



Chunghwa Picture Tubes, Ltd.

Technical Specification

To :

Date : 090609

CPT TFT-LCD
CLAA116WA01

Accepted by:

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APPROVED BY	CHECKED BY	PREPARED BY
黃奕凱	劉益群	莊志升

Prepared by : Design General Division

CHUNGHWA PICTUER TUBES, LTD.

No. 1, Huaying Rd., Sanho Tsun, Lungtan Shiang, Taoyuan, Taiwan, 325, R.O.C.
TEL: +886-3-4805678 FAX: +886-3-4800589

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Modification Record List

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1. OVERVIEW

CLAA116WA01 is 29.3 cm (11.6") color TFT-LCD (Thin Film Transistor Liquid Crystal Display) module composed of LCD panel, driver ICs, control circuit and LED backlight. By applying 1366×768 images are displayed on the 11.6" diagonal screen. Display 262K colors by 6 Bit R.G.B signal input. Use 3.3 voltages to drive the power of LCD system. General specification is summarized in the following table :

ITEM	SPECIFICATION			
Display Area (mm)	256.125 (H) × 144.00 (V) (11.6-inch diagonal)			
Number of Pixels	1366(H) × 3(RGB) × 768(V)			
Pixel Pitch (mm)	0.1875 (H) × 0.1875 (V)			
Color Pixel Arrangement	RGB vertical stripe			
Display Mode	Normally white, TN			
Number of Colors	262,144			
Optimum Viewing Angle	6 o'clock			
Response Time (ms)	10ms			
Viewing Angle (L/R/U/D)	45°、45°/15°、30° (Typ.)			
Brightness(cd/m ²)--5 point average	200 (typ)			
Uniformity (Min)	5point : 80%			
Consumption of Power (W)	4.0W (Max)			
Module Weight (g)	255 (max)			
Backlight Unit	LED			
Electrical Interface(data)	LVDS			
Surface Treatment	Anti-Glare type , Hardness : 3H			
Module Size (mm)		Min.	Typ.	Max.
	Horizontal (H)	267.7	268	268.3
	Vertical (V)	161.2	161.5	161.8
	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	-25	65	°C	*1). 2). 3)

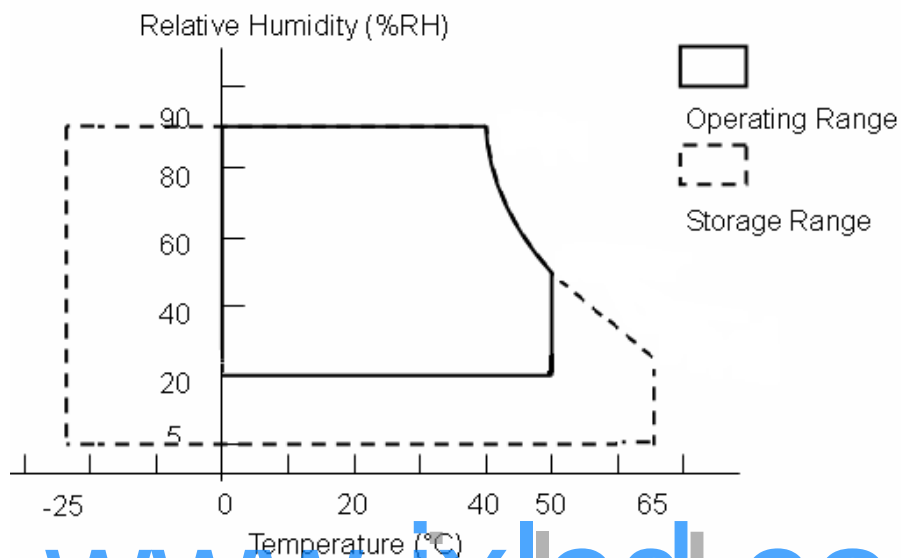
【Note】

*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 .



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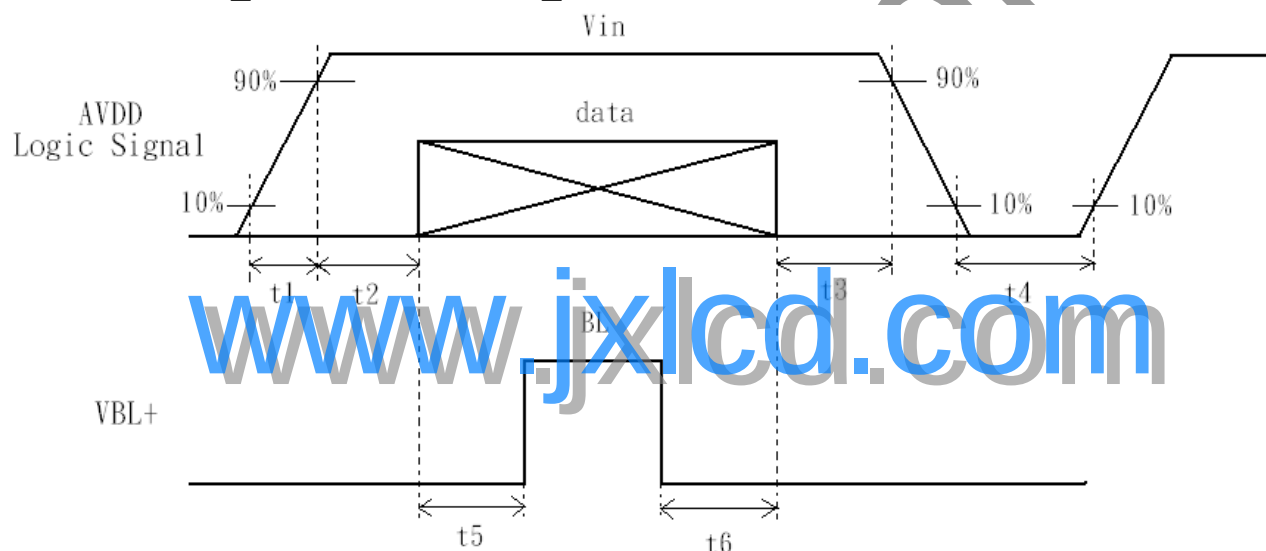
3. ELECTRICAL CHARACTERISTICS

(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	-	350	400	mA	【Note 2】
Rush CRRENT		Irush	-	-	1	A	【Note 4】
LOGIC INPUT VOLTAGE (LVDS: IN+,IN-)	COMMON VOLTAGE	VCM	1.08	1.2	1.32	V	【Note 3】
	DIFFERENTIAL INPUT VOLTAGE	VID	250	350	450	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 :

$$\begin{array}{ll}
 0.5 \text{ ms} \leq t_1 \leq 10 \text{ ms} & 1 \text{ sec} \leq t_4 \\
 0.01 \text{ ms} < t_2 \leq 50 \text{ ms} & 200 \text{ ms} \leq t_5 \\
 0.01 \text{ ms} < t_3 \leq 50 \text{ ms} & 200 \text{ ms} \leq t_6
 \end{array}$$

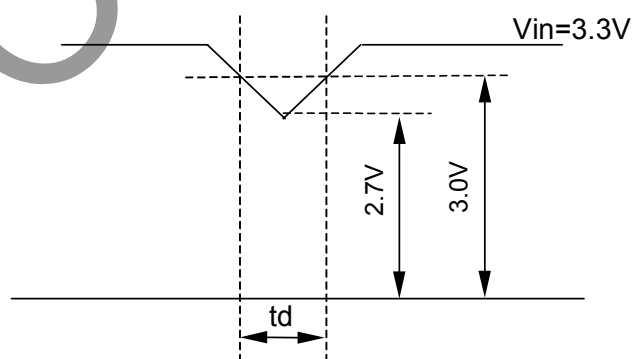


data: RGB DATA, DCLK, HD, VD, DENA

VCC-dip state

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

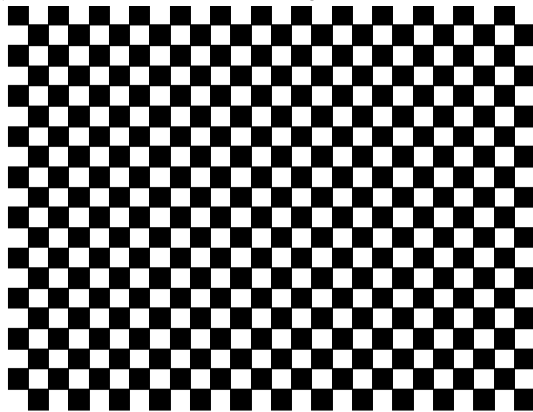
(2) when $VCC < 2.7V$, VCC-dip condition should as the VCC-turn-off condition.



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

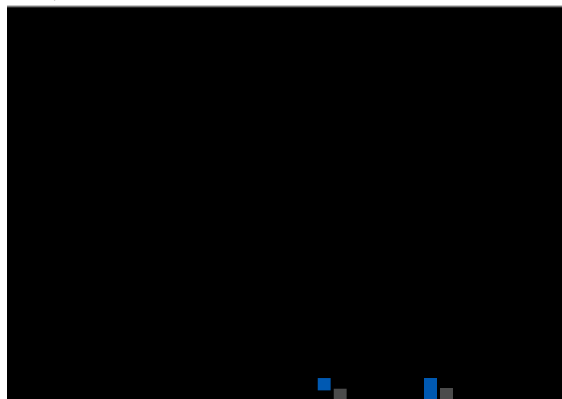
Circuit condition (Typ.) :

$V_{CC}=3.3\text{ V}$, $f_V=60\text{ Hz}$ $f_H=48.36\text{ kHz}$, $f_{CLK}=75.44\text{ MHz}$



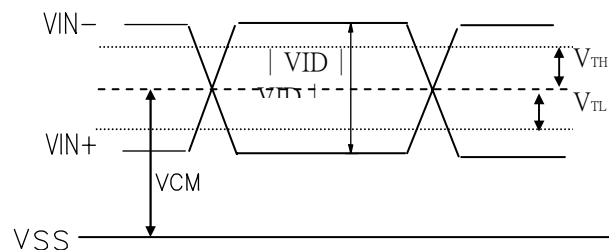
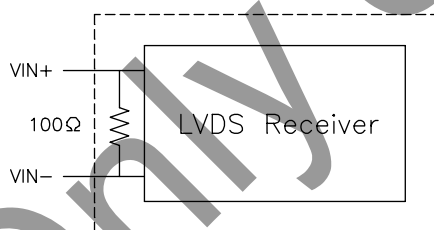
Max value is Black Pattern : 768 line mode ◦

Circuit condition (Max.) : $V_{CC}=3.3\text{ V}$, $f_V=60\text{ Hz}$ $f_H=48.36\text{ kHz}$, $f_{CLK}=75.44\text{ MHz}$



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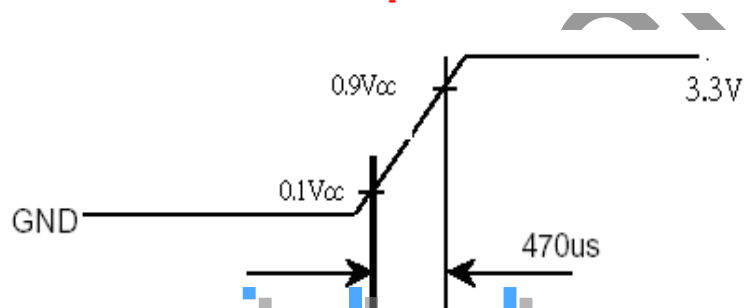
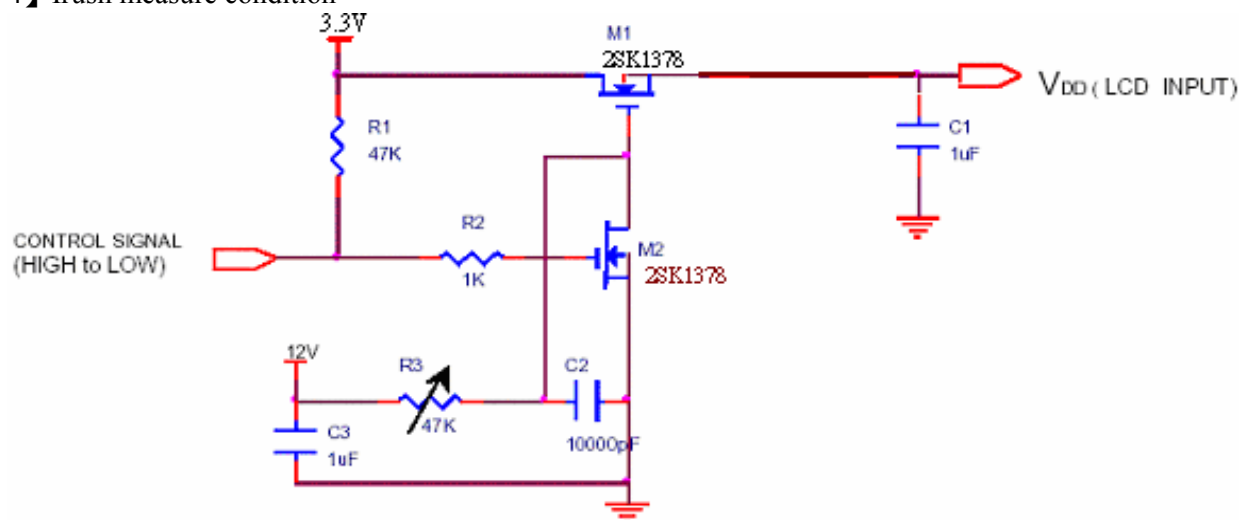
【Note 3】 LVDS Signal Definite :



VIN+ : Positive differential DATA & CLK Input

VIN- : Negative differential DATA & CLK Input

【Note 4】 Irush measure condition



(B) BACK LIGHT

(a.) ELECTRICAL CHARACTERISTICS

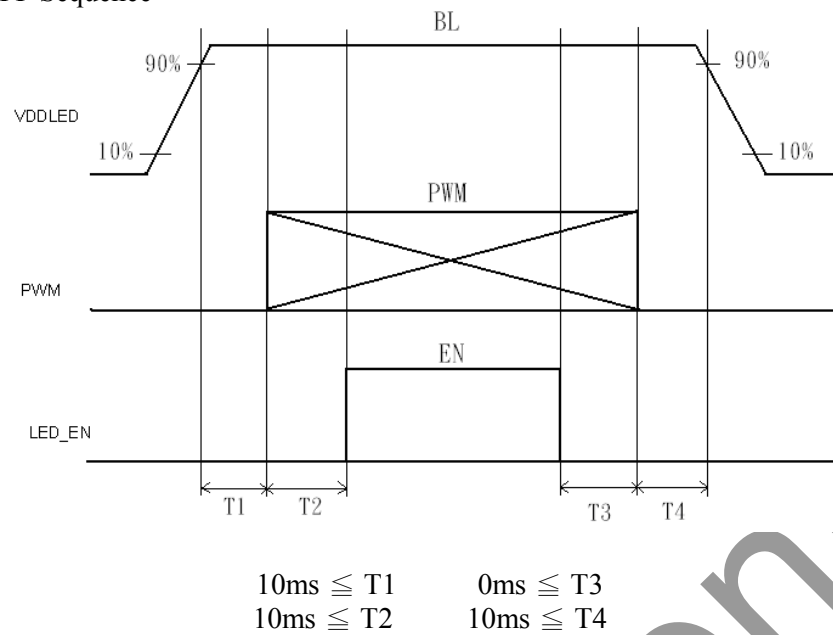
ITEM	SYMBOL	MIN	TYP	MAX	UNIT	NOTE
LED Driver Input Voltage	VBL+	5	-	19	V	
LED Driver Input Current	IBL+	-	-	550	mA	VBL+=5V
Forward Voltage	VF	2.8	3.1	3.5	V	*1)IF=20mA
Forward Current	IF		20		mA	*1)
Power consumption	PLED	56	62	70	mW	*1)*2)IF=18mA
PWM Frequency	PWM_BL	180	200	1k	Hz	
Duty ratio	Dim	10		100	%	

Ta=25°C

(b) LED LIFE – TIME

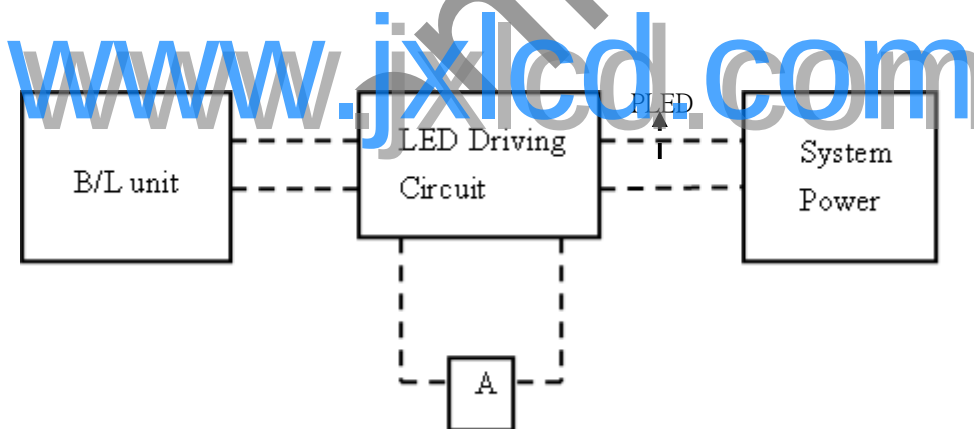
ITEM	Condition	min	typ	max	UNIT	NOTE
LIFE TIME	IF=20mA、Ta=25°C	15000			hrs	*3)

(c) LED ON/OFF Sequence :



Note : The duty of LED dimming signal should be more than 20% in T2 and T3

- *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)

Connector type : I-PEX 20455-040E-12 or compatible

Pin No.	SYMBOL	FUNCTION
1	NC	NC
2	V _{CC}	+3.3V Power
3	V _{CC}	+3.3V Power
4	V _{EDID}	EDID 3.3V Power
5	NC	No Connect
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
21	NC	NC
22	GND	Ground
23	NC	NC
24	NC	NC
25	GND	Ground
26	NC	NC
27	NC	NC
28	GND	Ground
29	NC	NC
30	NC	NC
31	GND	Ground
32	GND	Ground
33	GND	Ground
34	NC	NC
35	ADJ	Adjust for LED brightness
36	LED-EN	LED Enable pin(+3V Input)
37	NC	NC
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)

【Note】

BIST (Build in self-test pattern)

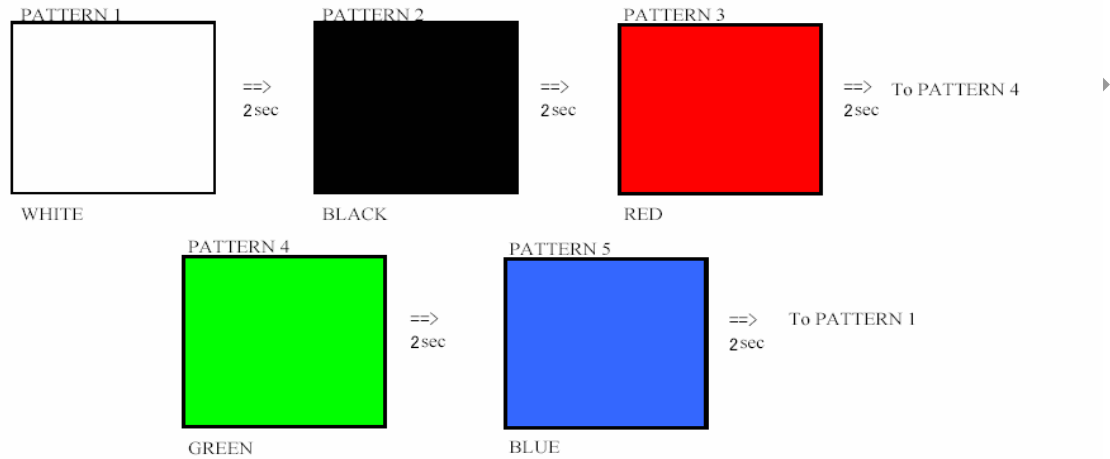
BIST pin = low(GND) : Normal

BIST pin = high(VCC) : Self-test mode

(1). Self-test Display Pattern change when pin 5 is high and no LVDS input signals detected, as followed patterns runs continuously. (White, Black, Red, Green and Blue).

(2). Pattern sequence

Pattern1 → Pattern2 → Pattern3 → Pattern4 → Pattern5 → Pattern1 →

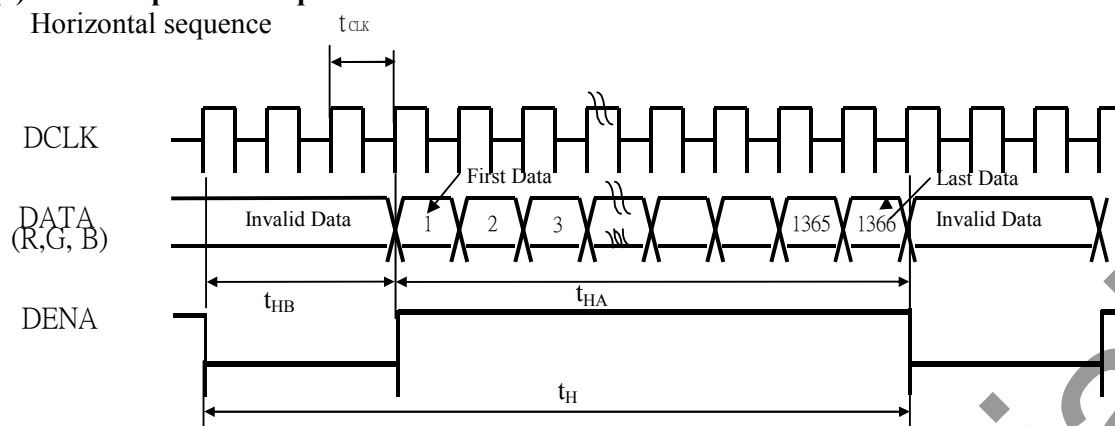


Alternative Display Pattern Sequence

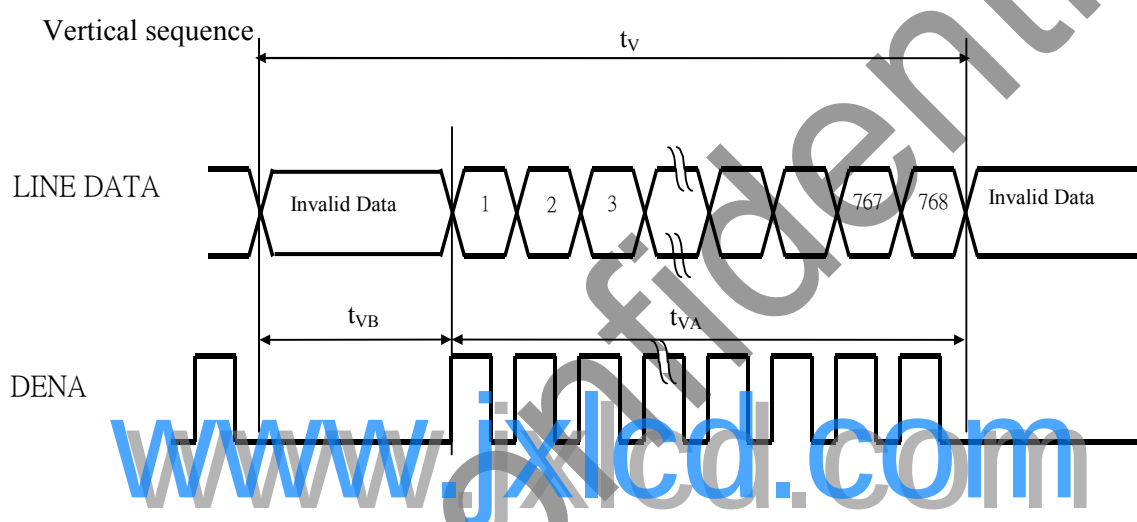
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5. INTERFACE TIMING CHART

(1)(a). LVDS input time sequence



(b) LCD input time sequence



(2) Timing Chart

ITEM		SYMBOL	MIN	TYP	MAX	UNIT
LCD Timing	Frame Rate		-	60		Hz
	DCLK	Frequency	f_{CLK}	65.6	69.3	MHz
		Period	t_{CLK}	13.0	14.3	ns
	DENA	Horizontal total time	t_H	1410	1433	t_{CLK}
		Horizontal Active time	t_{HA}	1366		t_{CLK}
		Horizontal Blank time	t_{HB}	44	67	t_{CLK}
	Vertical	Vertical total time	t_v	775	806	t_H
		Vertical Active time	t_{vA}	768		t_H
		Vertical Blank time	t_{vB}	7	38	t_H

【Note】

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

(3) DATA mapping

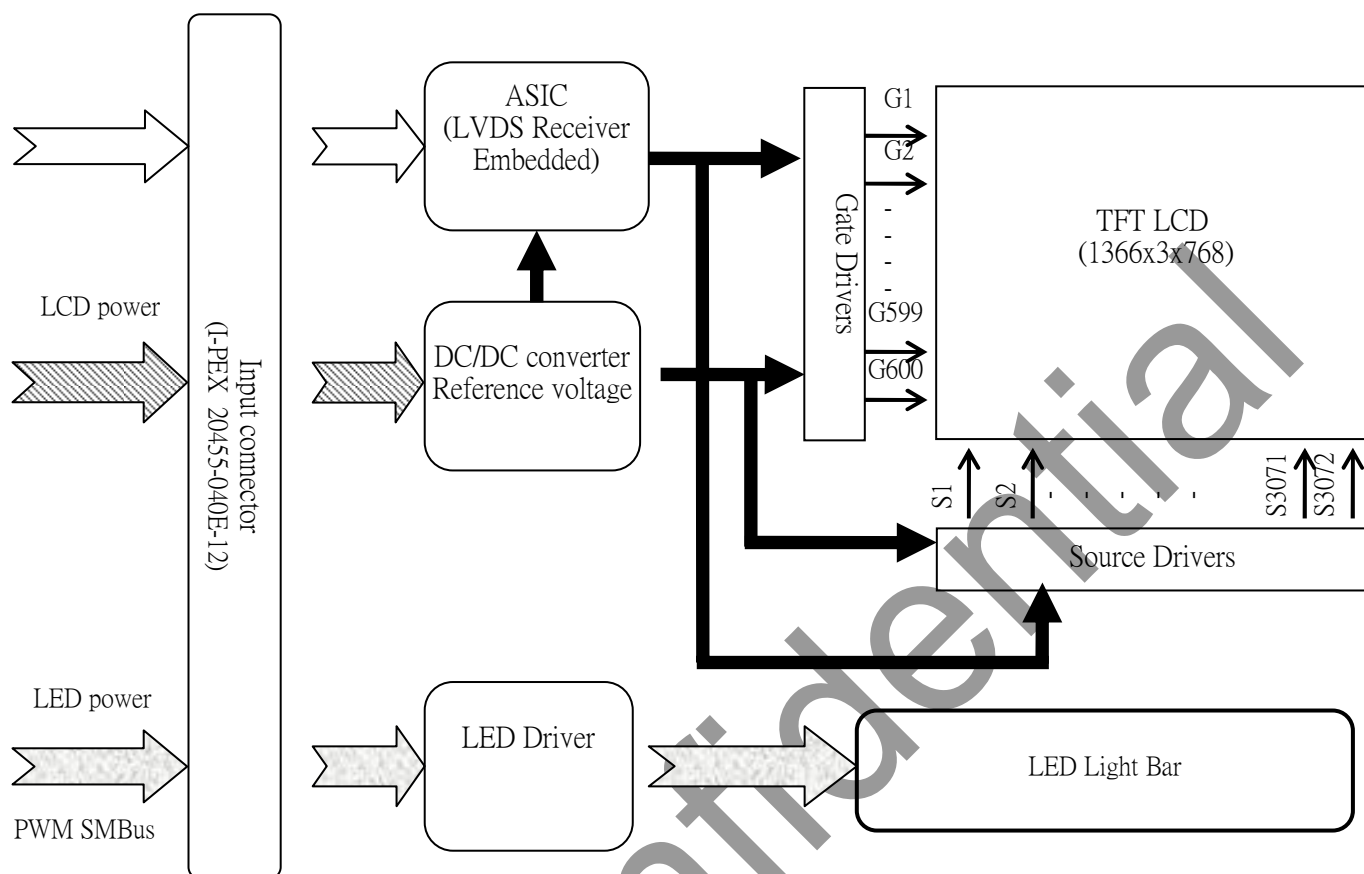
Color	Input Data	R DATA						G DATA						B DATA					
		R5	R4	R3	R2	R1	R0	G5	G4	G3	G2	G1	G0	B5	B4	B3	B2	B1	B0
		MS B					LS B	MS B					LS B	MS B					LS B
Basic Color	Black	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red(63)	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	Green(63)	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0
	Blue(63)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

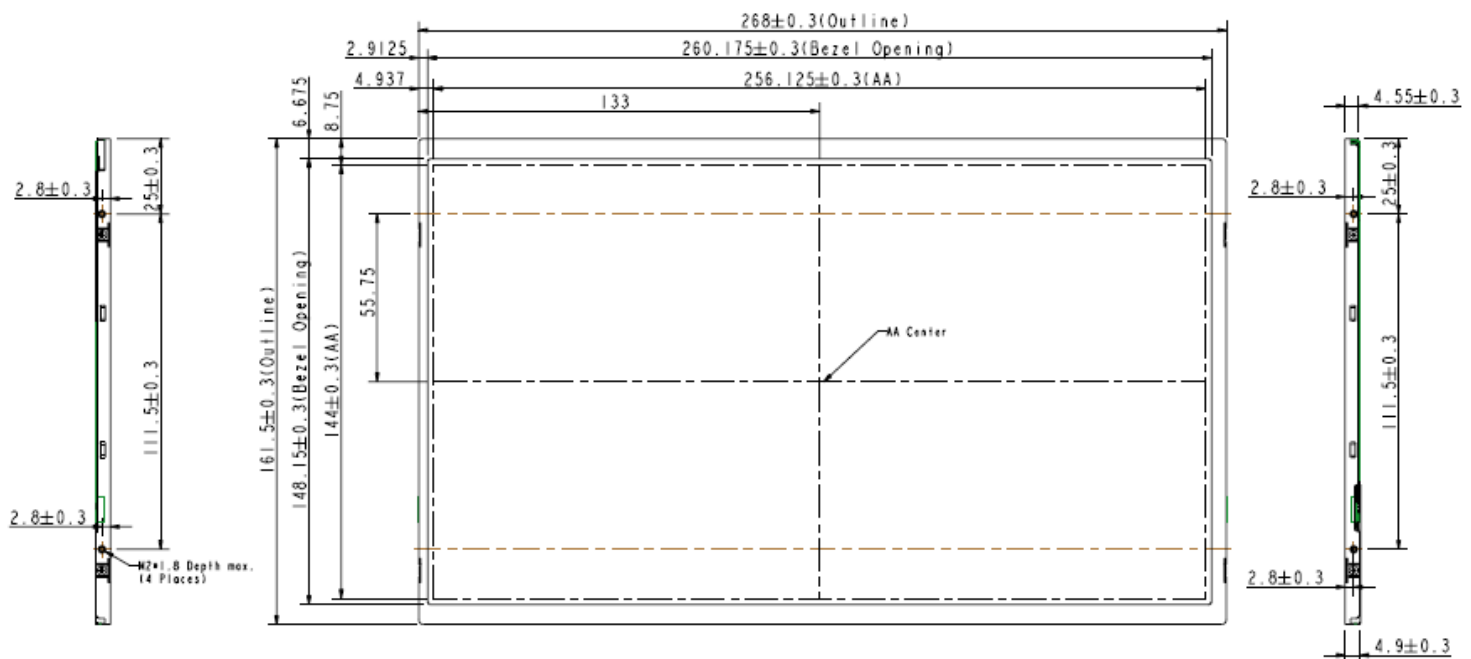
2) DATA:
1: high , 0: low

6. BLOCK DIAGRAM



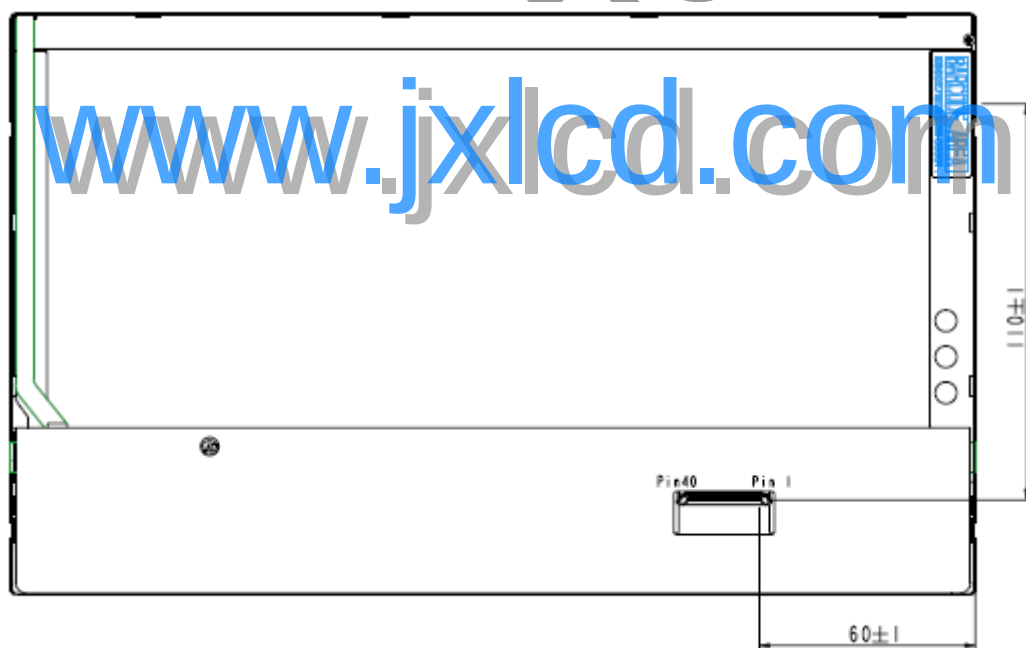
(1) Front side

[Unit : mm]



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

[Unit : mm]



8. OPTICAL CHARACTERISTICS

Ta=25°C , VDD=3.3V

ITEM		SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	NOTE
Contrast Ratio		CR	Point-7		400	-	--	*1) 2)
Luminance (5P)		L	5-Point Avg.	TBD	200	-	cd/m ²	*1) 3)
Uniformity(5P)		ΔL	θ=ψ= 0°	80	-	-	%	*1) 3)
Uniformity(13P)		ΔL	θ=ψ= 0°	70	-	-	%	*1) 3)
Response Time		Tr	θ=ψ= 0°	-	10	16	ms	*5)
Cross talk		CT	θ=ψ= 0°	-	-		%	*6)
View angle	Horizontal	Ψ	CR≥ 10	45/-45	-	-	°	*4)
	Vertical	θ		15/-30	-	-	°	*4)
Color Temperature Coordinate	W	X	θ=ψ= 0°	0.293	0.313	0.333		*3)
		Y		0.309	0.329	0.349		
	R	X		0.550	0.580	0.610		
		Y		0.310	0.340	0.370		
	G	X		0.280	0.310	0.340		
		Y		0.520	0.550	0.580		
	B	X		0.125	0.155	0.185		
		Y		0.125	0.155	0.185		
Gamut			θ=ψ= 0°	42%	45%			
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=18mA(each LED)

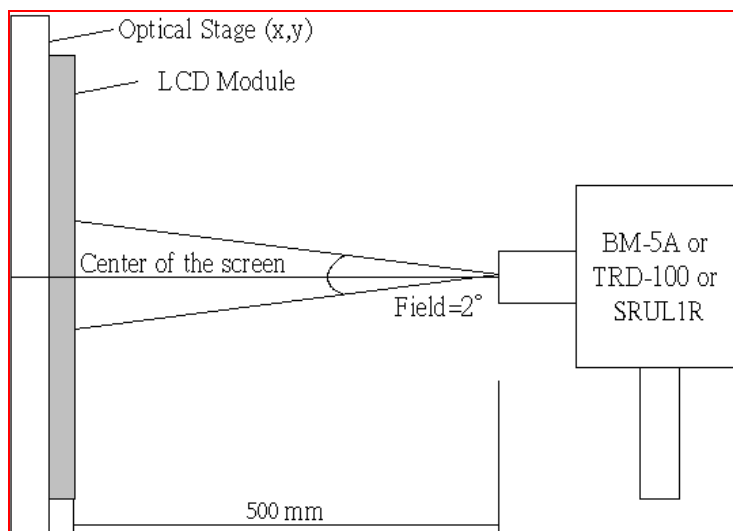
Definition of these measurement items is as follows:

*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.

$$\Delta L = Lw(\text{Min})_{5\text{ points}} \div Lw(\text{Max})_{5\text{ points}}$$

$$\Delta L = Lw(\text{Min})_{13\text{ points}} \div Lw(\text{Max})_{13\text{ points}}$$

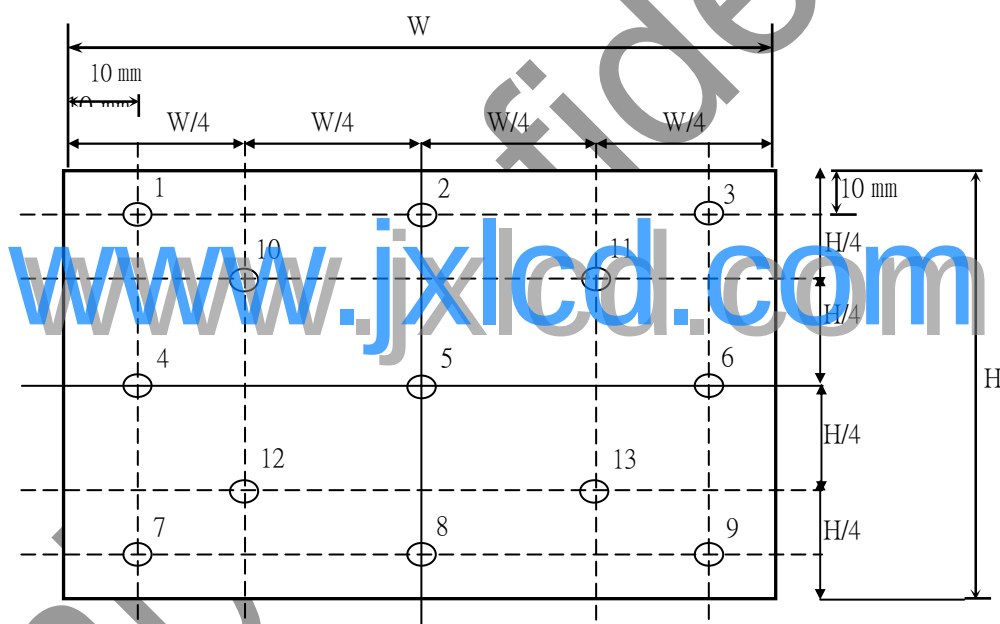
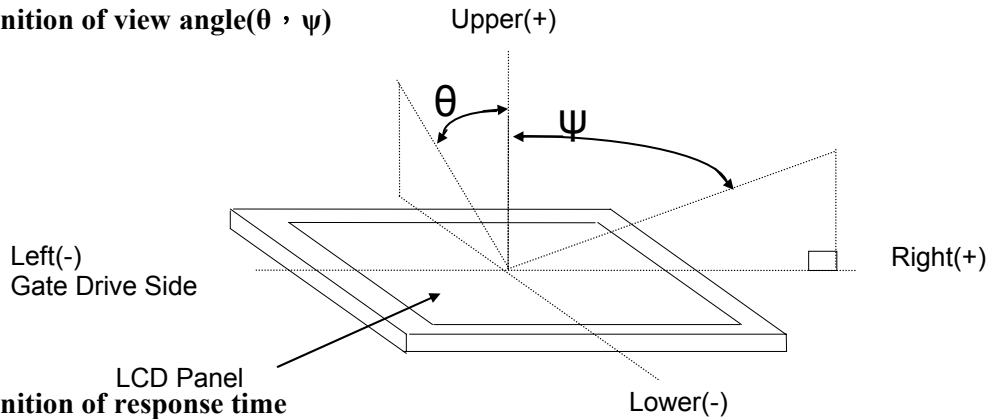
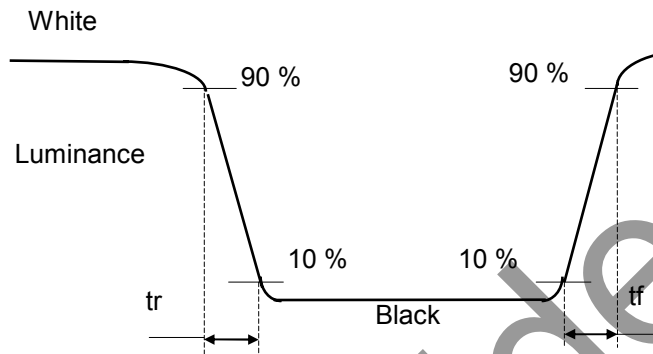


Fig.1 Measure point (Active area)

*4) Definition of view angle(θ , ψ)

*5) Definition of response time



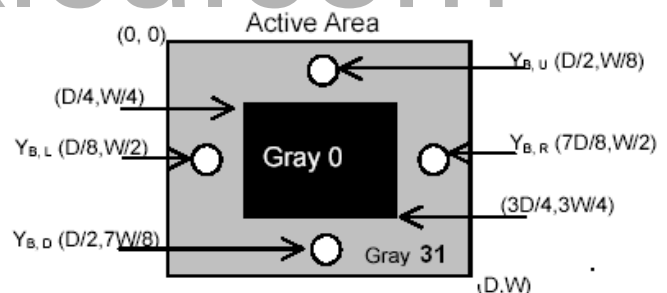
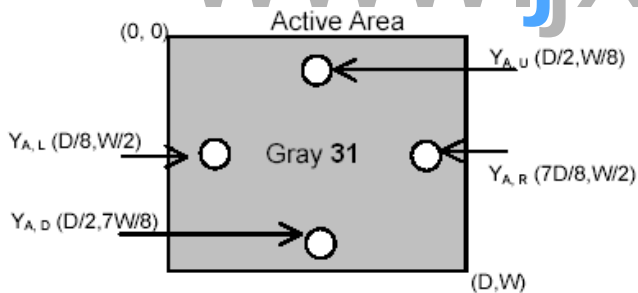
*6) Crosstalk Modulation Ratio:

$$CT = |Y_B - Y_A| / Y_A \times 100\%$$

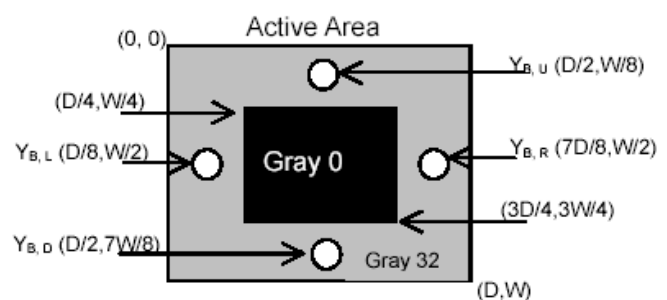
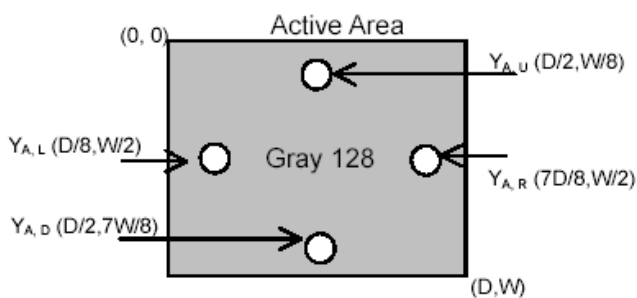
Y_A 、 Y_B measure position and definition

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)

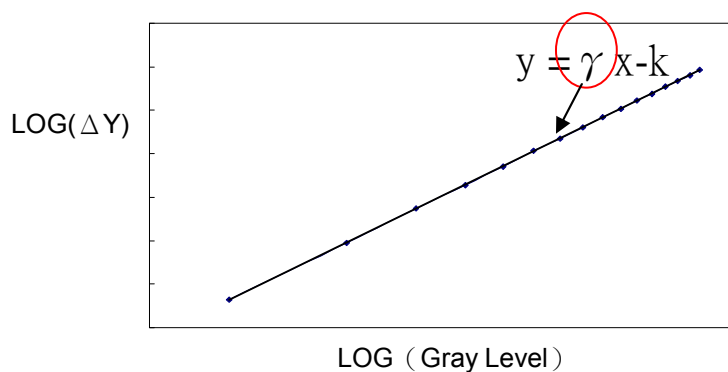


Original



***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).



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9. RELIABILITY TEST CONDITIONS

(A) Temperature and humidity

TEST ITEMS	CONDITIONS	NOTE
Low Temperature Storage	-30° C ; 250Hrs	
High Temperature Storage	65° C ; 250Hrs	
Low Temperature Operation	0° C ; 250Hrs	
High Temperature Operation	50° C ; 250Hrs	
High Temperature High Humidity Operation	40° C ; 95%RH MAX ; 250Hrs	
Thermal Shock	-40° C (0.5Hr) ~ 65° C (0.5 Hr) , Ramp<20°C, 100 Cycles	

(B) Shock and Vibration

TEST ITEMS	CONDITIONS
Shock	250G 、 2ms(half sin wave) 、 ± X 、 ± Y 、 ± Z one time in each axis
Vibration	1.5G 、 5~500Hz 、 0.5 Octave/min 、 1Hr in each +/-X 、 +/-Y 、 +/-Z

(C) ESD

ITEM	CONDITION	NOTE
ESD	200 pF , 0Ω , ±200V (Contact mode)	*1)
	150 pF , 330Ω , ±8 & 15KV (Air mode)	*2)

. 【Note】

*1) LCD glass and metal bezel

*2) IF connector pins

(D) 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-uniform, or line defect.

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10. AppendiX : EDID description

Byte#	Field Name and Comments	Value	Value
(Hex)		(Hex)	(Binary)
0		0	0000 0000
1		FF	1111 1111
2		FF	1111 1111
3		FF	1111 1111
4		FF	1111 1111
5		FF	1111 1111
6		FF	1111 1111
7		0	0000 0000
8	EISA manufacturer code = CPT (1 st byte)	0E	0000 1110
9	(2 nd byte)	14	0001 0100
0A	Product code LSB =	20	0010 0000
0B	Product code MSB = (CLAA116WA01=1C20)	1C	0001 1100
0C	ID (32-bit) serial number (preferred, but optional, zero if not used)	0	0000 0000
0D		0	0000 0000
0E		0	0000 0000
0F		0	0000 0000
10	Week of manufacture (preferred, but optional, zero if not used)	B	0000 1011
11	Year of manufacture (preferred, but optional, zero if not used)	13	0001 0011
12	EDID Structure version # = 1	1	0000 0000
13	EDID Revision # = 3	3	0000 0000
14	Video input definition (Digital LP, non TMDS CRGB)	80	1000 0000
15	Max H image size (25.61) (rounded to cm)	19	0001 1001
16	Max V image size (14.4) (rounded to cm)	E	0000 1110
17	Display gamma =2.2 (= (gamma*100)-100)	78	0111 1000
18	Features (no DPMS, Active off, RGB, timing BLK1)	0A	0000 1010
19	Red/Green low Bits (紅色為解碼器計算)	1D	0001 1101
1A	Blue/White Low Bits	1D	0001 1101
1B	Red X Rx = 0.571 bits 9→2	92	10010010
1C	Red Y Ry = 0.333 bits 9→2	55	0101 0101
1D	Green X Gx = 0.341 bits 9→2	57	0101 0111
1E	Green Y Gy = 0.566 bits 9→2	90	1001 0000
1F	Blue X Bx = 0.153 bits 9→2	27	0010 0111
20	Blue Y By = 0.107 bits 9→2	1B	0001 1011
21	White X Wx = 0.313 bits 9→2	50	0101 0000
22	White Y Wy = 0.329 bits 9→2	54	0101 0100
23	Established Timing I	0	0000 0000
24	Established Timing II	0	0000 0000
25	Manufacturer's Timings not used	0	0000 0000
26	Standard Timing Identification 1 not used	1	0000 0001
27	Standard Timing Identification 1 not used	1	0000 0001

28	Standard Timing Identification 2 not used	1	0000 0001
29	Standard Timing Identification 2 not used	1	0000 0001
2A	Standard Timing Identification 3 not used	1	0000 0001
2B	Standard Timing Identification 3 not used	1	0000 0001
2C	Standard Timing Identification 4 not used	1	0000 0001
2D	Standard Timing Identification 4 not used	1	0000 0001
2E	Standard Timing Identification 5 not used	1	0000 0001
2F	Standard Timing Identification 5 not used	1	0000 0001
30	Standard Timing Identification 6 not used	1	0000 0001
31	Standard Timing Identification 6 not used	1	0000 0001
32	Standard Timing Identification 7 not used	1	0000 0001
33	Standard Timing Identification 7 not used	1	0000 0001
34	Standard Timing Identification 8 not used	1	0000 0001
35	Standard Timing Identification 8 not used	1	0000 0001
36	Pixel Clock (LSB)	12	0001 0010
37	Pixel Clock = 69.3 MHz 1366 * 768 @60Hz (MSB)	1B	0001 1011
38	Horizontal Active = 1366 pixels Notes2 (lower 8 bits)	56	0101 0110
39	Horizontal Blanking = 67 pixels (lower 8 bits)	43	0100 0011
3A	Horizontal Active : Horizontal Blanking (upper 4:4 bits)	50	0101 0000
3B	Vertical Active = 768 lines	0	0000 0000
3C	Vertical Blanking(tvbp) = 38 lines (DE Blanking min for DE-only panels) lines	26	0010 0110
3D	Vertical Active : Vertical Blanking (upper 4:4 bits)	30	0011 0000
3E	Horizontal Sync. Offset (thfp)= 48 pixels	30	0011 0000
3F	Horizontal Sync Pulse Width = 32 pixels(WHL)	20	0010 0000
40	Vertical Sync Offset (tvfp)= 3 lines, Sync Width(tWVL) = 6 lines	36	0011 0110
41	Horizontal Vertical Sync Offset/Width upper 2bits	0	0000 0000
42	Horizontal Image Size = 256.13mm (lower 8bits)	0	0000 0000
43	Vertical Image Size = 144.00mm (lower 8bits)	90	1001 0000
44	Horizontal & Vertical Image Size (upper 4:4bits)	10	0001 0000
45	Horizontal Border = X (Zero for internal LCD)	0	0000 0000
46	Vertical Border = X (Zero for internal LCD)	0	0000 0000
47	Non-interlaced ,Normal display, no stereo, Digital separate sync,H/V pol negatives	19	0001 1001
48	Flag	0	0000 0000
49	Flag	0	0000 0000
4A	Flag	0	0000 0000
4B	Data Type Tag: Descriptor Defined by Manufacture	0F	0000 FFFF
4C	Flag	0	0000 0000
4D	value=HSPWmin/2 (pixel clks)WHL	20	0010 0000
4E	value=HSPWmax/2 (pixel clks)WHL	20	0010 0000
4F	value=Thbpmin/2 (pixel clks) (for DE-only timing also, with Thfp=0)	20	0010 0000
50	value=Thbpmax/2 (pixel clks) (for DE-only timing also, with Thfp=0)	20	0010 0000
51	value=VSPWmin/2 (line pulses)WVL	20	0010 0000

52	value=VSPWmax/2 (line pulses)WVL	20	0010 0000
53	value=TVbpmin/2	20	0010 0000
54	value=TVbpmax/2	20	0010 0000
55	Thpmin=value*2+HApixelClks (pixel clks) Note2	A0	1010 0000
56	Thpmax=value*2+HApixelClks (pixel clks) Note2	FF	1111 1111
57	Tvpmin=value*2+Valines (line pulses)	2	0000 0010
58	Tvpmax=value*2+Valines (line pulses)	32	0011 0010
59	Module revision	0	0000 0000
5A	Flag	0	0000 0000
5B	Flag	0	0000 0000
5C	Flag	0	0000 0000
5D	Data Type Tag: (Monitor) ASCII String	FE	1111 1110
5E	Flag	0	0000 0000
5F	"C",67	43	01000011
60	"P",80	50	01010000
61	"T",84	54	01010100
62		20	00100000
63		20	00100000
64		20	00100000
65		20	00100000
66		20	00100000
67		20	00100000
68		20	00100000
69		20	00100000
6A		20	00100000
6B	(if <13 char, then terminate with ASCII code 0Ah, and set remaining char = 20h)	20	00100000
6C	Flag	0	0000 0000
6D	Flag	0	0000 0000
6E	Flag	0	0000 0000
6F	Data Type Tag: (Monitor) ASCII String	FE	1111 1110
70	Flag	0	0000 0000
71	"C",67	43	01000011
72	"L",76	4C	01001100
73	"A",65	41	01000001
74	"A",65	41	01000001
75	"1",49	31	00110001
76	"1",49	31	00110001
77	"6",54	36	00110110
78	"W",87	57	01010111
79	"A",65	41	01000001
7A	"0",48	30	00110000
7B	"1",49	31	00110001
7C		A	0000 1010

7D	(if <13 char, then terminate with ASCII code 0Ah, and set remaining char = 20h)	20	0010 0000
7E	Extension Flag (# of optional 128-byte EDID extension blocks to follow, typ=0)	0	0000 0000
7F	Checksum (the 1-byte sum of all 128 bytes in this EDID block shall equal zero)	F9	1001 1111

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