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	MOBILE LIQUID CRYSTAL DISPLAY GROUP SHARP CORPORATION	APPLICABLE GROUP MOBILE LIQUID CRYSTAL DISPLAY GROUP
	SPECIFICATION	

DEVICE SPECIFICATION

TFT-LCD Module

MODEL No.

LQ215M1LGN2

☐ CUSTOMER'S APPROVAL

DATE _____

BY _____

PRESENTED

BY K. Shiono

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RECORDS OF REVISION

LQ215M1LGN2

SPEC No.	DATE	REVISED No.	SUMMARY		NOTE
			PAGE		
LD-22112	Jan. 29. 2010				1st Issue

1. Application

This specification applies to the color 21.5 Full HD TFT-LCD module, LQ215M1LGN2.

◎The device listed in this technical literature was designed and manufactured for use in OA equipment.

◎In case of using the device for applications such as control and safety equipment for transportation(aircraft, trains, automobiles, etc.), rescue and security equipment and various safety related equipment which require higher reliability and safety, take into consideration that appropriate measures such as fail-safe functions and redundant system design should be taken.

◎Do not use the device for equipment that requires an extreme level of reliability, such as aerospace applications, telecommunication equipment(trunk lines), nuclear power control equipment and medical or other equipment for life support.

◎SHARP assumes no responsibility for any damage resulting from the use of the device which does not comply with the instructions and the precautions specified in these specification sheets.

◎Contact and consult with a SHARP sales representative for any questions about this device.

2. Overview

This module is a color active matrix LCD module incorporating amorphous silicon TFT (Thin Film Transistor). It is composed of a color TFT-LCD panel, driver ICs, control circuit, power supply circuit and a back light unit. Graphics and texts can be displayed on a 1920×RGB×1080 dots panel with about 16.7 million colors by using LVDS (Low Voltage Differential Signaling) and supplying +5.0V DC supply voltages for TFT-LCD panel driving and supply voltage for backlight.

3. Mechanical Specifications

Parameter	Specifications	Unit
Display size	54.68 (Diagonal)	cm
	21.53 (Diagonal)	Inch
Active area	476.64 (H)×268.11 (V)	mm
Pixel format	1920 (H)×1080 (V)	Pixel
	(1 pixel=R+G+B dots)	
Pixel pitch	0.24825(H)×0.24825 (V)	mm
Pixel configuration	R, G, B vertical stripe	
Display mode	Normally white	
Unit outline dimensions *1	495.6(W)×292.2(H)×9.8(D) (TYP)	mm
Mass	1600 (MAX)	g
Surface treatment	Anti-glare and hard-coating 3H (Haze value = 25)	

*1.Note: excluding back light cables, cover and pet sheets.

The thickness of module (D) doesn't contain the projection.

Outline dimensions are shown in Fig.7

4. Input Terminals

4-1. TFT-LCD panel driving

CN1 (Interface signals and +5.0V DC power supply)

Using connectors : GS23302-0011R-7F(FOXCONN)

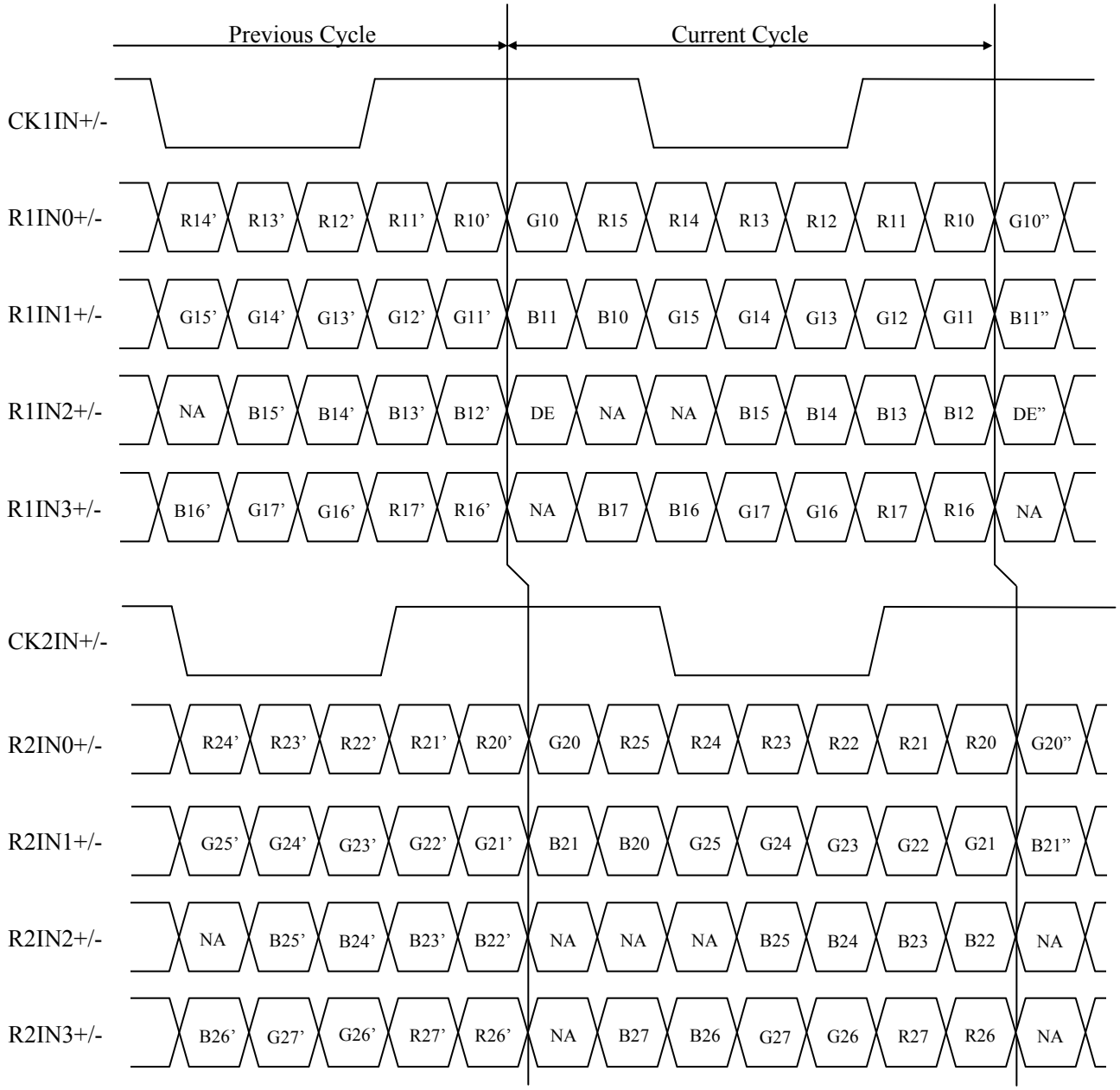
Corresponding connectors : FI-XB30SRL-HF11(JAE)

(Sharp is not responsible to its product quality, if the user applies a connector not corresponding to the above model.)

Pin No.	Symbol	Function	Remark
1	R1IN0-	Receiver signal of A side pixel (-)	LVDS
2	R1IN0+	Receiver signal of A side pixel (+)	LVDS
3	R1IN1-	Receiver signal of A side pixel (-)	LVDS
4	R1IN1+	Receiver signal of A side pixel (+)	LVDS
5	R1IN2-	Receiver signal of A side pixel (-)	LVDS
6	R1IN2+	Receiver signal of A side pixel (+)	LVDS
7	GND		
8	CK1 IN-	Clock signal of A side pixel (-)	LVDS
9	CK1 IN+	Clock signal of A side pixel (+)	LVDS
10	R1IN3-	Receiver signal of A side pixel (-)	LVDS
11	R1IN3+	Receiver signal of A side pixel (+)	LVDS
12	R2IN0-	Receiver signal of B side pixel (-)	LVDS
13	R2IN0+	Receiver signal of B side pixel (+)	LVDS
14	GND		
15	R2IN1-	Receiver signal of B side pixel (-)	LVDS
16	R2IN1+	Receiver signal of B side pixel (+)	LVDS
17	GND		
18	R2IN2-	Receiver signal of B side pixel (-)	LVDS
19	R2IN2+	Receiver signal of B side pixel (+)	LVDS
20	CK2 IN-	Clock signal of B side pixel (-)	LVDS
21	CK2 IN+	Clock signal of B side pixel (+)	LVDS
22	R2IN3-	Receiver signal of B side pixel (-)	LVDS
23	R2IN3+	Receiver signal of B side pixel (+)	LVDS
24	GND		
25	NC		【Note1】
26	NC		【Note1】
27	NC		【Note1】
28	Vcc	+5.0V Power supply	
29	Vcc	+5.0V Power supply	
30	Vcc	+5.0V Power supply	

[Note 1] Not connection, this pin should be open.

4-2 LVDS Data Mapping



DE : Display Enable
NA : Not Available

4-3 Backlight

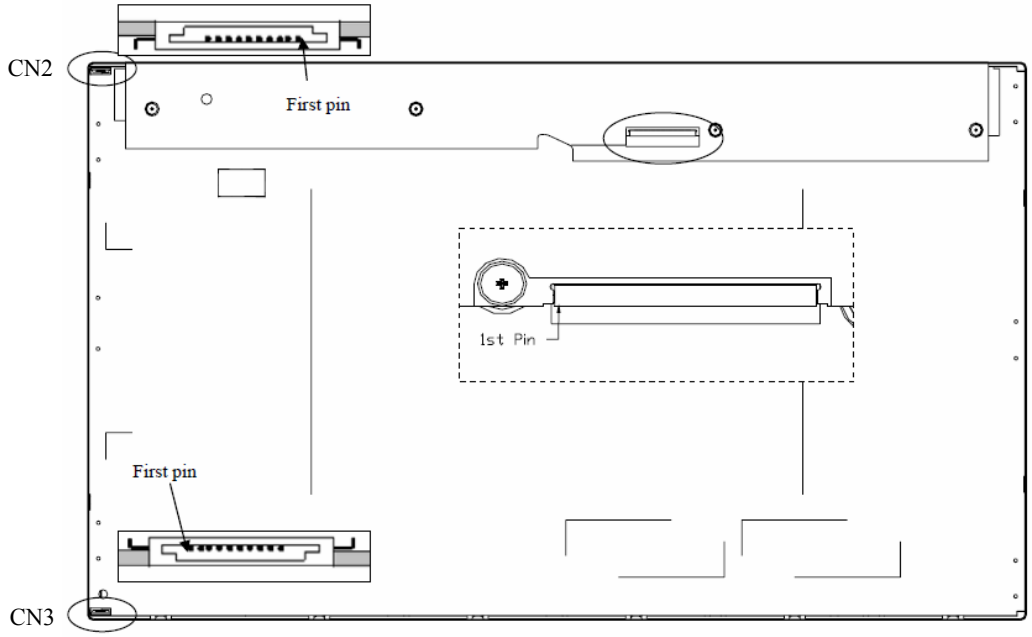
CN2, 3 (Upper/Lower FPC Connector Pin Assignment)

Using connector : 7080-Q10N-00R (Entery INDUSTRIAL CO.,LTD)

Corresponding FFC specification : Temperature＝80°C, Voltage=60V, Pin No.=10, 0.5Pitch, PET, HF

CN2 and CN3 are the same pin assignment.

Pin No	Symbol	Description
1	IRLED1	IRLED1 LED current sense for string 1
2	IRLED1	IRLED1 LED current sense for string 1
3	IRLED2	IRLED1 LED current sense for string 2
4	VLED	LED power supply
5	VLED	LED power supply
6	VLED	LED power supply
7	VLED	LED power supply
8	IRLED2	IRLED1 LED current sense for string 2
9	IRLED3	IRLED1 LED current sense for string 3
10	IRLED3	IRLED1 LED current sense for string 3



Rear View of LCM

5. Absolute Maximum Ratings

Parameter	Symbol	Condition	Ratings	Unit	Remark
Supply voltage	Vcc	Ta=25℃	－0.3 ～ ＋6.0	V	
Input voltage	V_I	Ta=25℃	－0.3 ～ ＋4.3	V	
Storage temperature	T_{STG}	－	－20 ～ ＋60	℃	【Note1】
Operating temperature (Ambient)	T_{OPA}	－	0 ～ ＋50	℃	【Note2】

【Note1】The relative humidity must not exceed 90% non-condensing at temperatures of 40°C or less. At temperatures greater than 40°C, the wet bulb temperature must not exceed 39°C.

【Note2】The unit should not be exposed to corrosive chemicals.

6. Electrical Characteristics

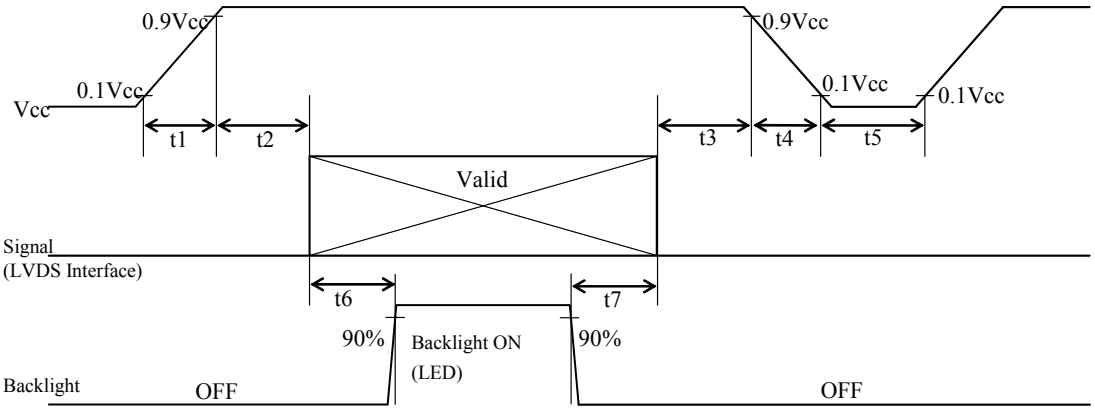
6-1. TFT-LCD panel driving Ta＝25℃

Parameter		Symbol	Min.	Typ.	Max.	Unit	Remark
Supply voltage		Vcc	+4.5	+5.0	+5.5	V	【Note2】
Current dissipation	Black	Icc	—	1000	1300	mA	【Note3】
	White	Icc	—	700	1000	mA	【Note4】
	Mosaic	Icc	–	900	1200	mA	【Note5】
Permissive input ripple voltage		V_{RF}	—	—	150	mVp-p	
Differential input threshold voltage	High	V_{TH}	—	—	+100	mV	V_{CM}=+1.2V 【Note1】
	Low	V_{TL}	–100	—	—	mV	
Terminal resistor		R_T	—	100	—	Ω	Differential input

【Note1】 V_{CM} : Common mode voltage of LVDS driver.

【Note2】

1） On-off conditions for supply voltage



Symbol	Min.	Max.	Unit	Remark
t1	0.1	10	ms	
t2	0	50	ms	
t3	0	50	ms	
t4	0.1	50ms	ms	
t5	1000	—	ms	
t6	200	—	ms	*1
t7	100	—	ms	*1

*1 : Power sequence for Backlight is not especially specified, however it is recommended to consider some timing difference between LVDS input and Backlight input as shown above.
If the Backlight lights on before LCD starting, or if the Backlight is kept on after LCD stopping, the screen may look white for a moment or abnormal image may be displayed.
This is caused by variation in output signal from timing generator at LVDS input on or off.
It does not cause the damage to the LCD module.

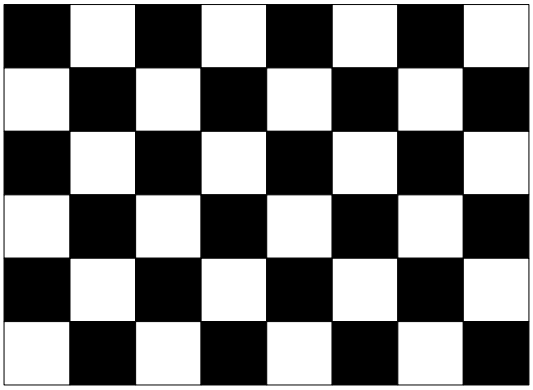
【Note3】The specified current is under the Vcc =5V, 25 °C, fv=60Hz (frame frequency) condition whereas black pattern is displayed.

【Note4】The specified current is under the Vcc =5V, 25 °C, fv=60Hz (frame frequency) condition whereas white pattern is displayed.

【Note5】The specified current is under the Vcc =5V, 25 °C, fv=60Hz (frame frequency) condition whereas mosaic pattern(black & white [8*6]) is displayed.

White : GS255

Black : GS0



6-2. Backlight driving

The backlight system is edge-lighting type with 198 White-LED(White Light Emitting Diode, (11 serial x 3 parallel) x 3 strings x 2 (Upper/Lower)).
The characteristics of White-LED are shown in the following table.

(Ta = 25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Supply voltage range	VLED	—	36.3	37.4	V	Duty 100%
Current dissipation	ILED	—	360	396	mA	【Note1,2,3】
Power Consumption	PLED	—	13.07	14.81	W	【Note4】
LED Life time	LBL	25,000	30,000	—	Hour	【Note5】

【Note1】There are two Light Bars, and the specified current is input LED chip 100% duty current.

【Note2】The sensing current of each string is 60mA.

【Note3】Each light bar have three current sensing strings, so that each light bar input current is 180mA.

【Note4】PLED = ILED × VLED , LED matrix is (11S3P) x 3 strings x 2.

【Note5】The life time is determined as the time at which luminance of the LED becomes 50% of the initial brightness or not normal lighting at ILED=360mA on condition of continuous operating at 25±2°C.

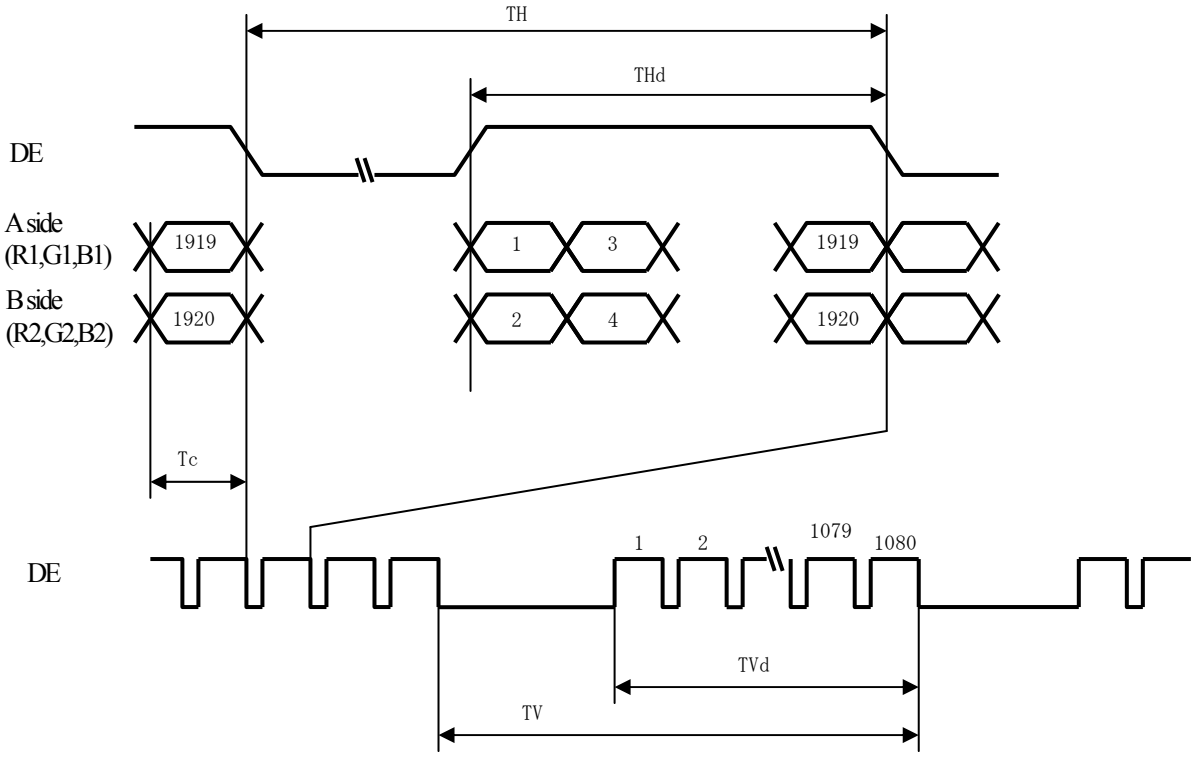
【Note6】In case of using PWM control for blacklight driving, please keep frequency enough high in order to avoid the flicker or the deterioration of display quality.

7. Timing characteristics of input signals

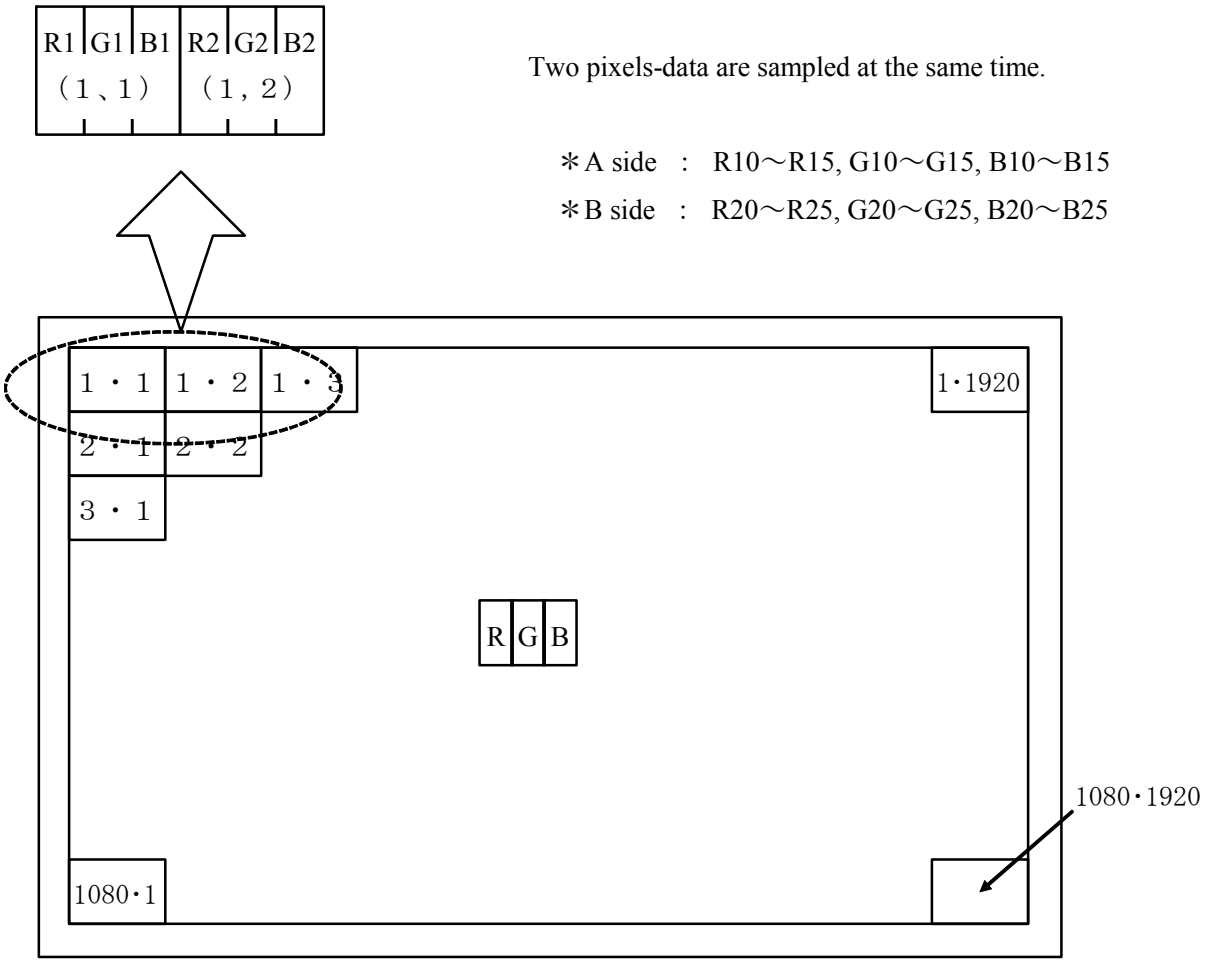
7-1. Timing characteristics

Parameter		Symbol	Min.	Typ.	Max.	Unit
Clock signal	Frequency	1/Tc	60	72	87.5	MHz
Horizontal	Horizontal period	TH	1000	1088	1120	Clock
	Horizontal period(High)	THd	960	960	960	Clock
Vertical	Vertical period	TV	1090	1100	1160	Line
	Vertical period(High)	TVd	1080	1080	1080	Line
	frequency	Fv	50	60	75	Hz

【Note】 In case of using the long vertical period, the deterioration of display quality, flicker etc. may occur.



7-2 Input Data Signals and Display Position on the screen



Display Position of Data (V,H)

8. Input Signals, Basic Display Colors and Gray Scale of Each Color

8-1 8bit input

	Colors & Gray scale	Gray Scale	Data signal																							
			R0	R1	R2	R3	R4	R5	R6	R7	G0	G1	G2	G3	G4	G5	G6	G7	B0	B1	B2	B3	B4	B5	B6	B7
Basic Color	Black	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Blue	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	Green	—	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	Cyan	—	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Red	—	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Magenta	—	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	Yellow	—	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	White	—	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gray Scale of Red	Black	GS0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	⇧	GS1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Darker	GS2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	⇧	↓					↓							↓									↓			
	⇩	↓					↓							↓									↓			
	Brighter	GS253	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	⇩	GS254	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red	GS255	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gray Scale of Green	Black	GS0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	⇧	GS1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Darker	GS2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	⇧	↓					↓							↓									↓			
	⇩	↓					↓							↓									↓			
	Brighter	GS253	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	⇩	GS254	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	Green	GS255	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
Gray Scale of Blue	Black	GS0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	⇧	GS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	Darker	GS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	⇧	↓					↓							↓									↓			
	⇩	↓					↓							↓									↓			
	Brighter	GS253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1
	⇩	GS254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	Blue	GS255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

0 : Low level voltage, 1 : High level voltage.

Each basic color can be displayed in 255 gray scales from 8 bit data signals. According to the combination of total 24 bit data signals, the 16.7-million-color display can be achieved on the screen.

9. Optical Characteristics

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit	Remark
Viewing angle range	Vertical	θ 11	CR≧10	70	80	—	Deg.	【Note3,5,6】
		θ 12		70	80	—	Deg.	
	Horizontal	θ 21, θ 22		75	85	—	Deg.	
Contrast ratio		C R	θ =0°	700	1000	—		【Note3,7】
Response Time	Rise	τ r	θ =0°	—	1.5	3	ms	【Note4】
	Fall	τ d		—	3.5	7	ms	
	Rise+Fall	τ r + τ d		—	5	10	ms	
Chromaticity of White		x		0.283	0.313	0.343		【Note3】
		y		0.299	0.329	0.359		
Chromaticity of Red		x		0.610	0.640	0.670		
		y		0.315	0.345	0.375		
Chromaticity of Green		x		0.294	0.324	0.354		
		y		0.589	0.619	0.649		
Chromaticity of Blue		x		0.120	0.150	0.180		
		y		0.029	0.059	0.089		
Luminance of white		YL		250	300	—	cd/m^2	【Note3】
White Uniformity		δ w1		0.70	0.75	—	—	【Note3,8】
Cross Talk		Dsha	θ =0°	—	—	2	%	【Note9】

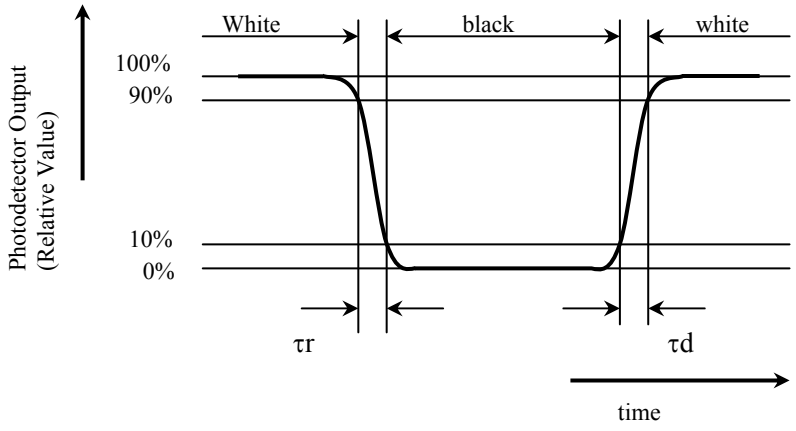
【Note1】Ambient temperature = 25°C.

【Note2】To be measured in dark room after backlight warm up 30 minutes.

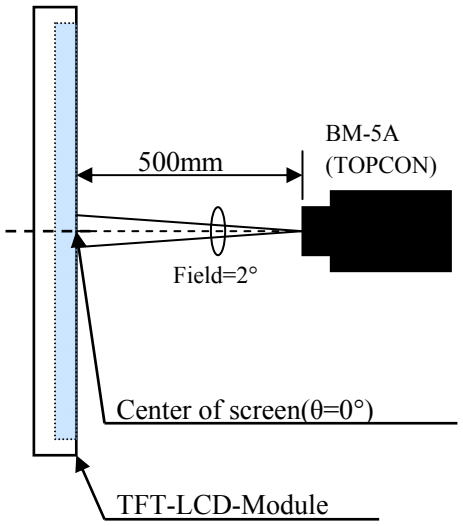
【Note3】To be measured with a viewing cone of 2°by Topcon luminance meter BM-5A.

【Note4】 Definition of response time:

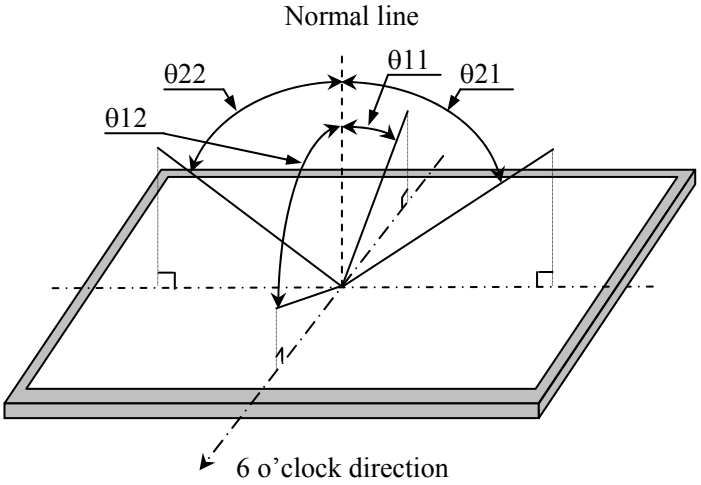
The output signals of BM-7 are measured when the input signals are changed from “Black” to “White” (falling time) and from “White” to “Black” (rising time), respectively. The response time interval is between the 10% and 90% of amplitudes. Refer to figure as below.



【Note5】Optical Characteristics Measurements:



【Note6】Definitions of viewing angle range:



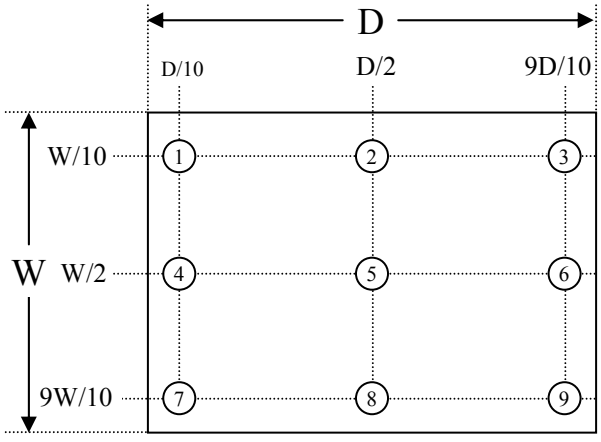
【Note7】Definition of contrast ratio:

The contrast ratio is defined as the following.

$$\text{Contrast Ratio(CR)} = \frac{\text{Luminance(brightness)with all pixels white}}{\text{Luminance(brightness)with all pixels black}}$$

【Note8】Definition of white uniformity:

White uniformity is defined as the following with nine measurements (1～9).

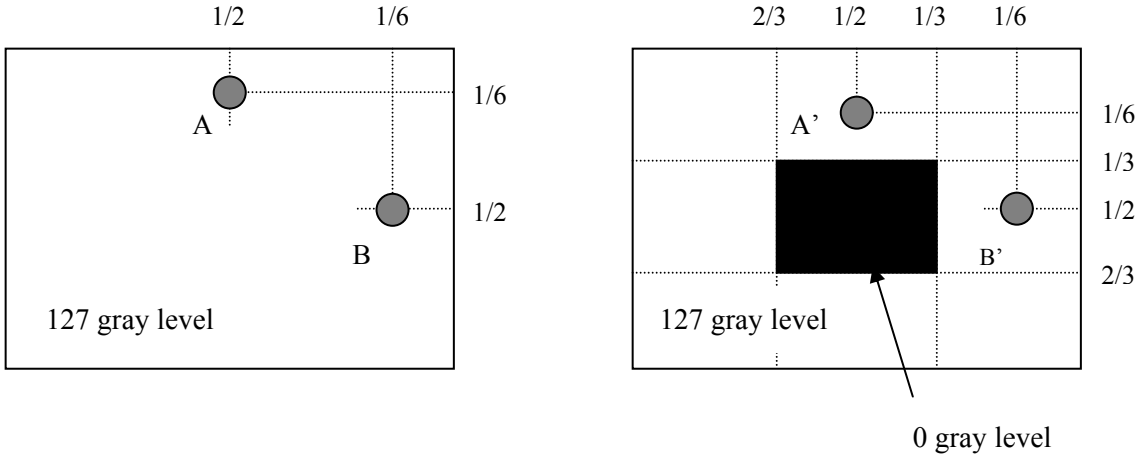


$$\sigma w1 = \frac{\text{Minimum Brightness of nine points(P1～P9).}}{\text{Maximum Brightness of nine points(P1～P9).}}$$

【Note9】Definition of cross talk:

We measured luminance in case there are a window frame and in case there are not a window frame with A points & B points of the following figure. Then, we compared the measured values.

$$\text{Dsha}(\%) = \frac{|\text{Luminance with a window frame} - \text{Luminance without a window}|}{\text{Luminance without a window}} \times 100$$



10. Handling Precautions

a) Be sure to turn off the power supply when inserting or disconnecting the cable.

b) Be sure to design the cabinet so that the module can be installed without any extra stress such as warp or twist.

c) Since the front polarizer is easily damaged, pay attention not to scratch it.
Blow away dust on the polarizer with antistatic N_2 blow. It is undesirable to wipe off because a polarizer is sensitive. It is recommended to peel off softly using the adhesive tape when soil or finger oil is stuck to the polarizer. When unavoidable, wipe off carefully with a cloth for wiping lenses.

d) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.

e) When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth.

f) Since the panel is made of glass, it may break or crack if dropped or bumped on hard surface.
Handle with care.

g) Since CMOS LSI is used in this module, take care of static electricity and injure the human earth when handling.Observe all other precautionary requirements in handling components.

h) Since there is a circuit board in the module back, stress is not added at the time of a design assembly.
Please make it like. If stress is added, there is a possibility that circuit parts may be damaged.

i) Protection film is attached to the module surface to prevent it from being scratched .
Peel the film off slowly , just before the use, with strict attention to electrostatic charges.
Blow off 'dust' on the polarizer by using an ionized nitrogen.

j) The polarizer surface on the panel is treated with Anti-Glare for low reflection. In case of attaching protective board over the LCD, be careful about the optical interface fringe etc. which degrades display quality.

k) Do not expose the LCD panel to direct sunlight. Lightproof shade etc. should be attached when LCD panel is used under such environment.

l) Connect GND to 4 place of mounting holes to stabilize against EMI and external noise.

m) When handling LCD modules and assembling them into cabinets, please avoid that long-term storage in the environment of oxidization or deoxidization gas and the use of such materials as reagent,solvent, adhesive, resin, etc. which generate these gasses, may cause corrosion and discoloration of the LCD modules.

o) When install LCD modules in the cabinet, please tighten with “torque=3.0kgf▪cm (Max)”.
Be sure to confirm it in the same condition as it is installed in your instrument.

p) Liquid crystal contained in the panel may leak if the LCD is broken. Rinse it as soon as possible if itgets inside your eye or mouth by mistake.

q) Notice : Never dismantle the module , because it will cause failure. Please don't remove the fixed tape, insulateing tape etc that was pasted on the original module. (except for protection film of the panel and the crepe tape(yellow tape) of fixing lamp cable temporarily.)

r) Be careful when using it for long time with fixed pattern display as it may cause afterimage.
(Please use a screen saver etc., in order to avoid an afterimage.)

s) Adjusting volume have been set optimally before shipment, so do not change any adjusted value.
If adjusted value is changed, the specification may not be satisfied.

t) If a minute particle enters in the module and adheres to an optical material, it may cause display non-uniformity issue, etc. Therefore, fine-pitch filters have to be installed to cooling and inhalation hole if you intend to install a fan.

11. Packing form

a) Piling number of cartons : maximum 2 cartons

b) Packing quantity in one carton : 8 modules

c) Carton size : 565mm(W)×250mm(D)×420mm(H)

d) Total mass of one carton filled with full modules : 14.5kg(Max.)

e) Packing form is shown in Fig.1,2,3

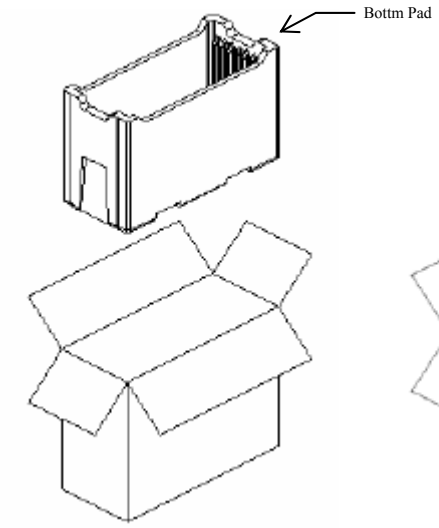


Fig 1

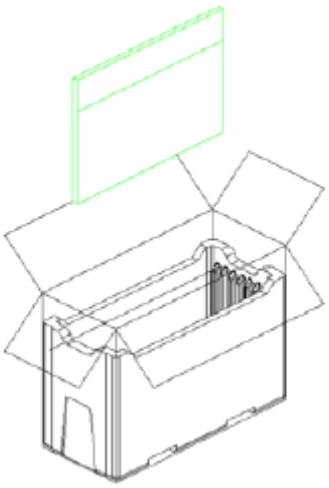


Fig 2

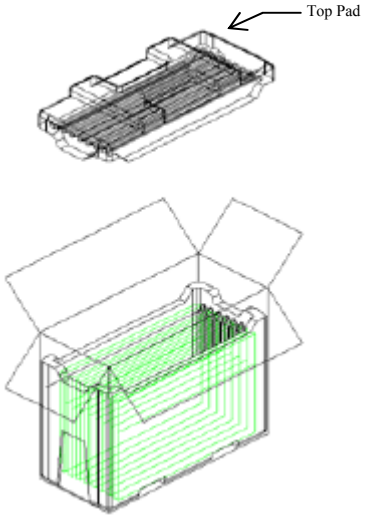


Fig 3

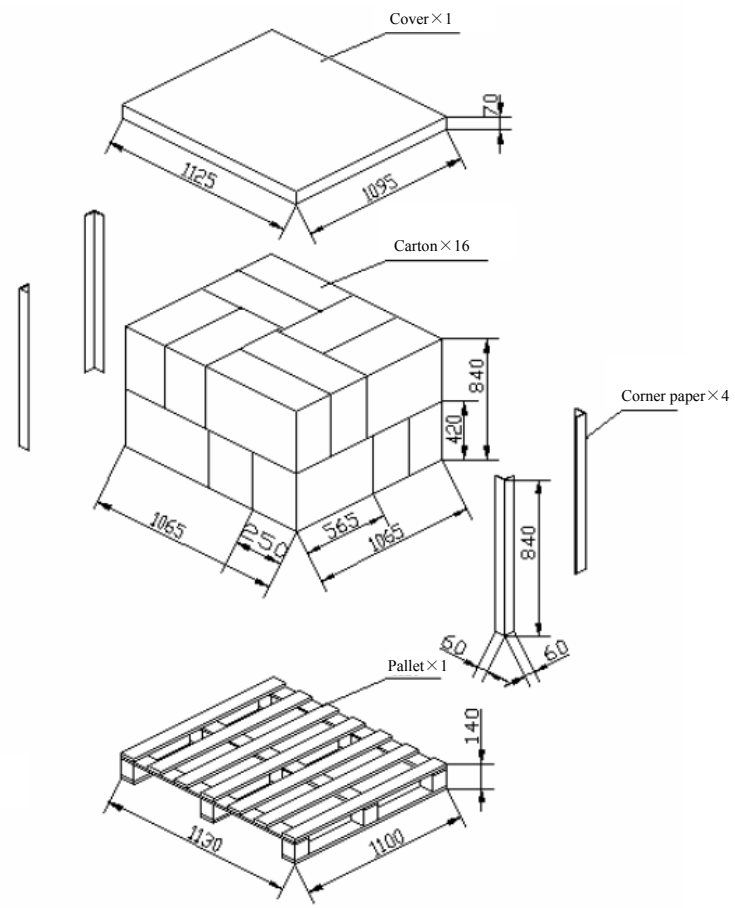
Step 1 Take a carton and put bottom pad 1pcs as fig1.

Step 2 Place the module with PCBA under then put it falls horizontally into the carton all 8pcs as fig2.

Step 3 Cover them with 1pcs top pad then to seal discount as fig3.

12. Shipping Pallet Package

a) Total mass of two pallets filled with full modules : 505kg(Max.)



Step 1 Place a pallet specially, spec is:1130mm*1100mm*140mm,as fig4.

Step 2 Stack cartons on the Pallet in 2 tiers,8 cartons in a tier, total 16 cartons.

Then place Corner paper and Upper Cover, as fig5.

Step 3 Pile of cargo according to 2 tiers pallets.

Notes: top pallet and bottom pallet need to pile up neat and tidy as fig6.

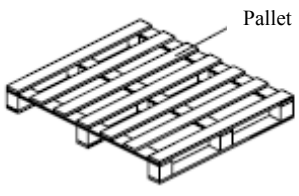


Fig 4

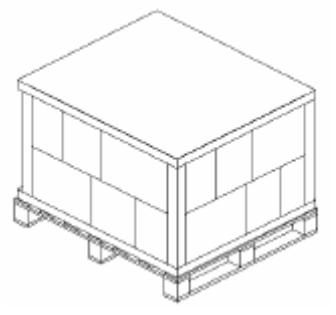


Fig 5

Fig 6

13. Reliability test items

No	Test item	Conditions	Judgment	Remark
1	High temperature storage test	60℃, 240h	Note 1	Note 2
2	Low temperature storage test	-20℃, 240h	Note 1	Note 2
3	High temperature & high humidity operation test	40℃, 90%RH, 240h (No condensation)	Note 1	Note 2
4	High temperature operation test	50℃, 240h	Note 1	Note 2
5	Low temperature operation test	0℃, 240h	Note 1	Note 2
6	Vibration test (non- operating)	Vibration level : 1.5G Bandwidth : 10-300Hz Waveform : sine wave, Sweep rate : 10min 30 min for each direction X, Y, Z (1.5 Hrs in total)	Note 1	Note 2
7	Shock test (non- operating)	Shock level : 50G, 11ms Waveform : Half sine wave Direction : ±X, ±Y, ±Z One time each direction	Note 1	Note 2
8	Thermal shock test (Storage)	-20℃～60℃ 1Hr, 1Hr, 100cycles	Note 1	Note 2
9	ESD test	Contack : +/-8kV, 150pF(330ohm) 10times/1point, time/1 sec, total 16 points Air discharge : +/-15kV, 150pF(330phm) 10times/1point, 1time/1 sec, total 9 points	Note 1	Note 2
10	MTBF Demonstration	25,000 hours with confidence level 90%	Note 1	Note 3

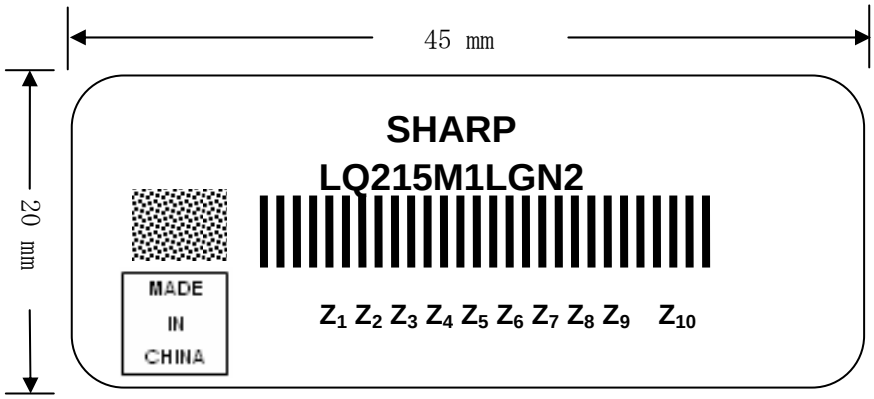
【Note 1】Pass: Normal display image with no obvious non-uniformity and no line defect.
Partial transformation of the module parts should be ignored.
Fail: No display image, obvious non-uniformity, or line defects.

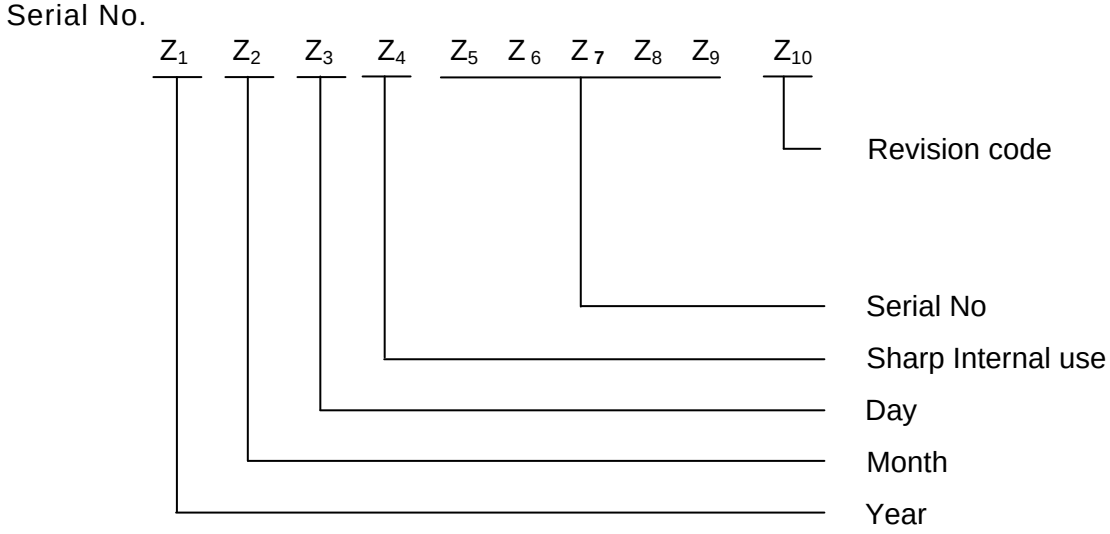
【Note 2】Evaluation should be tested after storage at room temperature for two hour.

【Note 3】The MTBF calculation is based on the assumption that the failure rate distribution meets the Exponential Model, and B/L is not included.

14. Others

1) Lot No. and indication Bar Code Label:





Serial ID includes the information as below:

1. Year: Final digit of the A.D. EX."0" for 2010
2. Month: 1~9, X, Y, and Z. (X=Oct. Y=Nov. Z=Dec.)
3. Day: 1～9,A to X.(please refer Day Code table)
4. Sharp internal use
5. Serial No: 0~99999, Over 10Kpcs use A, B, C…

   For example: Actual Print

   99,999 99999

   100,000~ A0000~

   110,000~ B0000~

   120,000~ C0000~
6. Revision code: The first Version is A, version changes with design change. Version with 26 letters, For example: A, B, C…

Day Code table

Date	Day Code	Date	Day Code	Date	Day Code
1	1	11	B	21	M
2	2	12	C	22	N
3	3	13	D	23	P
4	4	14	E	24	Q
5	5	15	F	25	R
6	6	16	G	26	S
7	7	17	H	27	T
8	8	18	J	28	U
9	9	19	K	29	V
10	A	20	L	30	W
				31	X

2) Packing Label

社内品番：（４Ｓ）LQ215M1LGN2

Bar code (①)

ＬｏｔNO.　：（１Ｔ）２０１０．Ｘ．ＸＸ

Bar code (②)

Ｑｕａｎｔｉｔｙ：(Q)　８　ｐｃｓ

Bar code (③)

ユーザ品番　：

シャープ物流用ラベルです。

① Model No. (LQ215M1LGN2)

② Lot No. (Date)

③ Quantity

3) If any problem occurs in relation to the description of this specification , it shall be resolved through discussion with spirit of cooperation.

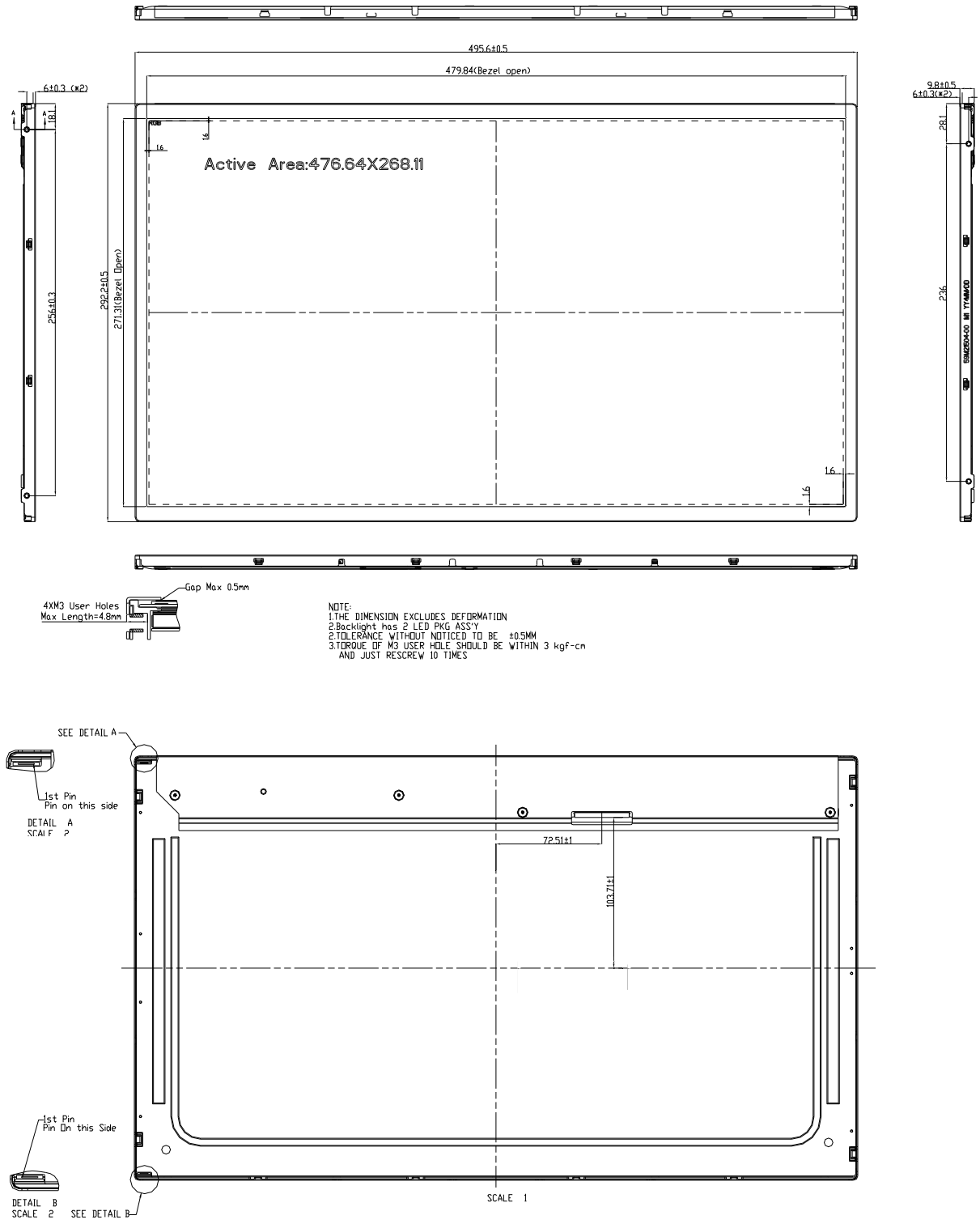


Fig7.LQ215M1LGN2 OUTLINE DIMENSIONS