X 13 , B2-1隔板 X 3
  (2)Total LCM quantity in carton : quantity per box 24 x no of boxes 8 = 192

(5) 氣泡紙
Bubble Sheet

(1)靜電袋+(2)氣泡袋+LCM
Antistatic Bag+Bubble Bag+LCM

(4) B2-1隔板
B2-1 Partition

(3) A2-1隔板
A2-1 Partition

(5) 氣泡紙
Bubble Sheet

(6) C2內盒
Product Box

(7)外紙箱
Carton
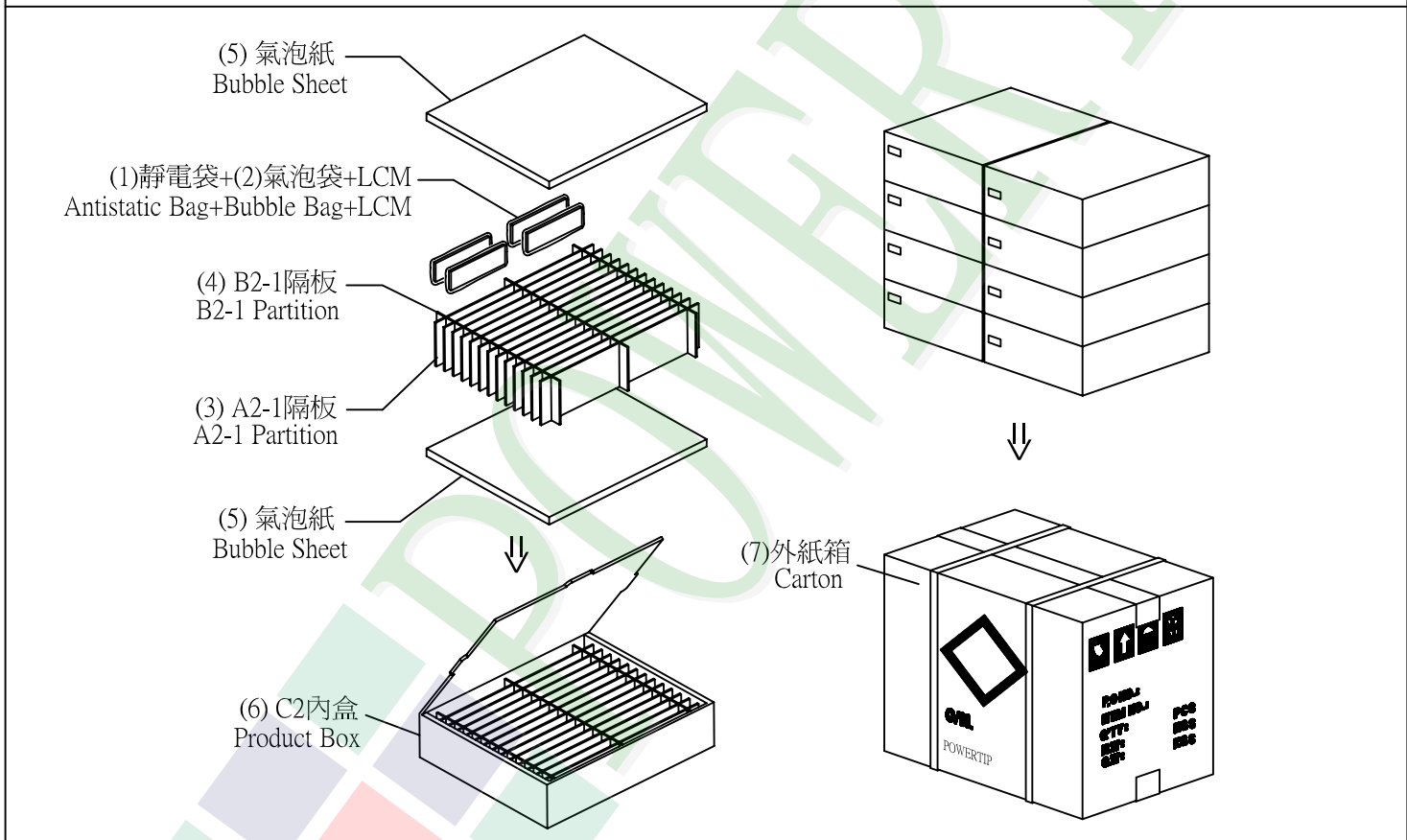
特 記 事 項 (REMARK)

4. Label Specifications :
   依廠內標準作業

5. LCM排放示意圖(前後間隔不放置):
5. LCM placed as figure showing:
   (First and last slot should be empty)

▨ 模組(LCM) X 1pcs.