



Chunghwa Picture Tubes, Ltd.

Technical Specification

To : **SCL**

Date : **2012 /11/ 08**

TFT LCD
CLAA101WA01

ACCEPTED BY :

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RECORD OF REVISIONS

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1. OVERVIEW

CLAA101WA01 is 10.1" color TFT-LCD (Thin Film Transistor Liquid Crystal Display) module composed of LCD panel, LVDS driver ICs, control circuit and backlight. By applying 6 bit digital data, 1366×RGB (3) ×768, 262K-color images are displayed on the 10.1" diagonal screen. general specifications are summarized in the following table :

ITEM	SPECIFICATION			
Display Area (mm)	222.72 (H) × 125.22 (V) (10.1-inch diagonal)			
Number of Pixels	1366 × 3 (H) × 768 (V)			
Pixel Pitch (mm)	0.16305 (H) × 0.16305 (V)			
Color Pixel Arrangement	RGB vertical stripe			
Display Mode	Normally white : TN			
Number of Colors	262,144(6bits)(LVDS)			
Gamut	58 % (Typ)			
Optimum Viewing Angle	6 o'clock			
Response Time (ms)	16 ms (Typ)			
Surface Treatment	Anti-Glare			
Viewing Angle	45° 、 45° /20° 、 35°(Typ.)			
Brightness (cd/m ²)	220 cd/m ² (5point)/20 mA (Typ.)			
Uniformity	5point : 80 %(Typ)			
Consumption of Power (W)	3.5 W (Max)			
Backlight Unit	LED			
Electrical Interface(data)	LVDS			
Module Weight (g)	200 (max)			
Module Size (mm)		Min.	Typ.	Max.
	Horizontal(H)	234.5	235	235.5
	Vertical(V)	142.5	143	143.5
	Depth(D)	-	-	5.2

The LCD Products listed on this document are not suitable for use of aerospace equipment, submarine cable, and nuclear reactor control system and life support systems. If customers intend to use these LCD products for applications listed above or those not included in the "Standard" list as follows, please contact our sales in advance.

Standard : Computer, Office equipment, Communication equipment, Test and Measurement equipment, Machine tool, Industrial robot, Audio and Visual equipment, Other consumer products.

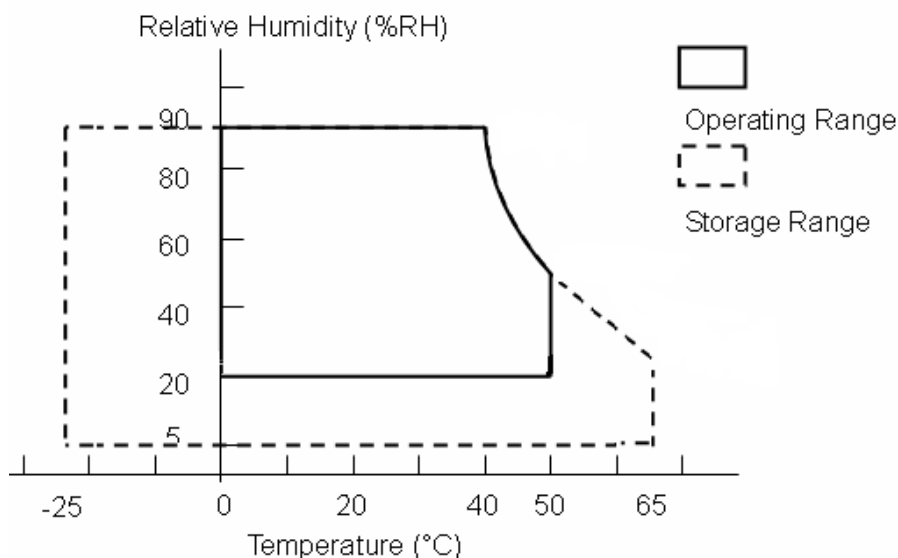
2. ABSOLUTE MAXIMUM RATINGS

The following are maximum value, which if exceeded, may cause faulty operation or damage to the unit.

ITEM	SYMBOL	MIN.	MAX.	UNIT	NOTE
Power Supply Voltage for LCD	VCC	0	4.0	V	
Operation Temperature	Top	0	50	°C	*1). 2). 3). 4)
Storage Temperature	Tstg	-20	60	°C	*1). 2). 3)

【Note】

- *1) The relative temperature and humidity range are as below sketch, 90%RH Max. ($T_a \leq 40^\circ\text{C}$)
- *2) The maximum wet bulb temperature $\leq 39^\circ\text{C}$ ($T_a > 40^\circ\text{C}$) and without dewing.
- *3) If product in environment which over the definition of the relative temperature and humidity out of range too long, it will affect visual of LCD.
- *4) If you operate LCD in normal temperature range, the center surface of panel should be under 50°C .
- *5) Not showing abnormal scanner operation when turning on LCD Module after storage at -20°C during 2 hours.



3. ELECTRICAL CHARACTERISTICS

(A) TFT LCD

TEM		SYMBOL	MIN	TYP	MAX	UNIT	NOTE
LCD POWER VOLTAGE		VCC	3.0	3.3	3.6	V	【Note 1】
LCD POWER CURRENT		ICC	-	250	300	mA	【Note 2】
Rush CRRENT		Irush	-	-	2	A	【Note 4】
LOGIC INPUT VOLTAGE (LVDS: IN+,IN-)	COMMON VOLTAGE	VCM	1.125	1.25	1.375	V	【Note 3】
	DIFFRENTIAL INPUT VOLTAGE	VID	200	350	500	mV	【Note 3】
	THRESHOLD VOLTAGE (HIGH)	VTH	-	-	100	mV	【Note 3】 When VCM = +1.2V
	THRESHOLD VOLTAGE (LOW)	VTL	-100	-	-	mV	

【Note 1】 Power Sequence :

$$0.5 \text{ ms} \leq t1 \leq 10 \text{ ms}$$

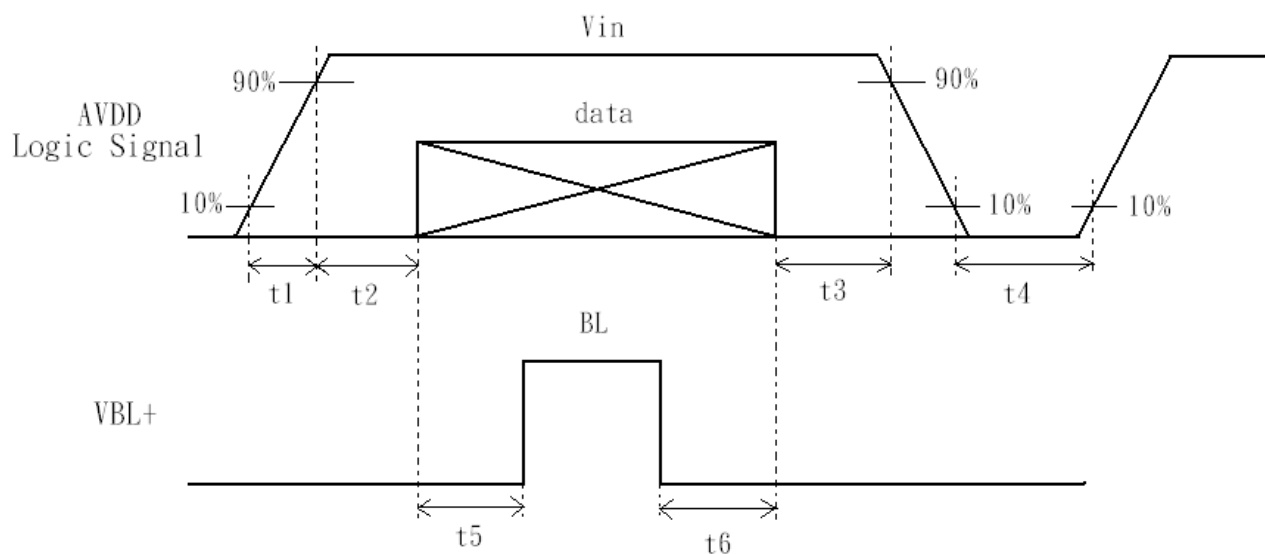
$$0 \text{ ms} < t2 \leq 50 \text{ ms}$$

$$0 \text{ ms} < t3 \leq 50 \text{ ms}$$

$$400 \text{ ms} \leq t4$$

$$200 \text{ ms} \leq t5$$

$$200 \text{ ms} \leq t6$$

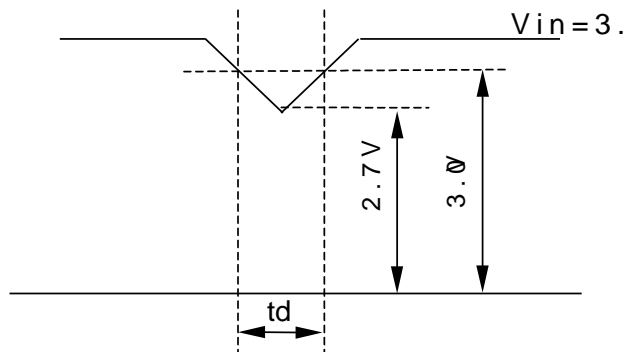


data: RGB DATA, DCLK, HD, VD, DENA

VCC-dip state

(1) when $3.0 > V_{CC} \geq 2.7V$, $t_d \leq 10 \text{ ms}$

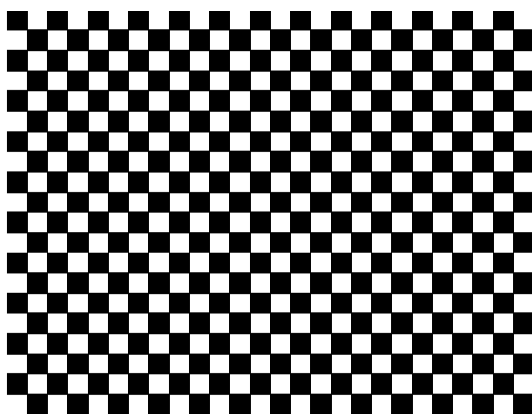
(2) when $V_{CC} < 2.7V$, VCC-dip condition should as the VCC-turn-off condition.



【Note2】 Typical value is Mosaic (32*36 Checker board) Pattern : 768 line mode ◦

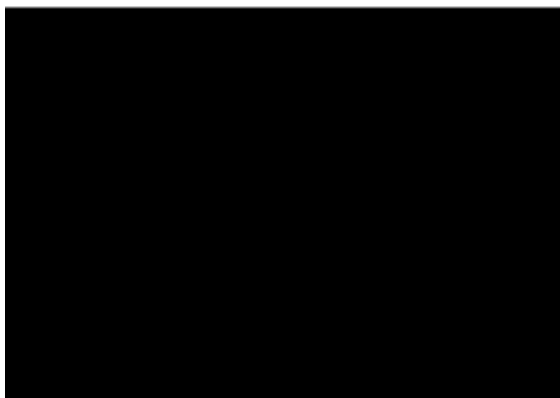
Circuit condition (Typ.) :

$V_{CC}=3.3 \text{ V}$, $f_V=60 \text{ Hz}$, $f_H=46.80 \text{ kHz}$, $f_{CLK}=72.07 \text{ MHz}$

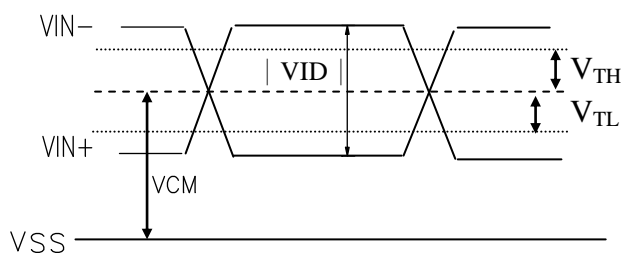
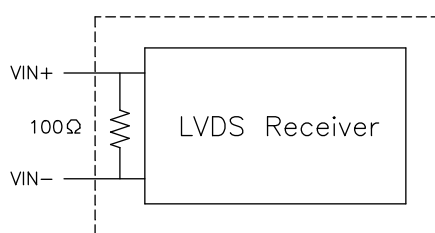


Max value is Black Pattern : 768 line mode ◦

Circuit condition (Max.) : $V_{CC}=3.3 \text{ V}$, $f_V=60 \text{ Hz}$, $f_H=46.80 \text{ kHz}$, $f_{CLK}=72.07 \text{ MHz}$



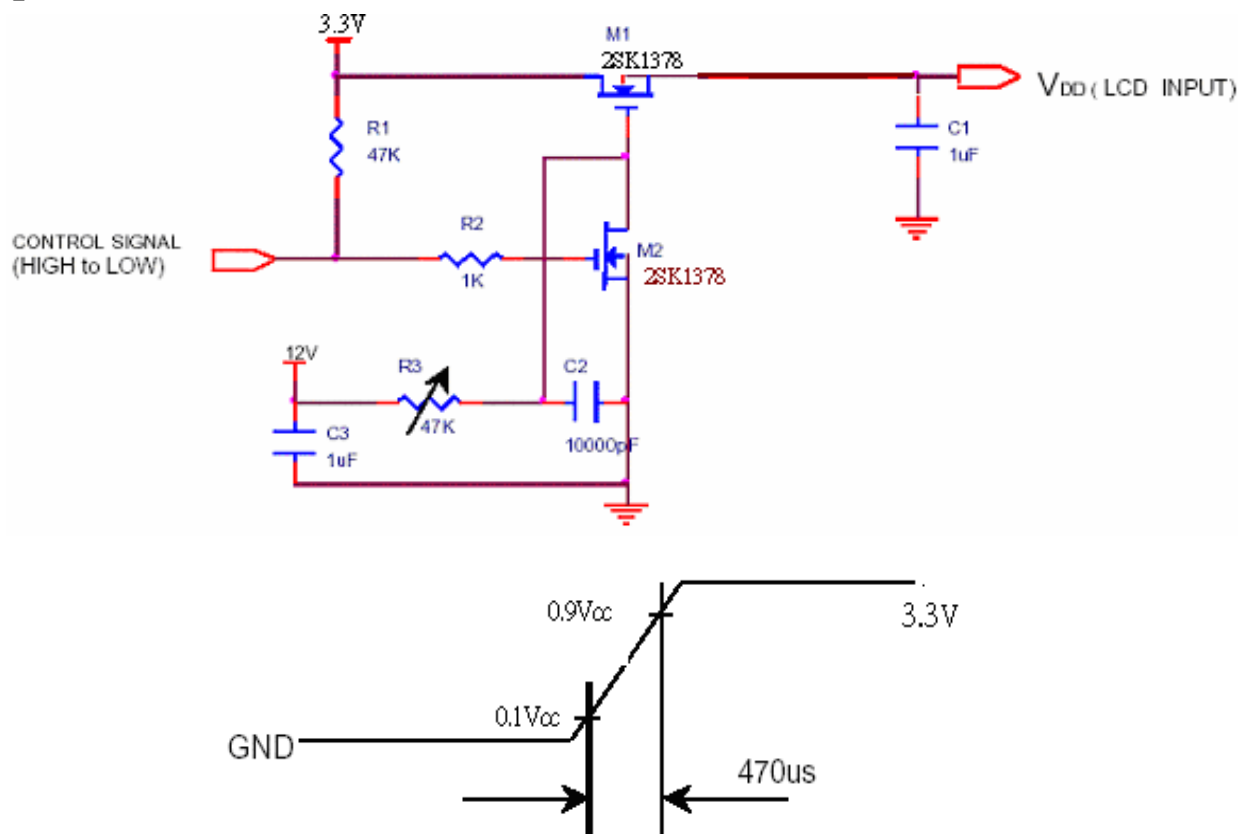
【Note 3】 LVDS Signal Definite :



VIN+ : Positive differential DATA & CLK Input

VIN- : Negative differential DATA & CLK Input

【Note 4】 Irush measure condition



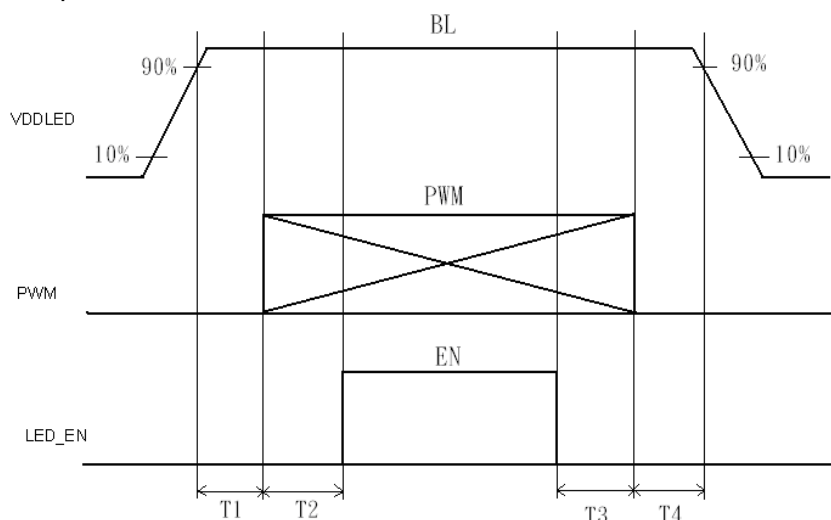
(B) BACK LIGHT**(a.) ELECTRICAL CHARACTERISTICS**

Ta=25°C

ITEM	SYMBOL	MIN	TYP	MAX	UNIT	NOTE
LED Driver Input Voltage	VBL+	5	-	21	V	
LED Driver Input Current	IBL+	-	-	500	mA	
Rush Current	Irush	-	-	2	A	Page 7 【Note 4】
Forward Voltage	VF	-	3.2	3.5	V	*1) I _F =20mA
Forward Current	IF	18	20	22	mA	*1)
Power consumption	PLED	-	1.92	2.5	W	*1)*2) I _F =20mA
PWM Frequency	PWM_BL	180	200	220	Hz	
Duty ratio	Dim	10		100	%	

(b) LED LIFE – TIME

ITEM	Condition	min	typ	max	UNIT	NOTE
LIFE TIME	I _F =20mA、Ta=25°C	15000			hrs	*3)

(c) LED ON/OFF Sequence :

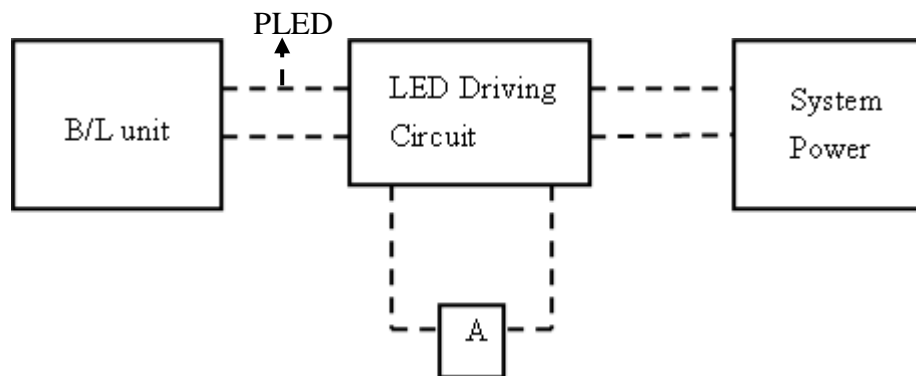
$$10\text{ms} \leq T1$$

$$0\text{ms} \leq T3$$

$$0\text{ms} \leq T2$$

$$10\text{ms} \leq T4$$

- *1)Measure method : a. LED current is measured by utilizing a current meter as show below.
b. We set up system power input voltage at 12v to measurement PLED.



*2)Calculator value for reference $IF \cdot VF = P$

*3)Life time means that estimated time to 50% degradation of initial luminous intensity.

4. Connector Interface PIN & Function

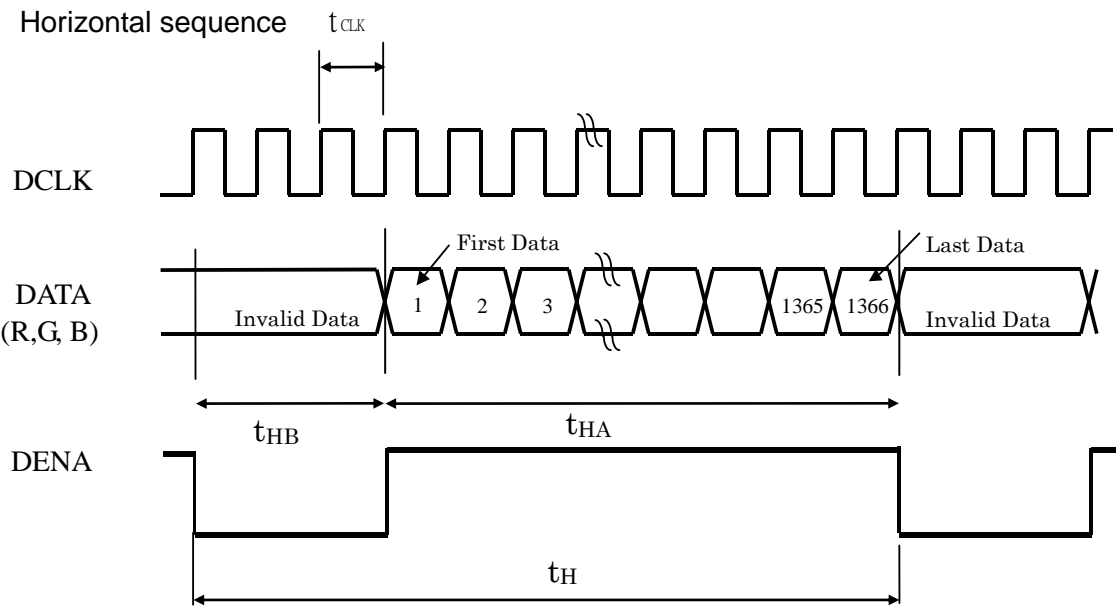
CN(Interface signal)

Outlet connector: I-PEX 20455-040E-12

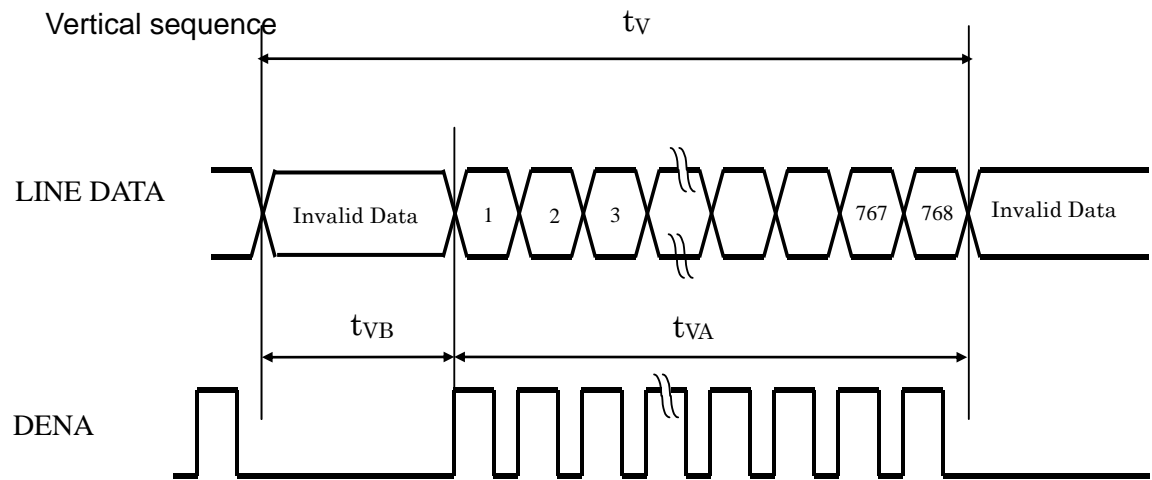
Pin No.	SYMBOL	FUNCTION
1	NC	NC (Please let it floating for CPT test only)
2	V _{CC}	+3.3V Power
3	V _{CC}	+3.3V Power
4	V _{EDID}	EDID 3.3V Power
5	NC	NC(Please let it floating for CPT test only)
6	CLK_EDID	EDID Clock
7	DATA_EDID	EDID Data
8	RXIN0-	LVDS Signal(-)—channel 0
9	RXIN0+	LVDS Signal(+)—channel 0
10	GND	Ground
11	RXIN1-	LVDS Signal(-)—channel 1
12	RXIN1+	LVDS Signal(+)—channel 1
13	GND	Ground
14	RXIN2-	LVDS Signal(-)—channel 2
15	RXIN2+	LVDS Signal(+)—channel 2
16	GND	Ground
17	RXCLKIN-	LVDS Clock Signal(-)
18	RXCLKIN+	LVDS Clock Signal(+)
19	GND	Ground
20	NC	NC (Please let it floating for CPT test only)
21	NC	NC (Please let it floating for CPT test only)
22	GND	Ground
23	NC	NC (Please let it floating for CPT test only)
24	NC	NC (Please let it floating for CPT test only)
25	GND	Ground
26	NC	NC (Please let it floating for CPT test only)
27	NC	NC (Please let it floating for CPT test only)
28	GND	Ground
29	NC	NC (Please let it floating for CPT test only)
30	NC	NC (Please let it floating for CPT test only)
31	VSSLED	Ground – LED
32	VSSLED	Ground – LED
33	VSSLED	Ground – LED
34	NC	NC (Please let it floating for CPT test only)
35	PWM	System PWM Signal Input (+3.3V±0.3V Swing)
36	LED_EN	LED enable pin (+3.3V±0.3V Input)
37	NC	NC(Please let it floating for CPT test only)
38	V _{LED}	Power Supply for LED(V _{LED} =5V ~ 21V)
39	V _{LED}	Power Supply for LED(V _{LED} =5V ~ 21V)
40	V _{LED}	Power Supply for LED(V _{LED} =5V ~ 21V)

5. INTERFACE TIMING CHART

(1)(a). LVDS input time sequence



(b) LCD input time sequence



(2) Timing Chart

ITEM			SYMBOL	MIN	TYP	MAX	UNIT	
LCD Timing	DCLK		Frequency	f _{CLK}	66.12	72.07	80.00	MHz
			Period	t _{CLK}	12.50	13.88	15.12	ns
	DENA	Horizontal	Horizontal total time	t _H	1420	1540	1650	t _{CLK}
			Horizontal Active time	t _{HA}	1366			t _{CLK}
			Horizontal Blank time	t _{HB}	54	174	284	t _{CLK}
		Vertical	Vertical total time	t _V	776	780	808	t _H
			Vertical Active time	t _{VA}	768			t _H
			Vertical Blank time	t _{VB}	8	12	40	t _H

【Note】

- *1) DENA (DATA ENABLE) usually is positive.
- *2) During the whole blank period, DCLK should keep input.

(3) DATA mapping

Color	Input Data	R DATA						G DATA						B DATA					
		R5	R4	R3	R2	R1	R0	G5	G4	G3	G2	G1	G0	B5	B4	B3	B2	B1	B0
		MS B					LS B	MS B					LS B	MS B					LS B
Basic Color	Black	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red(63)	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	Green(63)	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0
	Blue(63)	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	Cyan	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	Magenta	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1
	Yellow	1	1	1	1	1	1	1	1	1	1	1	1	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
RED	RED(0)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	RED(1)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	RED(2)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	RED(62)	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	RED(63)	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Green	Green(0)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Green(1)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Green(2)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	Green(62)	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0
	Green(63)	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0
Blue	Blue(0)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Blue(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Blue(2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	Blue(62)	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0
	Blue(63)	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1

【Note】

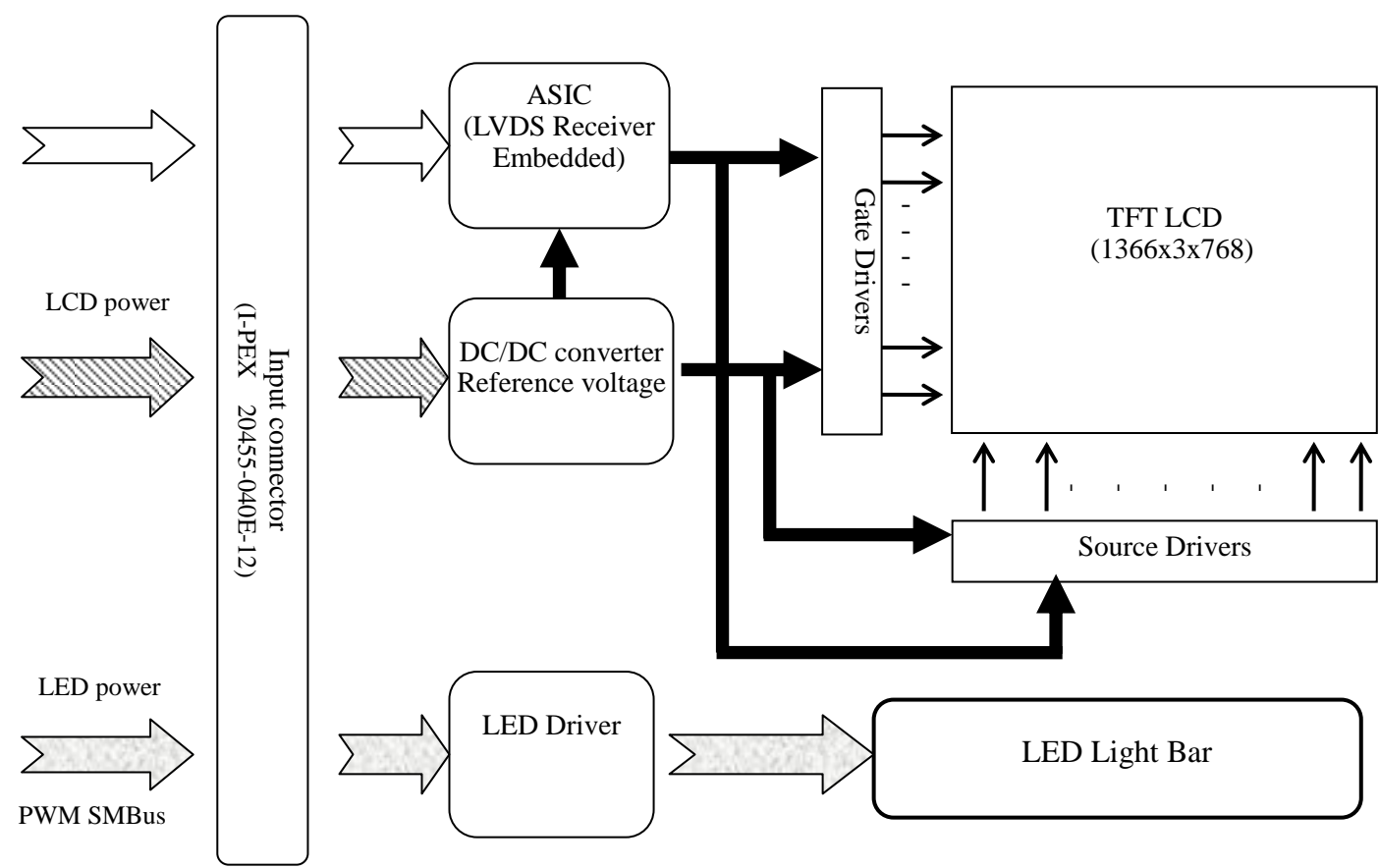
1) Gray level:

Color(n) : n is level order; higher n means brighter level.

2) DATA:

1: high , 0: low

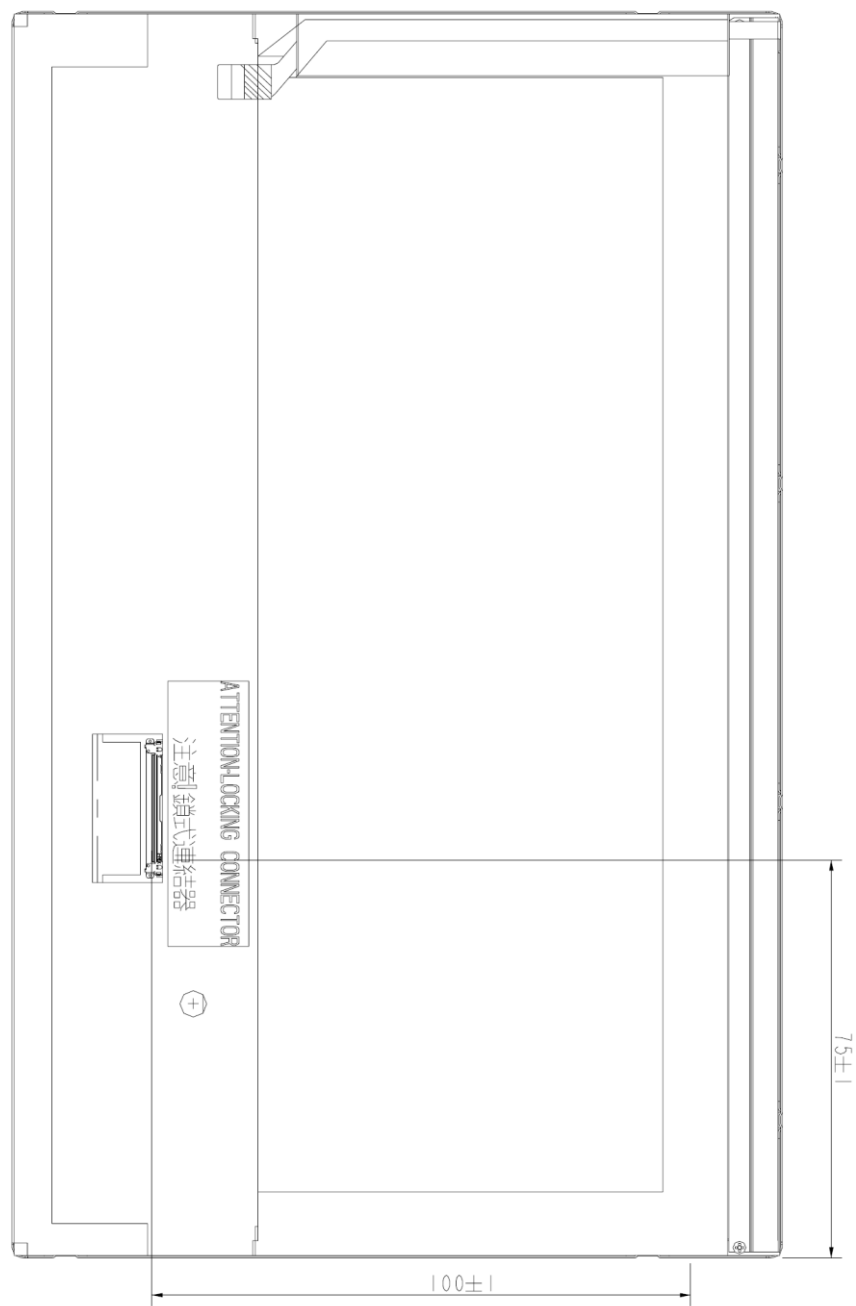
6. BLOCK DIAGRAM



2) Rear side

The tolerance, not show in the figure, is $\pm 0.5\text{mm}$.

[Unit : mm]



8. OPTICAL CHARACTERISTICS

$T_a=25^{\circ}\text{C}$, $V_{DD}=3.3\text{V}$

ITEM		SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	NOTE
Contrast Ratio		CR	Point-7	400	500	-	--	*1) 2)
Luminance (5P)		L	5-Point Avg.	200	220	-	cd/m ²	*1) 3)
Uniformity(5P)		ΔL	θ=ψ= 0°	75	80	-	%	*1) 3)
Uniformity(13P)		ΔL	θ=ψ= 0°	65	-	-	%	*1) 3)
Response Time		Tr	θ=ψ= 0°	-	16	27	ms	*5)
Cross talk		CT	θ=ψ= 0°	-	-	1	%	*6)
View angle	Horizontal	Ψ	CR ≥ 10	40/-40	-	-	°	*4)
	Vertical	θ		15/-30	-	-	°	*4)
Color Temperatur e Coordinate	W	X	θ=ψ= 0°	0.283	0.313	0.343	-	*3)
		Y		0.299	0.329	0.359		
	R	X		0.570	0.600	0.630	-	
		Y		0.310	0.340	0.370		
	G	X		0.280	0.310	0.340	-	
		Y		0.570	0.600	0.630		
	B	X		0.120	0.150	0.180	-	
		Y		0.080	0.110	0.140		
Gamut			θ=ψ= 0°	-	58 %	-	-	
Gamma		γ	GL	2.0	2.2	2.4	-	*7)

Color coordinate and color gamut are measured by SRUL1R, response time is measured by TRD-100, and all the other items are measured by BM-5A (TOPCON). All these items are measured under the dark room condition (no ambient light).

Measurement Condition: IL=20mA (each LED)

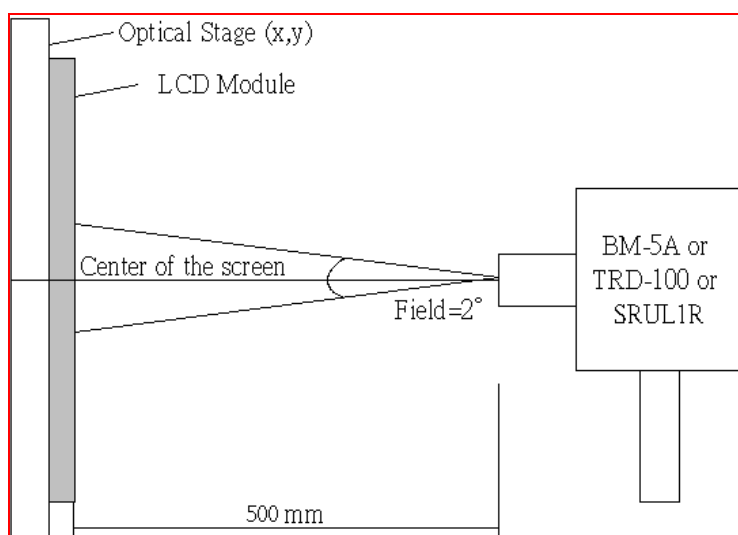
Definition of these measurement items is as follows:

*1) Setup of Measurement Equipment

The LCD module should be turn-on to a stable luminance level to be reached. The measurement should be executed after lighting Backlight for 20 minutes and in a dark room.

*2) Definition of Contrast Ratio

CR=ON (White) Luminance/OFF (Black) Luminance



*3) Definition of Luminance and Luminance uniformity

Central luminance: The white luminance is measured at the center position “5” on the screen, see Fig.1 below.

5P Luminance (AVG): The white luminance is measured at measuring points 5、10、11、12、13, see Fig.1 below.

5P Uniformity: $\Delta L = (L_{min} / L_{max}) \times 100\%$

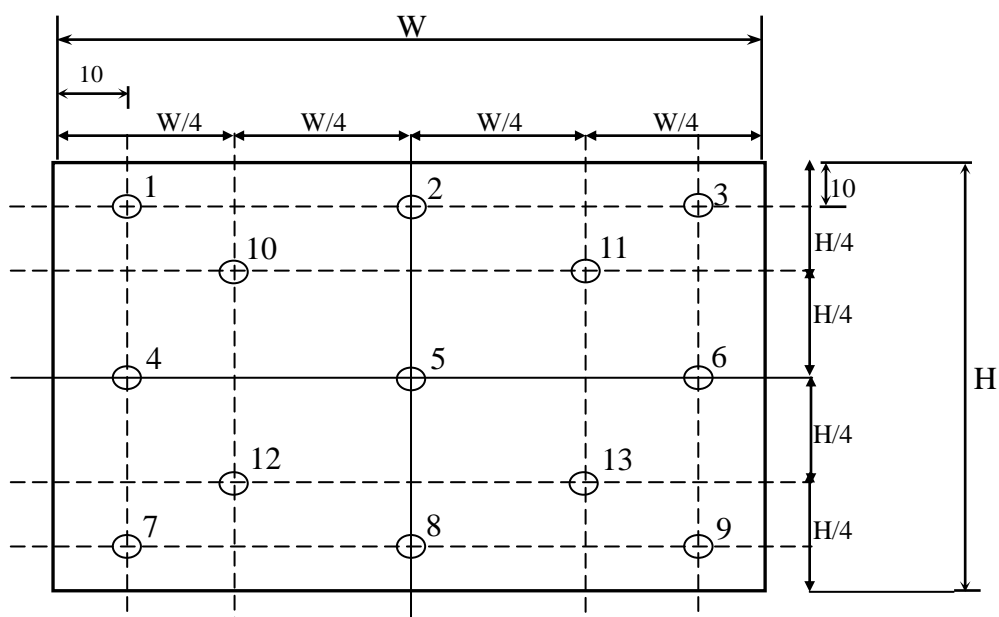
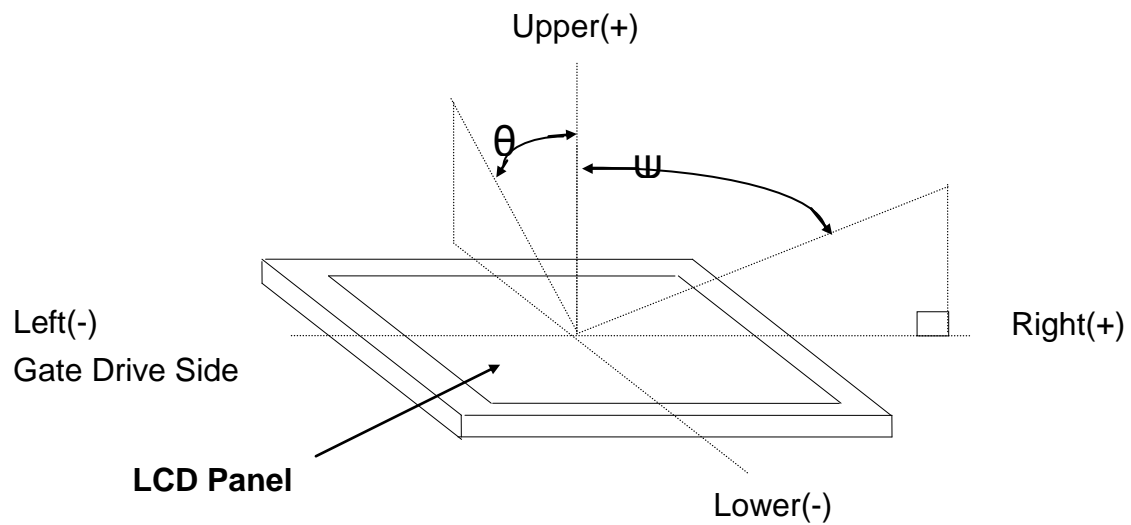
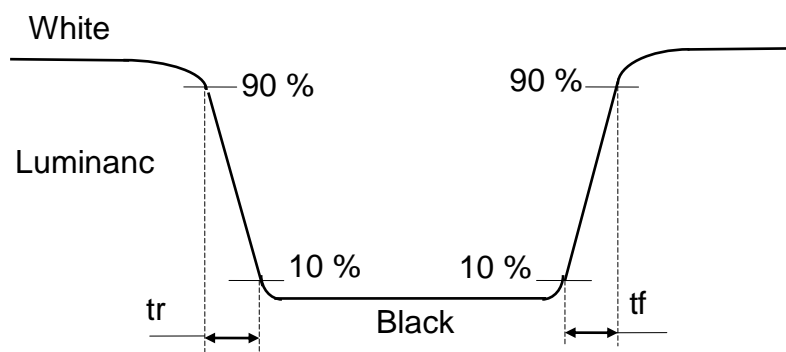


Fig.1 Measure point (Active area)

***4) Definition of view angle(θ , ψ)**



***5) Definition of response time**



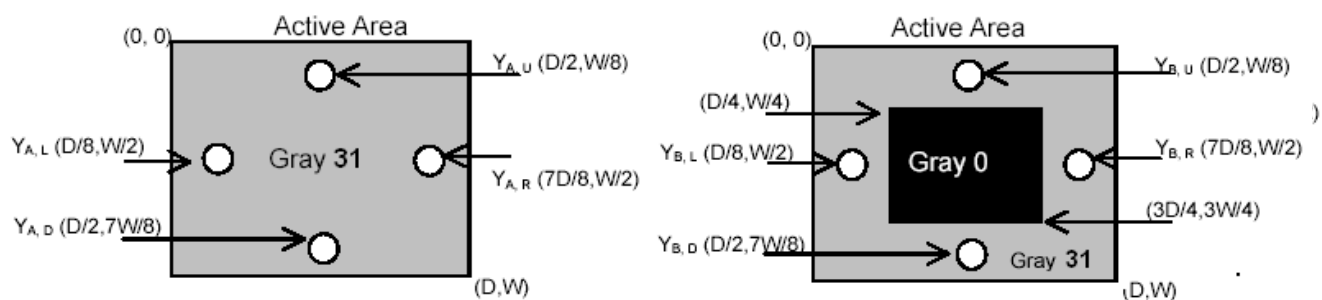
***6) Crosstalk Modulation Ratio:**

$$CT = |Y_B - Y_A| / Y_{Ax} \times 100\%$$

Y_A 、 Y_B measure position and definition

Y_A means luminance at gray level 32(exclude gray level 0 pattern)

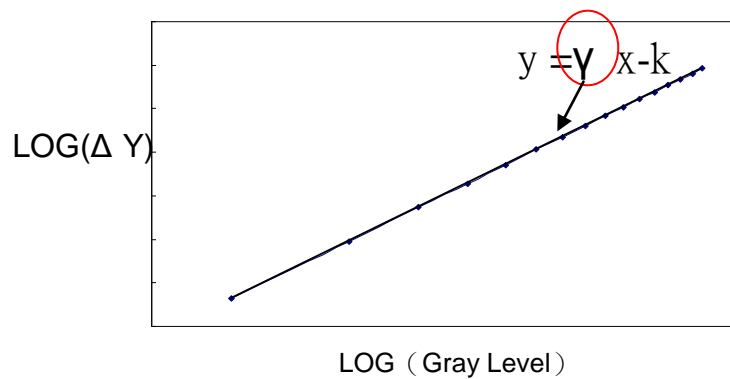
Y_B means luminance at gray level 32(include gray level 0 pattern)



***7) Definition Gamma (VESA)**

Based on Customer Sample, take the average value as a standard center value and the variation range of gamma value caused by loop voltage error should be between +/- 0.2. the bellow figure shows how to obtain

the gamma curve and γ (from gray level: 0 、 4 、 8-----60 、 63).



9. RELIABILITY TEST CONDITIONS

9.1 Temperature and Humidity:

(LCD also need to meet Sony LCD Note PC LCD Reliability Standard)

TEST ITEMS	CONDITIONS
High Temperature Operation	50° C ; 240Hrs
High Temperature Storage	60° C ; 240Hrs
High Temperature High Humidity Operation	50° C ; 90% RH ; 240Hrs
High Temperature High Humidity Storage	60° C ; 90% RH ; 48 Hrs
Low Temperature Operation	0° C ; 240 Hrs
Low Temperature Storage	-20° C ; 240 Hrs
Thermal Shock	-20° C (0.5 hr)~60° C (0.5 hr) , Ramp<20° C , 100 CYCLE
Temperature & Pressure Storage	25° C ; 260hPa(about 10000m) , 24 Hrs

9.2 Shock & Vibration:

TEST ITEMS	CONDITIONS
Shock (Operating)	120G 3msec Half sin wave ±X, ±Y, ±Z, 1 time each
Shock (Non-Operating)	210G 3msec Half sin wave ±X, ±Y, ±Z, 1 time each
Vibration (Operating)	Random 1.1Grms 5-50Hz 0.024G2/Hz 50-100Hz -36dB/oct X,Y,Z 20min total 60 min
Vibration (Non-Operating)	Random 2.3Grms 5-50Hz 0.011G2/Hz 50-100Hz -36dB/oct X,Y,Z 20min total 60 min

9.3 ESD:

ITEMS	CONDITIONS
Module	Air ±15KV,150pF , 330Ω , 1.Under test conditions, by using air-mode to discharge each test point 25 times continuously and then check the module frame. 2. Under test conditions, by using contact-mode to discharge each test point of panel frame 25 times continuously and then check the module frame.
Connector	200 pF , 0 Ω , ±250 V By using contact-mode to discharge each pin one time and then check the module frame.

9.4Altitude :

ITEMS	CONDITIONS
Operating altitule	700 Pa(3000m). 48H.
Storage altitule	260 Pa(10000m).48H.

9.5 MTBF without B/L : 200,000 Hrs(min) life time.

9.6 Judgment standard

The judgment of the above test should be made as follow:

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.

10. HANDLING PRECAUTIONS FOR TFT-LCD MODULE

Please pay attention to the followings in handling- TFT-LCD products.

10.1 ASSEMBLY PRECAUTION

- (1) Please use the mounting hole on the module side in installing and do not beading or wrenching LCD in assembling. And please do not drop, bend or twist LCD module in handling.
- (2) Please design display housing in accordance with the following guidelines.
 - Housing case must be destined carefully so as not to put stresses on LCD all sides and not to wrench module. The stresses may cause non-uniformity even if there is no non-uniformity statically.
 - Keep sufficient clearance between LCD module back surface and housing when the LCD module is mounted. Approximately 1.0 mm of the clearance in the design is recommended taking into account the tolerance of LCD module thickness and mounting structure height on the housing.
 - When some parts, such as, FPC cable and ferrite plate, are installed underneath the LCD module, still sufficient clearance is required, such as 0.5mm. This clearance is, especially, to be reconsidered when the additional parts are implemented for EMI countermeasure.
 - Keep sufficient clearance between LCD module and the others parts, such as speaker so as not to interface the LCD module. Approximately 1.0mm of the clearance in the design is recommended.
- (3) Please do not push or scratch LCD panel surface with any-thing hard. And do not soil LCD panel surface by touching with bare hands. (Polarizer film, surface of LCD panel is easy to be flawed.)
- (4) Please do not press any parts on the rear side such as source TCP, gate TCP, control circuit board and FPCs during handling LCD module. If pressing rear part is unavoidable, handle the LCD module with care not to damage them.
- (5) Please wipe out LCD panel surface with absorbent cotton or soft clothe in case of it being soiled.
- (6) Please wipe out drops of adhesives like saliva and water on LCD panel surface immediately. They might damage to cause panel surface variation and color change.
- (7) Please do not take a LCD module to pieces and reconstruct it. Resolving and reconstructing modules may cause them not to work well.
- (8) Please do not touch metal frames with bare hands and soiled gloves. A color change of the metal frames can happen during a long preservation of soiled LCD modules.

10.2 OPERATING PRECAUTIONS

- (1) Please be sure to turn off the power supply before connecting and disconnecting signal input cable.
- (2) Please do not change variable resistance settings in LCD module. They are adjusted to the most suitable value. If they are changed, it might happen LCD does not satisfy the characteristics specification.
- (3) Please consider that LCD backlight takes longer time to become stable of radiation characteristics in low temperature than in room temperature.
- (4) A condensation might happen on the surface and inside of LCD module in case of sudden change of ambient temperature.

- (5) Please pay attention to displaying the same pattern for very long time. Image might stick on LCD. If then, time going on can make LCD work well.
- (6) Please obey the same caution descriptions as ones that need to pay attention to ordinary electronic parts.

10.3 PRECAUTIONS WITH ELECTROSTATICS

- (1) This LCD module use CMOS-IC on circuit board and TFT-LCD panel, and so it is easy to be affected by electrostatics. Please be careful with electrostatics by the way of your body connecting to the ground and so on.
- (2) Please remove protection film very slowly on the surface of LCD module to prevent from electrostatics occurrence.

10.4 STORAGE PRECAUTIONS

- (1) When you store LCDs for a long time, it is recommended to keep the temperature between 0°C ~40°C without the exposure of sunlight and to keep the humidity less than 90%RH.
- (2) Please do not leave the LCDs in the environment of high humidity and high temperature such as 60°C 90%RH.
- (3) Please do not leave the LCDs in the environment of low temperature; below -20°C.

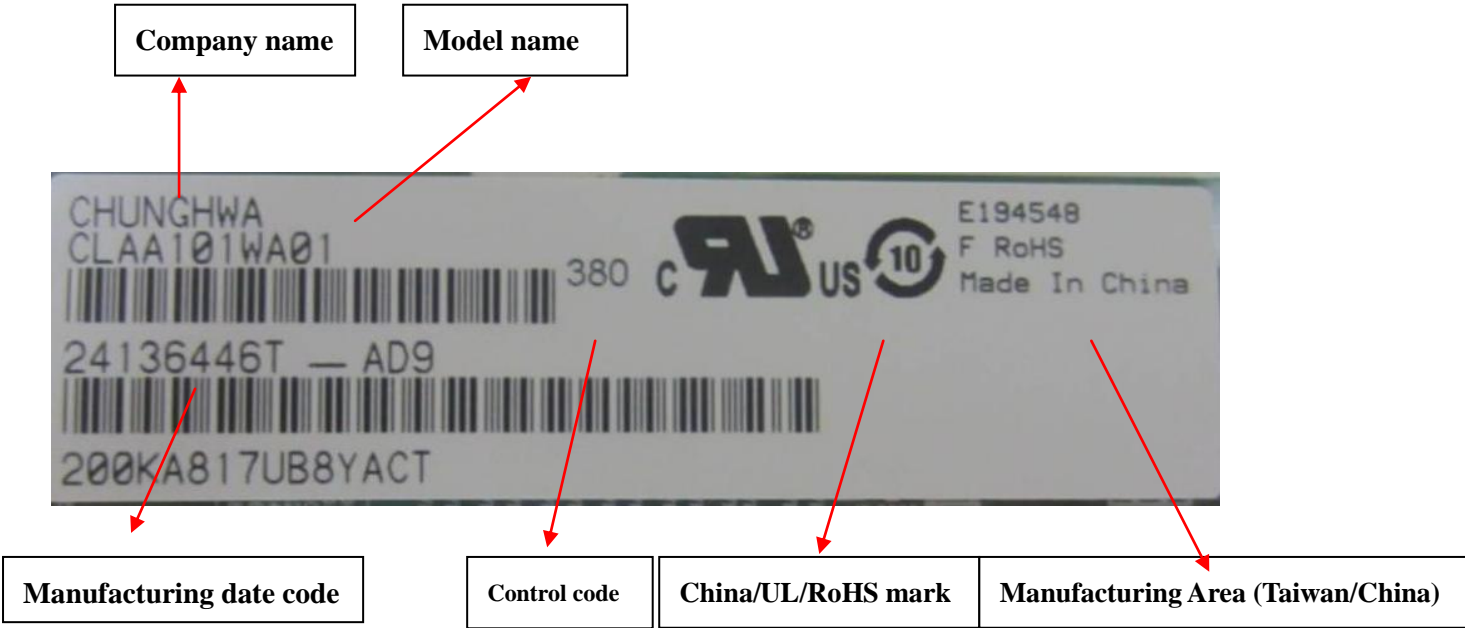
10.5 SAFETY PRECAUTIONS

- (1) When you waste LCDs, it is recommended to crush damaged or unnecessary LCDs into pieces and wash them off with solvents such as acetone and ethanol, which should later be burned.
- (2) If any liquid leaks out of a damaged-glass cell and comes in contact with the hands, wash off thoroughly with soap and water.

10.6 OTHERS

- (1) A strong incident light into LCD panel might cause display characteristics' changing inferior because of polarizer film, color filter, and other materials becoming inferior. Please do not expose LCD module direct sunlight and strong UV rays.
- (2) Please pay attention to a panel side of LCD module not to contact with other materials in preserving it alone.
- (3) For the packaging box, please pay attention to the followings:
 - Packaging box and inner case for LCD are designed to protect the LCDs from the damage or scratching during transportation. Please do not open except picking LCDs up from the box.
 - Please do not pile them up more than 3 boxes. (They are not designed so.) And please do not turn over.
 - Please handle packaging box with care not to give them sudden shock and vibrations. And also please do not throw them up.
 - Packing box and inner case for LCDs are made of cardboard. So please pay attention not to get them wet. (Such like keeping them in high humidity or wet place can occur getting them wet.)

APPENDIX-1 : panel label format



APPENDIX-2 - ISP Enhanced Extended Display Identification Data (EEDID) Requirements**LCD MODULE NAME : CLAA101WA01 (GLARE TYPE)**

Byte# (dec)	Byte# (hex)	Field Name and Comments	Value (hex)
0	0		0
1	1		FF
2	2		FF
3	3		FF
4	4		FF
5	5		FF
6	6		FF
7	7		0
8	8	EISA manufacturer code = CPT (1 st byte)	0E
9	9	(2 nd byte)	14
10	0A	Product code LSB =84	84
11	0B	Product code MSB =1C	1C
12	0C	ID (32-bit) serial number (preferred, but optional, zero if not used)	0
13	0D		0
14	0E		0
15	0F		0
16	10	Week of manufacture (preferred, but optional, zero if not used)	10
17	11	Year of manufacture (preferred, but optional, zero if not used)	13
18	12	EDID Structure version # = 1	1
19	13	EDID Revision # = 3	3
20	14	Video input definition (Digital I/P, non TMDS CRGB)	80
21	15	Max H image size (22.3) (rounded to cm)	16
22	16	Max V image size (12.5) (rounded to cm)	0C
23	17	Display gamma =2.2 (=(gamma*100)-100)	78
24	18	Features (no DPMS, Active off, RGB, timing BLK1)	0A
25	19	Red/Green low Bits	82
26	1A	Blue/White Low Bits	7D
27	1B	Red X Rx = 0.600	99
28	1C	Red Y Ry = 0.340	57
29	1D	Green X Gx = 0.310	4F
30	1E	Green Y Gy = 0.600	99
31	1F	Blue X Bx = 0.150	26
32	20	Blue Y By = 0.110	1C
33	21	White X Wx = 0.313	50
34	22	White Y Wy = 0.329	54
35	23	Established Timing I not used	0
36	24	Established Timing II not used	0
37	25	Manufacturer's Timings not used	0

38	26	Standard Timing Identification 1 not used	1
39	27	Standard Timing Identification 1 not used	1
40	28	Standard Timing Identification 2 not used	1
41	29	Standard Timing Identification 2 not used	1
42	2A	Standard Timing Identification 3 not used	1
43	2B	Standard Timing Identification 3 not used	1
44	2C	Standard Timing Identification 4 not used	1
45	2D	Standard Timing Identification 4 not used	1
46	2E	Standard Timing Identification 5 not used	1
47	2F	Standard Timing Identification 5 not used	1
48	30	Standard Timing Identification 6 not used	1
49	31	Standard Timing Identification 6 not used	1
50	32	Standard Timing Identification 7 not used	1
51	33	Standard Timing Identification 7 not used	1
52	34	Standard Timing Identification 8 not used	1
53	35	Standard Timing Identification 8 not used	1
54	36	Pixel Clock (LSB)	78
55	37	Pixel Clock= 75.44MHz 1366X 768@60Hz (MSB)	1D
56	38	Horizontal Active = 1366 pixels Notes2 (lower 8 bits)	56
57	39	Horizontal Blanking = 194 pixels (lower 8 bits)	C2
58	3A	Horizontal Active : Horizontal Blanking(thbp) (upper 4:4 bits)	50
59	3B	Vertical Active = 768 lines	00
60	3C	Vertical Blanking(tvbp) = 38 lines (DE Blanking min for DE-only panels) lines	26
61	3D	Vertical Active : Vertical Blanking(tvbp) (upper 4:4 bits)	30
62	3E	Horizontal Sync. Offset (thfp)= 59 pixels (front porch)	3B
63	3F	Horizontal Sync Pulse Width = 39 pixels(WHL)	27
64	40	Vertical Sync Offset (tvfp)= 5 lines, Sync Width(tWVL) = 9 lines	59
65	41	Horizontal Vertical Sync Offset/Width upper 2bits	00
66	42	Horizontal Image Size = 223mm (lower 8bits)	DF
67	43	Vertical Image Size = 125mm (lower 8bits)	7D
68	44	Horizontal & Vertical Image Size (upper 4:4bits)	00
69	45	Horizontal Border = X (Zero for internal LCD)	0
70	46	Vertical Border = X (Zero for internal LCD)	0
71	47	Non-interlaced, Normal display, no stereo, Digital separate sync, H/V pol negatives	19
72	48	Flag	0
73	49	Flag	0
74	4A	Flag	0
75	4B	Data Type Tag: Descriptor Defined by Manufacture	0F
76	4C	Flag	0
77	4D	value=HSPWmin/2 (pixel clks) WHL	20
78	4E	value=HSPWmax/2 (pixel clks) WHL	20
79	4F	value= Thbp min/2 (pixel clks) (for DE-only timing also, with Thfp=0)	20
80	50	value= Thbp max/2 (pixel clks) (for DE-only timing also, with Thfp=0)	20
81	51	value=VSPWmin/2 (line pulses) WVL	20
82	52	value=VSPWmax/2 (line pulses) WVL	20
83	53	value= Tvbp min/2	20

84	54	value= Tv bpmax/2	20
85	55	Thp min=value*2+HApixelClks (pixel clks) Note2	A0
86	56	Thp max=value*2+HApixelClks (pixel clks) Note2	FF
87	57	Tvp min=value*2+Valines (line pulses)	2
88	58	Tvp max=value*2+Valines (line pulses)	32
89	59	Module revision	0
90	5A	Flag	0
91	5B	Flag	0
92	5C	Flag	0
93	5D	Data Type Tag: (Monitor) ASCII String	FE
94	5E	Flag	0
95	5F	"C",67	43
96	60	"P",80	50
97	61	"T",84	54
98	62		0A
99	63		20
100	64		20
101	65		20
102	66		20
103	67		20
104	68		20
105	69		20
106	6A		20
107	6B	(if <13 char, then terminate with ASCII code 0Ah, and set remaining char = 20h)	20
108	6C	Flag	0
109	6D	Flag	0
110	6E	Flag	0
111	6F	Data Type Tag: (Monitor) ASCII String	FE
112	70	Flag	0
113	71	"C",67	43
114	72	"L",76	4C
115	73	"A",65	41
116	74	"A",65	41
117	75	"1",49	31
118	76	"0",48	30
119	77	"1",49	31
120	78	"W",87	57
121	79	"A",65	41
122	7A	"0",48	30
123	7B	"1",49	31
124	7C		A
125	7D	(if <13 char, then terminate with ASCII code 0Ah, and set remaining char = 20h)	20
126	7E	Extension Flag (# of optional 128-byte EDID extension blocks to follow, typ=0)	0
127	7F	Checksum (the 1-byte sum of all 128 bytes in this EDID block shall equal zero)	F5

PS : The value of yellow color column will be changed by the date of product cycle

