奇美電子
CHIMEI INNOLUX

☐ Tentative Specification
☐ Preliminary Specification
■ Approval Specification

MODEL NO.: V400HJ1

SUFFIX: P01

Customer:

CONFIRMED BY   SIGNATURE

Name / Title _____   _____

APPROVED BY   SIGNATURE

Name / Title _____   _____

Note

Please return 1 copy for your confirmation with your signature and comments.

Approved By	Checked By	Prepared By
Chao-Chun Chung	Ken Wu	Apple Wen

CONTENTS

REVISION HISTORY

Version	Date	Page(New)	Section	Description
Ver. 2.0	Jun. 28, 2011	All	All	The approval specification was first issued.

1. GENERAL DESCRIPTION

1.1 OVERVIEW

V400HJ1-P01 is a 40″ TFT Liquid Crystal Display product with driver ICs and 2path mini-LVDS interface. This product supports 1920 x 1080 Full HDTV format and can display 16.7M colors (8-bit). The backlight unit is not built in.

1.2 FEATURES

CHARACTERISTICS ITEMS	SPECIFICATIONS
Screen Diagonal [in]	40
Pixels [lines]	1920 × 1080
Active Area [mm]	885.6(H) × 498.15(V) (40″ diagonal)
Sub-Pixel Pitch [mm]	0.15375(H) × 0.46125(V)
Pixel Arrangement	RGB Vertical Stripe
Weight [g]	Typ. 1800 g
Physical Size [mm]	904.7(W) × 539.05(H) × 8(D) Typ.
Display Mode	Transmissive Mode / Normallly Black
Contrast Ratio	Typ.5000:1 (Typical value measure by CMI's Module)
Glass thickness (Array / CF) [mm]	0.7 / 0.7
Viewing Angle (CR>20)	+88/-88(H), +88/-88(V) Typ. (CR≧20) (Typical value measure by CMI's module)
Color Chromaticity	R = (0.650,0.325) G = (0.298,0.596) B = (0.144,0.077) W= (0.326,0.368) * Please refer to "color chromaticity" on p.15
Cell Transparency [%]	4.8%
Polarizer Surface Treatment	Anti-Glare coating (Haze 11%)

1.3 MECHANICAL SPECIFICATIONS

Item	Min.	Typ.	Max.	Unit	Note
Weight	-	1800	-	g	-
I/F connector mounting position	The mounting inclination of the connector makes the screen center within ± 0.5mm as the horizontal.				(2)

Note (1) Please refer to the attached drawings for more information of front and back outline dimensions.

Note (2) Connector mounting position

+/- 0.5mm
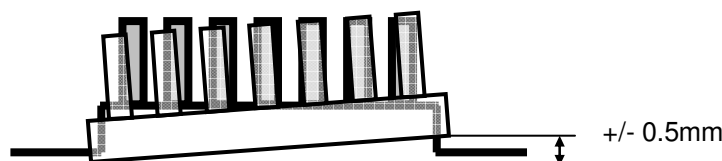
2. ABSOLUTE MAXIMUM RATINGS

2.1 ABSOLUTE RATINGS OF ENVIRONMENT

Item	Symbol	Value		Unit	Note
		Min.	Max.		
Storage Temperature	TST	-20	+60	℃	(1) With CMI Module
Operating Ambient Temperature	TOP	0	50	℃	(1), (2) With CMI Module

Note (1) Temperature and relative humidity range is shown in the figure below.

      (a) 90 ％RH Max. (Ta $\leq$ 40 ℃).

      (b) Wet-bulb temperature should be 39 ℃ Max. (Ta > 40 ℃).

      (c) No condensation.

Note (2) The maximum operating temperature is based on the test condition that the surface temperature of display area is less than or equal to 65 ℃ with LCD module alone in a temperature controlled chamber. Thermal management should be considered in final product design to prevent the surface temperature of display area from being over 65 ℃. The range of operating temperature may degrade in case of improper thermal management in final product design.
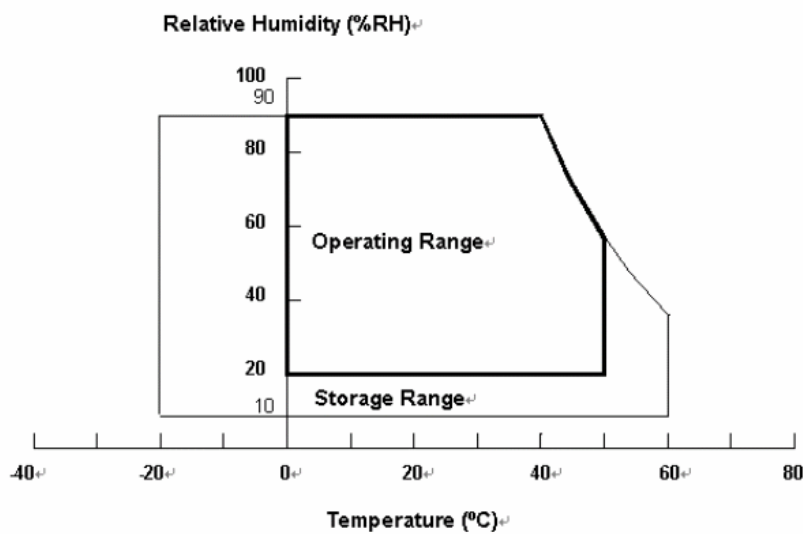
2.2 ABSOLUTE RATINGS OF ENVIRONMENT (OPEN CELL)

Recommended Storage Condition: With shipping package.

Recommended Storage temperature range: 25±5 ℃

Recommended Storage humidity range: 50±10%RH

Recommended Shelf life: a month

3. ELECTRICAL CHARACTERISTICS

3.1 TFT LCD OPEN CELL

(Ta = 25 ± 2 ℃)

Parameter		Symbol	Value			Unit	Note
			Min.	Typ.	Max.		
Power Supply Voltage		VGH	24	25	26	V	
		VGL	-8.3	-8.0	-7.7	V	
		VDA	17.4	17.7	18.0	V	
		VDD	3.2	3.3	3.4	V	
Power Supply Current		IGH	-	10	-	mA	
		IGL	-	3	-	mA	
		IDA	-	350	-	mA	
		IDD	-	345	-	mA	
CMOS interface	Input High Threshold Voltage	V_{IH}	2.7	-	3.3	V	
	Input Low Threshold Voltage	V_{IL}	0	-	0.7	V	

3.2 Mini-LVDS CHARACTERISTICS

Item	Symbol	Condition	Value			Unit
			Min	Typ	Max	
Mini-LVDS differential voltage (amplitude: peak to peak)	V_{ID}	3.0V ≦ VDD ≦ 3.6V FCPV ≦ 330MHz	200	-	600	mV
Mini-LVDS common mode input voltage range (center)	V_{CM}	3.0V ≦ VDD ≦ 3.6V	VSS+0.5	1.2	VDD-1.2	V
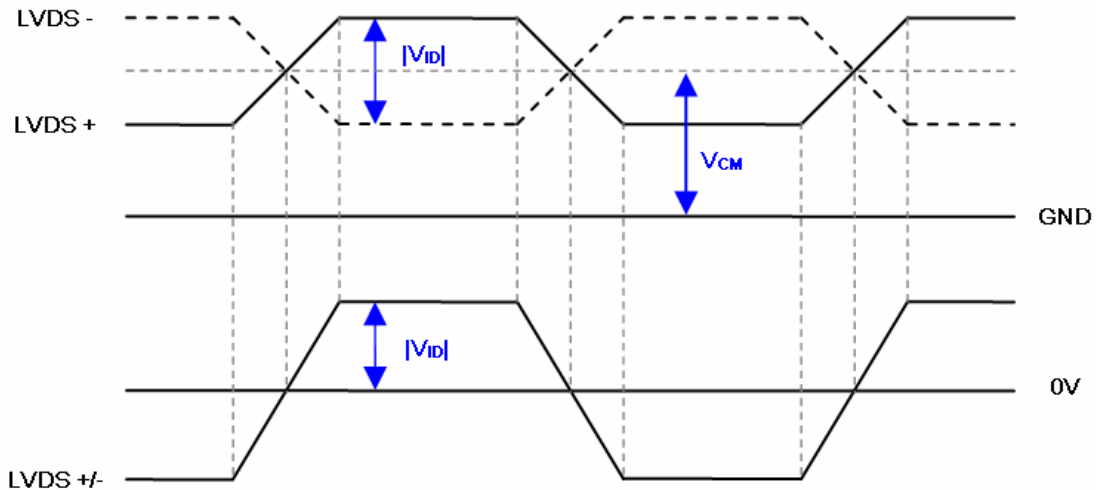
4. INPUT TERMINAL PIN ASSIGNMENT

4.1 TFT LCD OPEN CELL

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                    ┌─────────────────────────────────┐
                    │                                 │
                    │         TFT LCD PANEL            │
                    │                                 │
                    │         (1920x3x1080)           │
                    │                                 │
                    └─────────────────────────────────┘
                           ↑                  ↑
                  ┌──────────────┐    ┌──────────────┐
                  │  X(R) Board  │    │  X(L) Board  │
                  └──────────────┘    └──────────────┘
                           ↑                  ↑
                  ┌──────────────┐    ┌──────────────┐
                  │ INPUT        │    │ INPUT        │
                  │ CONNECTOR    │    │ CONNECTOR    │
                  │ P-TWO        │    │ P-TWO        │
                  │ (196225-     │    │ (196225-     │
                  │ 80041) or    │    │ 80041) or    │
                  │ equivalent   │    │ equivalent   │
                  └──────────────┘    └──────────────┘
                           ↑                  ↑
                  Mini-LVDS signal    Mini-LVDS signal
                  input               input
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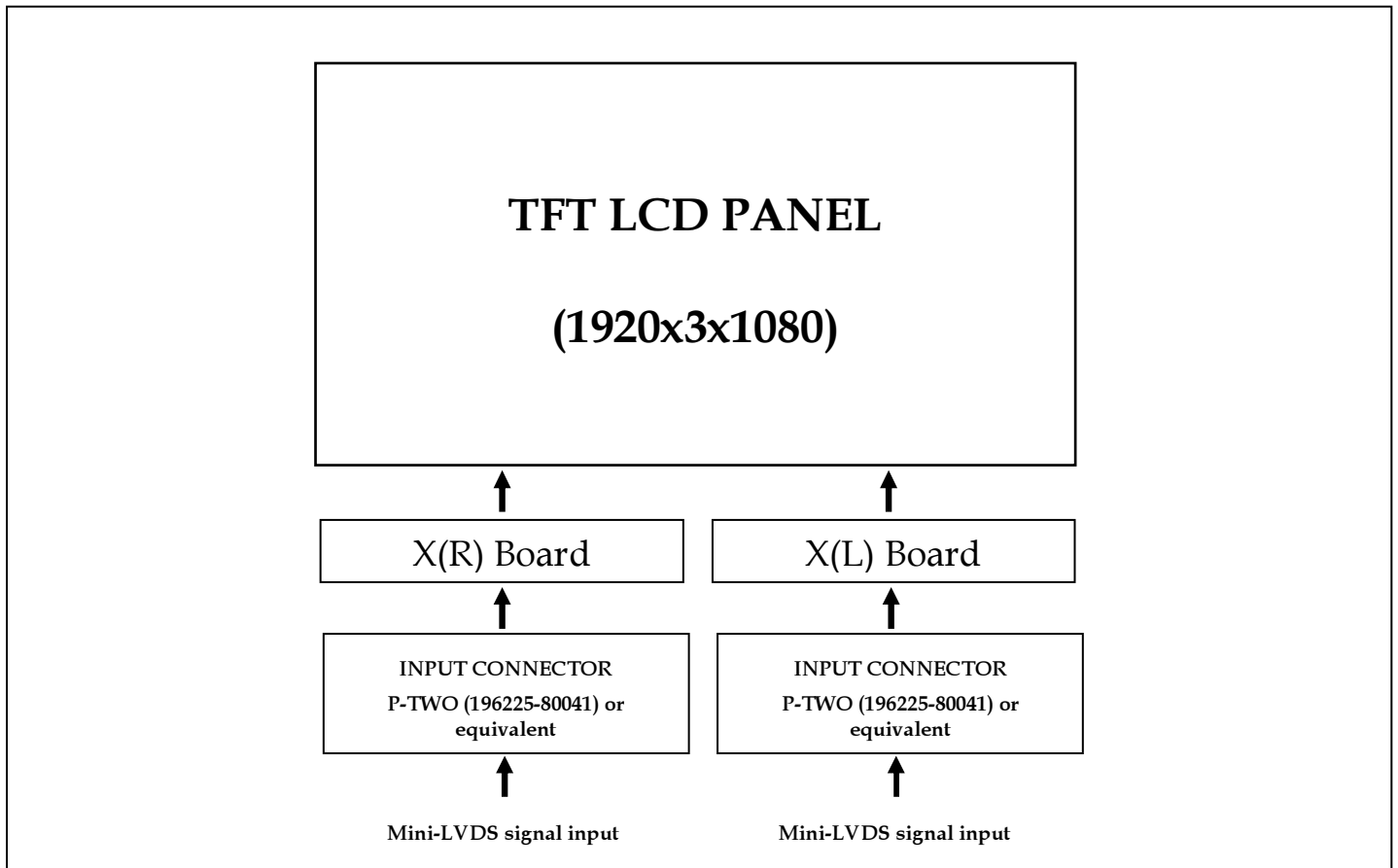
5. INPUT TERMINAL PIN ASSIGNMENT

5.1 TFT LCD OPEN CELL INPUT

CN1 (XL) Connector Pin Assignment

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	GND	Ground	41	NC	No connection
2	LV5N	Mini-LVDS data signal	42	STV	Scan driver start pulse
3	LV5P	Mini-LVDS data signal	43	TP1	Mini-LVDS data latch
4	LV4N	Mini-LVDS data signal	44	EIOA	Source driver start pulse A
5	LV4P	Mini-LVDS data signal	45	EIOB	Source driver start pulse B
6	LV3N	Mini-LVDS data signal	46	VDASEL	Half/Full VDA operating range selection
7	LV3P	Mini-LVDS data signal	47	GND	Ground
8	GND	Ground	48	GM18	Gamma Power supply
9	LVCLKN	Data driver clock	49	GM17	Gamma Power supply
10	LVCLKP	Data driver clock	50	GM16	Gamma Power supply
11	GND	Ground	51	GM15	Gamma Power supply
12	LV2N	Mini-LVDS data signal	52	GM14	Gamma Power supply
13	LV2P	Mini-LVDS data signal	53	GM13	Gamma Power supply
14	LV1N	Mini-LVDS data signal	54	GM12	Gamma Power supply
15	LV1P	Mini-LVDS data signal	55	GM10	Gamma Power supply
16	LV0N	Mini-LVDS data signal	56	GM9	Gamma Power supply
17	LV0P	Mini-LVDS data signal	57	GM7	Gamma Power supply
18	GND	Ground	58	GM6	Gamma Power supply
19	LV5N	Mini-LVDS data signal	59	GM5	Gamma Power supply
20	LV5P	Mini-LVDS data signal	60	GM4	Gamma Power supply
21	LV4N	Mini-LVDS data signal	61	GM3	Gamma Power supply
22	LV4P	Mini-LVDS data signal	62	GM2	Gamma Power supply
23	LV3N	Mini-LVDS data signal	63	GM1	Gamma Power supply
24	LV3P	Mini-LVDS data signal	64	GND	Ground
25	GND	Ground	65	VDAH	Driver Power supply

26	LVCLKN	Data driver clock	66	VDAL	Driver Power supply
27	LVCLKP	Data driver clock	67	GND	Ground
28	GND	Ground	68	VCM	VCM Power supply
29	LV2N	Mini-LVDS data signal	69	VCM	VCM Power supply
30	LV2P	Mini-LVDS data signal	70	GND	Ground
31	LV1N	Mini-LVDS data signal	71	VDA	Driver Power supply
32	LV1P	Mini-LVDS data signal	72	VDA	Driver Power supply
33	LV0N	Mini-LVDS data signal	73	GND	Ground
34	LV0P	Mini-LVDS data signal	74	VDD	Logic Power supply
35	GND	Ground	75	VDD	Logic Power supply
36	GND	Ground	76	VGL	Driver Power supply
37	OE1	Scan driver output enable 1	77	VGL	Driver Power supply
38	OE2	Scan driver output enable 2	78	VGH	Driver Power supply
39	CKV	Scan driver clock	79	VGH	Driver Power supply
40	POL	polarity invert	80	GND	Ground

CN1 (XR) Connector Pin Assignment

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	GND	Ground	41	RV2P	Mini-LVDS data signal
2	VGH	Driver Power supply	42	RV1N	Mini-LVDS data signal
3	VGH	Driver Power supply	43	RV1P	Mini-LVDS data signal
4	VGL	Driver Power supply	44	RV0N	Mini-LVDS data signal
5	VGL	Driver Power supply	45	RV0P	Mini-LVDS data signal
6	VDD	Logic Power supply	46	GND	Ground
7	VDD	Logic Power supply	47	RV5N	Mini-LVDS data signal
8	GND	Ground	48	RV5P	Mini-LVDS data signal
9	VDA	Driver Power supply	49	RV4N	Mini-LVDS data signal
10	VDA	Driver Power supply	50	RV4P	Mini-LVDS data signal

11	GND	Ground	51	RV3N	Mini-LVDS data signal
12	VCM	VCM Power supply	52	RV3P	Mini-LVDS data signal
13	VCM	VCM Power supply	53	GND	Ground
14	GND	Ground	54	RVCLKN	Data driver clock
15	VDAL	Driver Power supply	55	RVCLKP	Data driver clock
16	VDAH	Driver Power supply	56	GND	Ground
17	GND	Ground	57	RV2N	Mini-LVDS data signal
18	NC	No connection	58	RV2P	Mini-LVDS data signal
19	VDASEL	Half/Full VDA operating range selection	59	RV1N	Mini-LVDS data signal
20	EIOB	Source driver start pulse B	60	RV1P	Mini-LVDS data signal
21	EIOA	Source driver start pulse A	61	RV0N	Mini-LVDS data signal
22	TP1	Mini-LVDS data latch	62	RV0P	Mini-LVDS data signal
23	STV	Scan driver start pulse	63	GND	Ground
24	NC	No connection	64	GM18	Gamma Power supply
25	POL	polarity invert	65	GM17	Gamma Power supply
26	CKV	Scan driver clock	66	GM16	Gamma Power supply
27	OE2	Scan driver output enable 2	67	GM15	Gamma Power supply
28	OE1	Scan driver output enable 1	68	GM14	Gamma Power supply
29	GND	Ground	69	GM13	Gamma Power supply
30	RV5N	Mini-LVDS data signal	70	GM12	Gamma Power supply
31	RV5P	Mini-LVDS data signal	71	GM10	Gamma Power supply
32	RV4N	Mini-LVDS data signal	72	GM9	Gamma Power supply
33	RV4P	Mini-LVDS data signal	73	GM7	Gamma Power supply
34	RV3N	Mini-LVDS data signal	74	GM6	Gamma Power supply
35	RV3P	Mini-LVDS data signal	75	GM5	Gamma Power supply
36	GND	Ground	76	GM4	Gamma Power supply
37	RVCLKN	Data driver clock	77	GM3	Gamma Power supply
38	RVCLKP	Data driver clock	78	GM2	Gamma Power supply

| 39 | GND | Ground | 79 | GM1 | Gamma Power supply |
| 40 | RV2N | Mini-LVDS data signal | 80 | GND | Ground |

Note (1) The EIOA must be connected to the EIOB.
Note (2) The VDAH must be connected to the GND.
Note (3) The VDAL must be connected to the VDA.
Note (2) Please set VDASEL to low.

5.2 COLOR DATA INPUT ASSIGNMENT

The brightness of each primary color (red, green and blue) is based on the 8-bit gray scale data input for the color. The higher the binary input, the brighter the color. The table below provides the assignment of the color versus data input.

Color		Data Signal																								
		Red								Green								Blue								
		R7	R6	R5	R4	R3	R2	R1	R0	G7	G6	G5	G4	G3	G2	G1	G0	B7	B6	B5	B4	B3	B2	B1	B0
Basic Colors	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
	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
	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
	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
	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
	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	Red (0) / Dark	0	0	0	0	0	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	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red (2)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	Red (253)	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red (254)	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red (255)	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	Green (0) / Dark	0	0	0	0	0	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	0	0	0	0	1	0	0	0	0	0	0	0	0
	Green (2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
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	Green (253)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0
	Green (254)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	Green (255)	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	Blue (0) / Dark	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 (1)	0	0	0	0	0	0	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	0	0	0	0	0	0	1	0
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	Blue (253)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1
	Blue (254)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0
	Blue (255)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

Note (1) 0: Low Level Voltage, 1: High Level Voltage

6. INTERFACE TIMING

6.1 INPUT SIGNAL TIMING SPECIFICATIONS

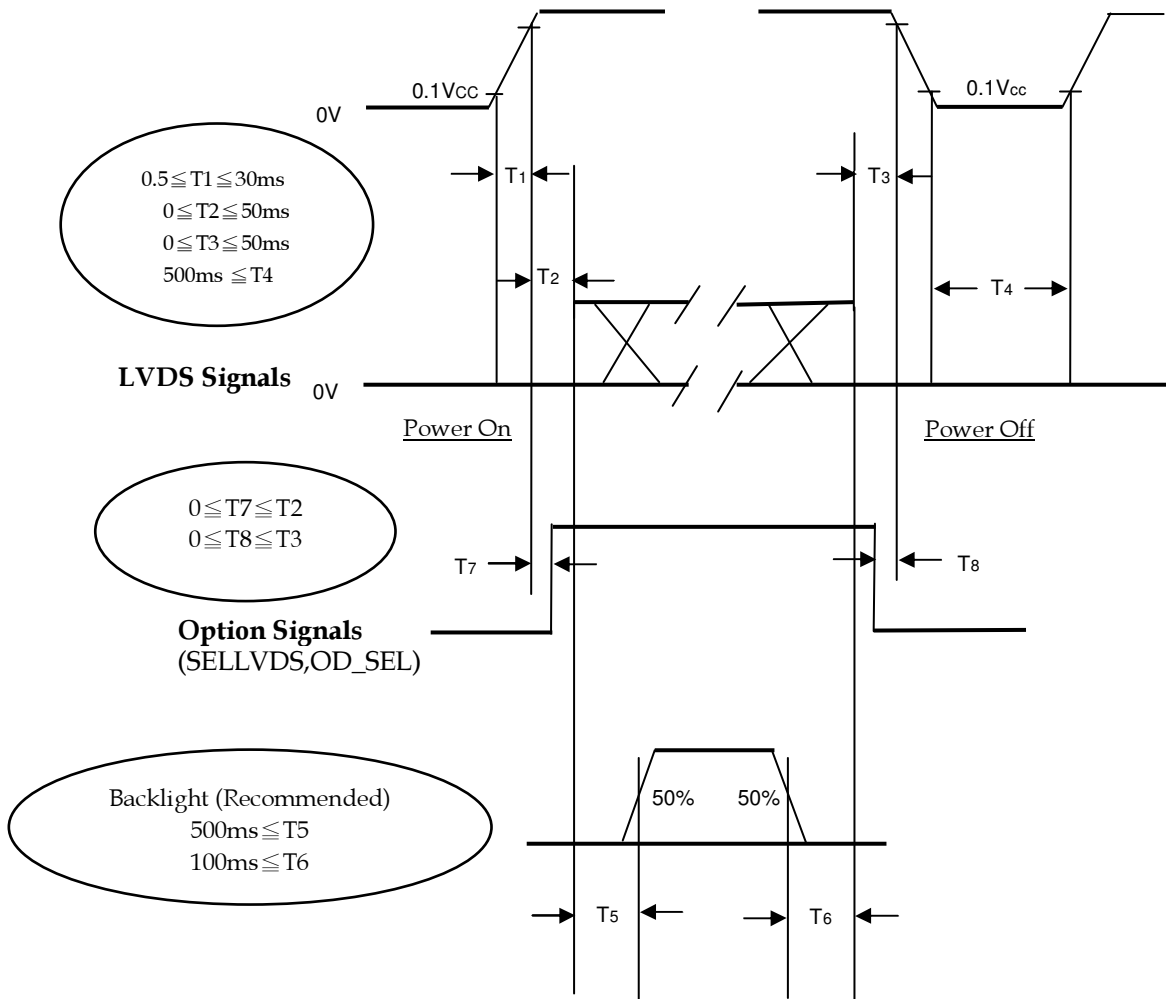The input signal timing specifications are shown as the following table and timing diagram.

Signal	Item	Symbol	Min.	Typ.	Max.	Unit	Note
Vertical Active Display Term	Frame Rate	Fr6	57	60	63	Hz	
		Fr5	47	50	53		
	Total	Tv	1115	1125	1135	Th	Tv=Tvd+Tvb
	Display	Tvd	1080	1080	1080	Th	-
	Blank	Tvb	35	45	55	Th	-
Horizontal Active Display Term	Total	Th	1050	1100	1150	Tc	Th=Thd+Thb
	Display	Thd	960	960	960	Tc	-
	Blank	Thb	90	140	190	Tc	-

INPUT SIGNAL TIMING DIAGRAM
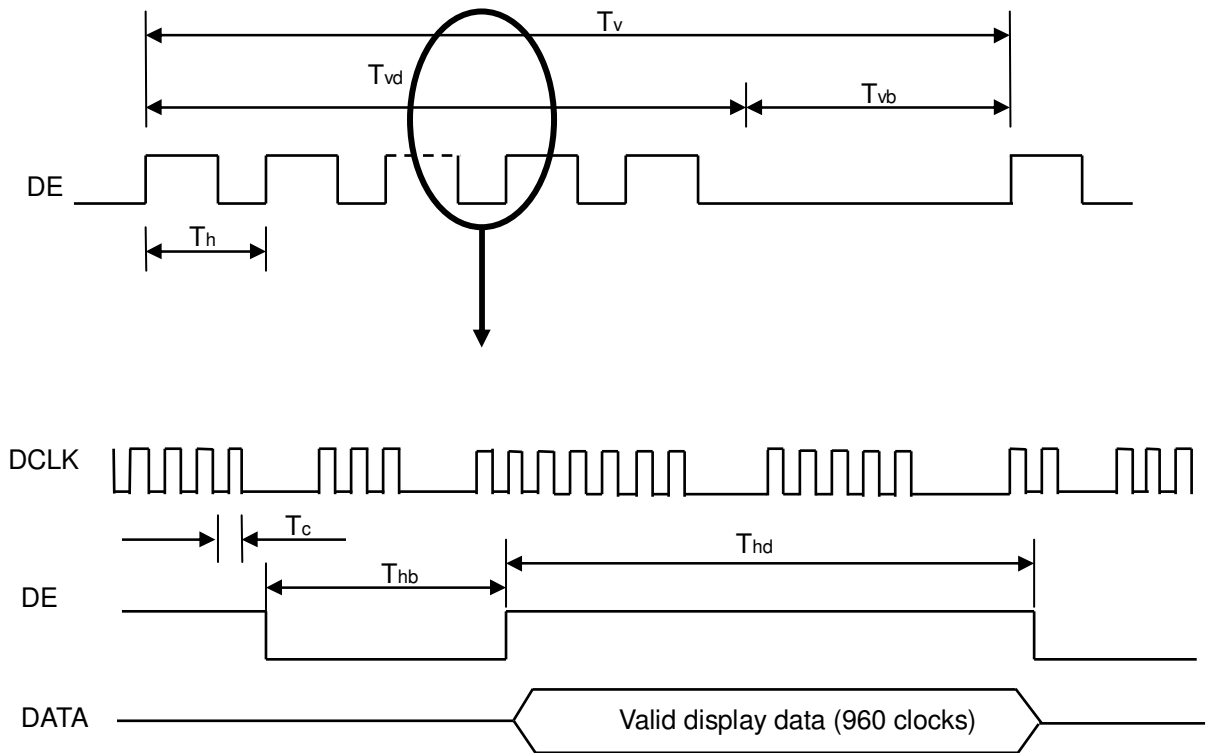
6.2 POWER ON/OFF SEQUENCE

To prevent a latch-up or DC operation of LCD module, the power on/off sequence should be as the diagram below.

$0.5 \leqq T1 \leqq 30ms$
$0 \leqq T2 \leqq 50ms$
$0 \leqq T3 \leqq 50ms$
$500ms \leqq T4$

LVDS Signals

Power On   Power Off

$0 \leqq T7 \leqq T2$
$0 \leqq T8 \leqq T3$

Option Signals
(SELLVDS,OD_SEL)

Backlight (Recommended)
$500ms \leqq T5$
$100ms \leqq T6$

50%   50%

7. OPTICAL CHARACTERISTICS

7.1 TEST CONDITIONS

Item	Symbol	Value	Unit
Ambient Temperature	Ta	25±2	°C
Ambient Humidity	Ha	50±10	%RH
Vertical Frame Rate	Fr	60	Hz

The LCD module should be stabilized at given temperature for 1 hour to avoid abrupt temperature change during measuring in a windless room.
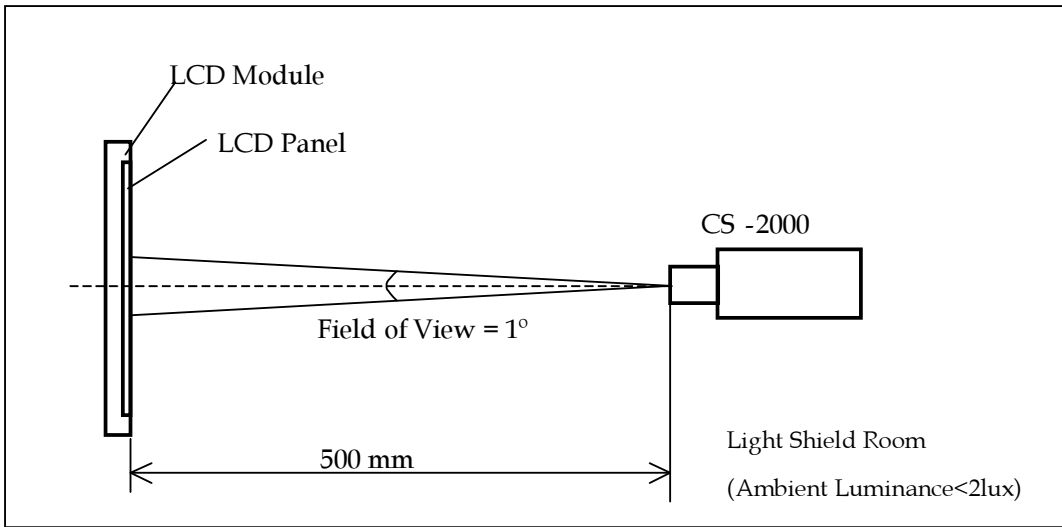
7.2 OPTICAL SPECIFICATIONS

The relative measurement methods of optical characteristics are shown as below. The following items should be measured under the test conditions described in 5.1 and stable environment shown in 5.1.

Item			Symbol	Condition	Min.	Typ.	Max.	Unit	Note
Color Chromaticity	Red		Rcx	θ_x=0°, θ_Y=0° Viewing Angle at Normal Direction Standard light source "C" With CMI Module & Tcon Board	-0.03	0.650	+0.03	-	(0)
			Rcy			0.325		-	
	Green		Gcx			0.298		-	
			Gcy			0.596		-	
	Blue		Bcx			0.144		-	
			Bcy			0.077		-	
	White		Wcx			0.326		-	
			Wcy			0.368		-	
Center Transmittance			T%	θ_x=0°, θ_Y=0° With CMI Module & Tcon Board	-	4.8	-	%	(1),(5)
Contrast Ratio			CR		3500	5000	-	-	(1),(3)
Response Time			Gray to gray		-	7.5	14	ms	(1),(4)
Viewing Angle	Horizontal		θ_x+	CR≥20 With CMI Module & Tcon Board	-	88	-	Deg.	(1),(2)
			θ_x-		-	88	-		
	Vertical		θ_Y+		-	88	-		
			θ_Y-		-	88	-		

Note (0) Light source is the standard light source "C" which is defined by CIE and driving voltage are based on suitable gamma voltages. The calculating method is as following :

　　　1.Measure Module's W,R,G,B spectrum and BLU's spectrum. Which BLU is supplied by V400H1-L10.

　　　2.Calculate cell's spectrum.

　　　3.Calculate cell's chromaticity by using the spectrum of standard light source "C".

Note (1) Light source is the BLU which supplied by CMI and driving voltage are based on suitable gamma voltages.

Note (2) Definition of Viewing Angle (θx, θy) :

　　　Viewing angles are measured by Autronic Conoscope Cono-80

Normal
$\theta x = \theta y = 0^{\circ}$

$\theta y+$

$\theta x- = 90^{\circ}$ x-

12 o'clock direction
$\theta y+ = 90^{\circ}$

y+

$\theta x-$

$\theta x+$

6 o'clock
y-

$\theta y- = 90^{\circ}$

x+ $\theta x+ = 90^{\circ}$
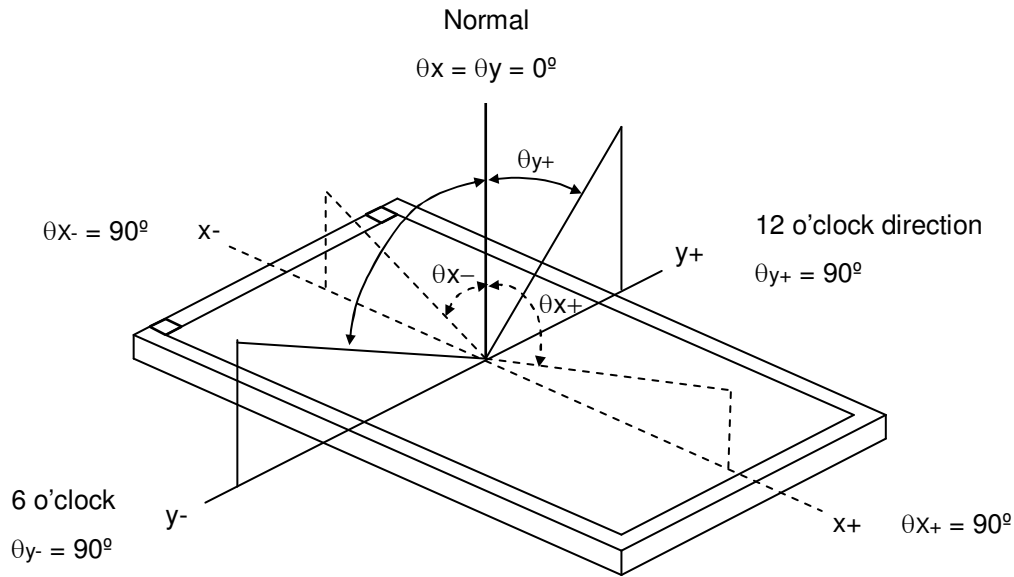
Note (3) Definition of Contrast Ratio (CR):

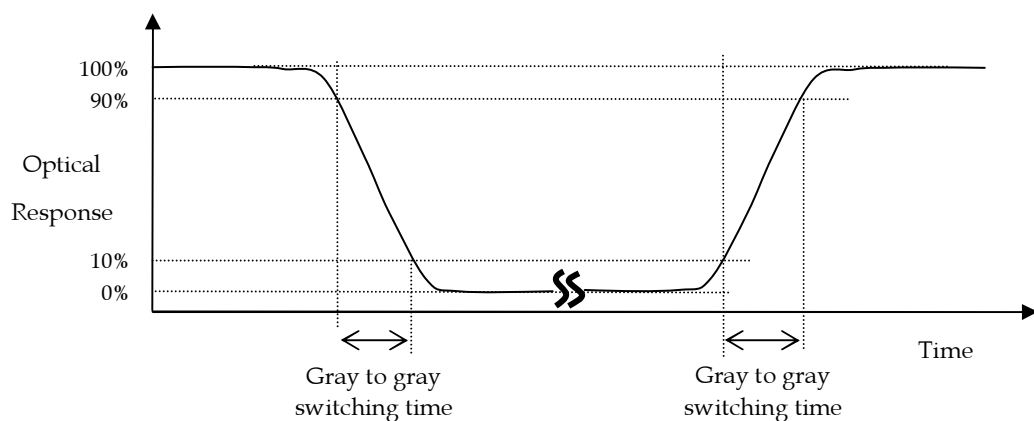The contrast ratio can be calculated by the following expression.

$$\text{Contrast Ratio (CR)} = \frac{\text{Surface Luminance of L255}}{\text{Surface Luminance of L0}}$$

L255: Luminance of gray level 255

L 0: Luminance of gray level 0

CR = CR (5), where CR (X) is corresponding to the Contrast Ratio of the point X at the figure in Note (6).

Note (4) Definition of Response Time (T_R, T_F, Gray to Gray) :

The driving signal means the signal of gray level 0, 31, 63, 95, 127, 159, 191, 223 and 255

T_R means switching time from gray 0 to 255

T_F means switching time from gray 255 to 0

Gray to gray means the average switching time of gray level 0, 31, 63, 95, 127, 159, 191, 223 and 255 to each other.

Note (5) Definition of Transmittance (T%) :

Measure the luminance of gray level 255 at center point of LCD module.

$$\text{Transmittance (T\%)} = \frac{\text{Luminance of LCD module}}{\text{Luminance of backligh unit}} \times 100\%$$

8. PRECAUTIONS

8.1 ASSEMBLY AND HANDLING PRECAUTIONS

[1] Do not apply rough force such as bending or twisting to the module during assembly.

[2] It is recommended to assemble or to install a module into the user's system in clean working areas. The dust and oil may cause electrical short or worsen the polarizer.

[3] Do not apply pressure or impulse to the module to prevent the damage of LCD panel.

[4] Always follow the correct power-on sequence when the LCD module is turned on. This can prevent the damage and latch-up of the CMOS LSI chips.

[5] The distance between COF edge and rib of BLU is suggested to be larger than 5mm, in order to prevent from damage on COF during module assembly.

[6] Do not design sharp-pointed structure / parting line / tooling gate on the COF position of plastic parts, because the burr will scrape the COF.

[7] If COF would be bended during module assembly, it is suggested not to locate the IC on the bending corner of COF.

[8] The gap between COF IC and any structure of BLU is suggested to be larger than 2mm, in order to prevent from damage on COF IC.

[9] Bezel opening must have no burr. Burr will scrape the panel surface.

[10] It is suggested that bezel of module and bezel of TV set can not press or touch the panel surface. It will make light leakage or scrape.

[11] When module used FFC / FPC, but no FFC / FPC to be attached in the open cell. Customer can refer the FFC / FPC drawing and buy it by self.

[12] The gap between Panel and any structure of Bezel is suggested to be larger than 2mm, in order to prevent from damage on Panel.

[13] Do not plug in or pull out the I/F connector while the module is in operation.

[14] Use a soft dry cloth without chemicals for cleaning, because the surface of polarizer is very soft and easily scratched.

[15] Moisture can easily penetrate into LCD module and may cause the damage during operation.

[16] When storing modules as spares for a long time, the following precaution is necessary.

[16.1] Do not leave the module in high temperature, and high humidity for a long time. It is highly recommended to store the module with temperature from 0 to 35℃ at normal humidity without condensation.

[16.2] The module shall be stored in dark place. Do not store the TFT-LCD module in direct sunlight or fluorescent light.

[17] When ambient temperature is lower than 10ºC, the display quality might be reduced.

[18] The peeling strength of COF is 200gf/cm.

[19] During module assembly process, the static electricity around the environment should be less than 300V.

8.2 SAFETY PRECAUTIONS

[1]   If the liquid crystal material leaks from the panel, it should be kept away from the eyes or mouth. In case of contact with hands, skin or clothes, it has to be washed away thoroughly with soap.

[2]   After end of life of the open cell product, it is not harmful in case of normal operation and storage.

9. DEFINITION OF LABELS

9.1 OPEN CELL LABEL

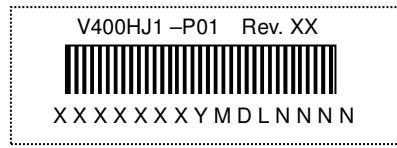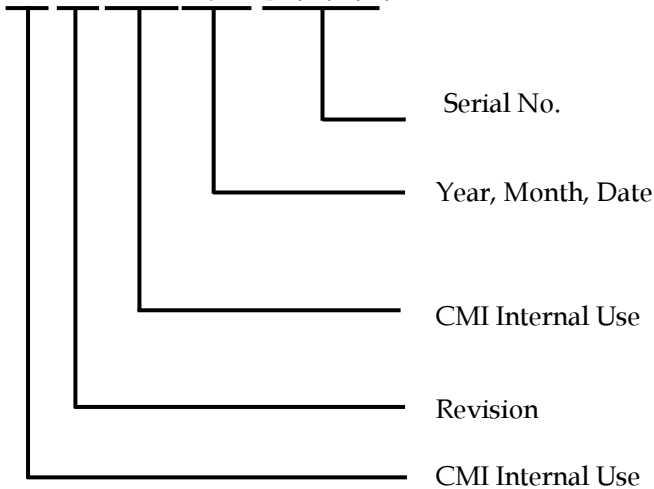The barcode nameplate is pasted on each open cell as illustration for CMI internal control.

```
V400HJ1 –P01   Rev. XX

|||||||||||||||||||||||||||||||||

X X X X X X Y M D L N N N N
```

Figure.9-1 Serial No. Label on SPWB and Cell

Model Name: V400HJ1-P01

Revision: Rev. XX, for example: A0, A1… B1, B2… or C1, C2…etc.

Serial ID: X X X X X X X Y M D L N N N N

```
                              Serial No.

                              Year, Month, Date

                              CMI Internal Use

                              Revision

                              CMI Internal Use
```

Serial ID includes the information as below:

Manufactured Date:

       Year: 2010=0, 2011=1,2012=2…etc.

       Month: 1~9, A~C, for Jan. ~ Dec.

       Day: 1~9, A~Y, for 1st to 31st, exclude I ,O, and U.

Revision Code: Cover all the change

Serial No.: Manufacturing sequence of product
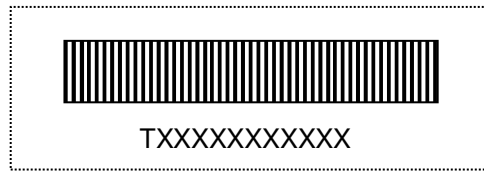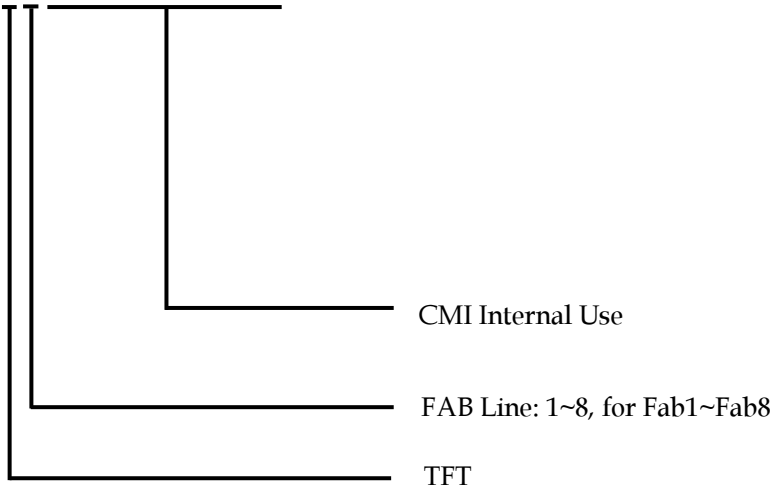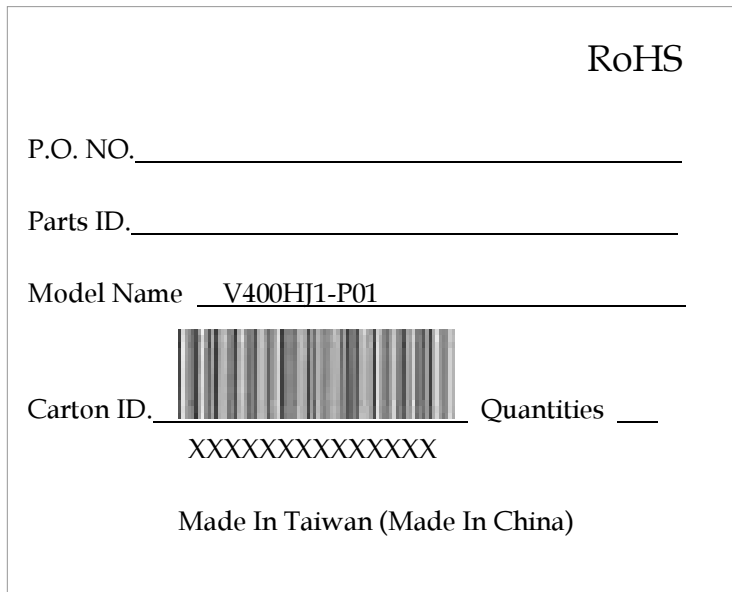
TXXXXXXXXXX

Figure.9-2 Panel ID Label on Cell

Panel ID Label includes the information as below :

Panel ID: T X X X X X X X X X X X

CMI Internal Use
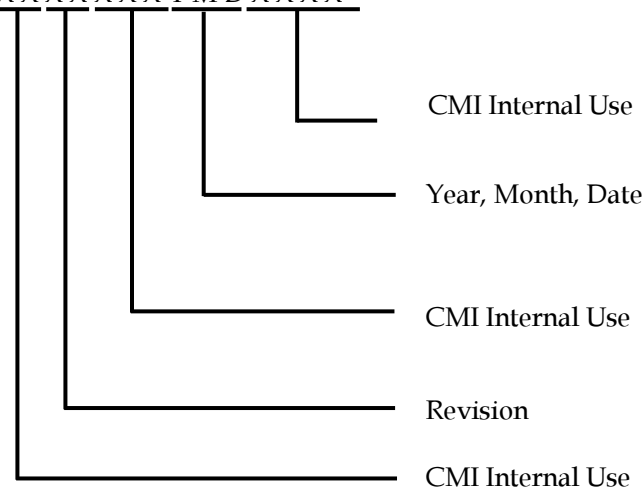
FAB Line: 1~8, for Fab1~Fab8

TFT

9.2 CARTON LABEL

The barcode nameplate is pasted on each box as illustration, and its definitions are as following explanation.

<div style="border:1px solid">

RoHS

P.O. NO. _____

Parts ID. _____

Model Name   V400HJ1-P01 _____

Carton ID. [barcode] Quantities ____

XXXXXXXXXXXXX

Made In Taiwan (Made In China)

</div>

(a) Model Name: V400HJ1– P01

(b) Carton ID: X X X X X X X Y M D X X X X

- CMI Internal Use
- Year, Month, Date
- CMI Internal Use
- Revision
- CMI Internal Use

Serial ID includes the information as below :

Manufactured Date:

Year: 2010=0, 2011=1,2012=2…etc.

Month: 1~9, A~C, for Jan. ~ Dec.

Day: 1~9, A~Y, for 1st to 31st, exclude I ,O, and U.

Revision Code: Cover all the change

(c) Quantities: 12

10. PACKAGING

10.1 PACKAGING SPECIFICATIONS

(1) 12 PCS LCD TV Panels / 1 Box

(2) Box dimensions :1008(L) X 738(W) X 252(H)mm

(3) Weight : approximately 38 Kg

(4) Desiccant (Drier) : Weight 30g / 1 piece, Quantity 4 pcs, Cobalt chloride free.

10.2 PACKAGING METHOD

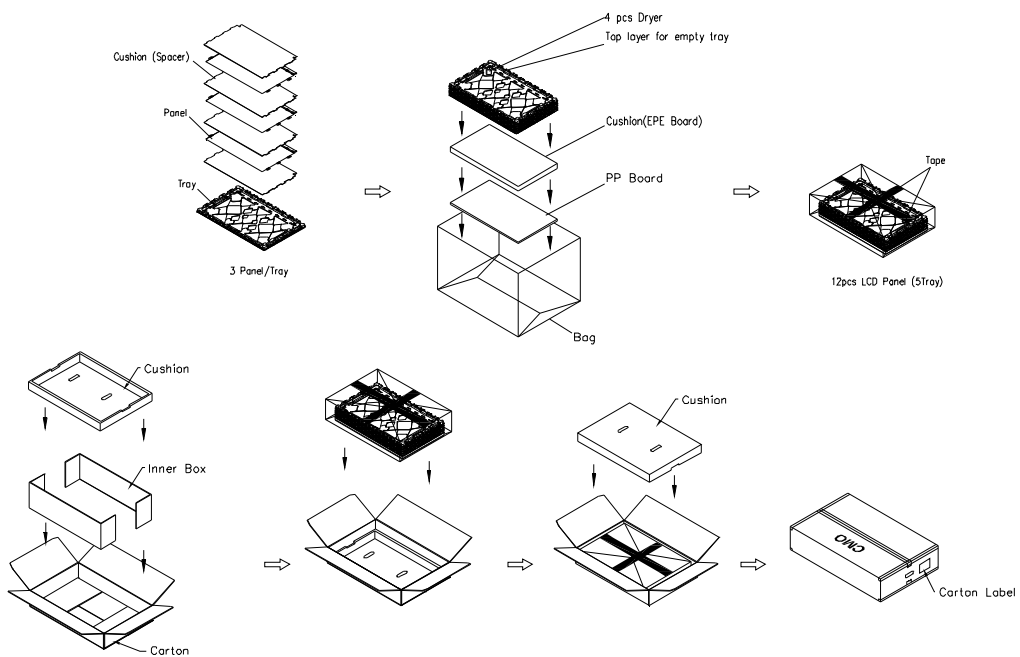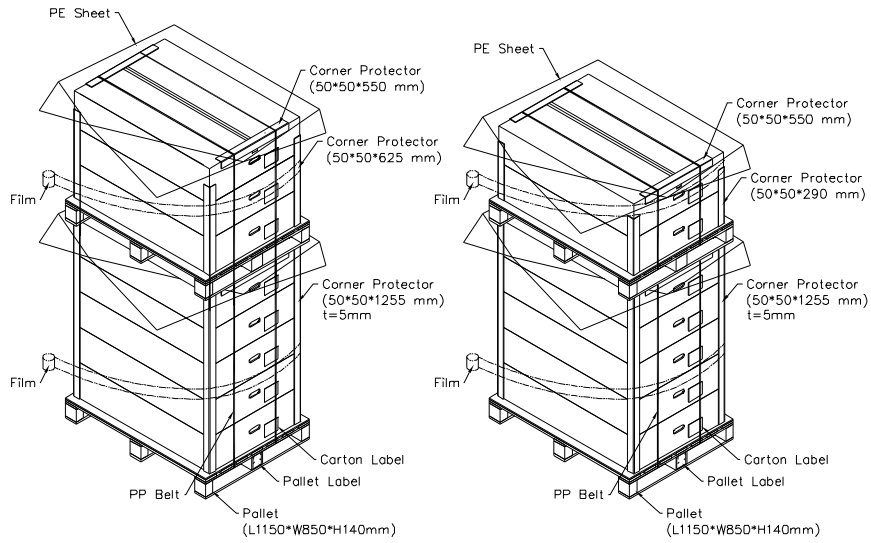Packing method is shown in Figure 10.1 & 10.2

Figure.10-1 Packing Method

Sea / Land Transportation
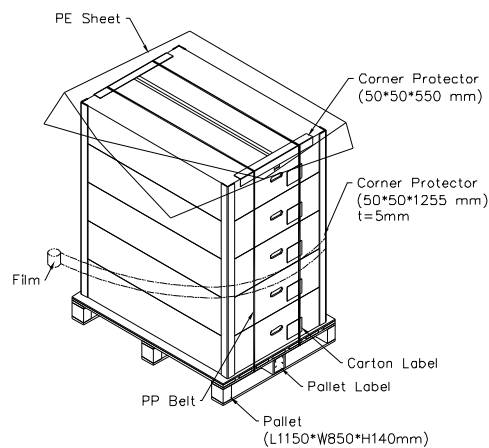(40ft HQ Container)

Sea / Land Transportation

PE Sheet

Corner Protector
(50*50*550 mm)

Corner Protector
(50*50*625 mm)

Film

Corner Protector
(50*50*1255 mm)
t=5mm

Film

Carton Label
Pallet Label

PP Belt

Pallet
(L1150*W850*H140mm)

PE Sheet

Corner Protector
(50*50*550 mm)

Corner Protector
(50*50*290 mm)

Film

Corner Protector
(50*50*1255 mm)
t=5mm

Film

Carton Label
Pallet Label

PP Belt

Pallet
(L1150*W850*H140mm)

Air Transportation

PE Sheet

Corner Protector
(50*50*550 mm)

Corner Protector
(50*50*1255 mm)
t=5mm

Film

Carton Label
Pallet Label

PP Belt

Pallet
(L1150*W850*H140mm)

Figure.10-2 Packing Method

11. MECHANICAL CHARACTERISTIC

NOTE:
1.COMPONENT HEIGHT LIMITATION IS 3.0mm, UNLESS OTHERWISE INDICATED
2." ▨ " NO COMPONENT AREA
3." ▨ " GROUND
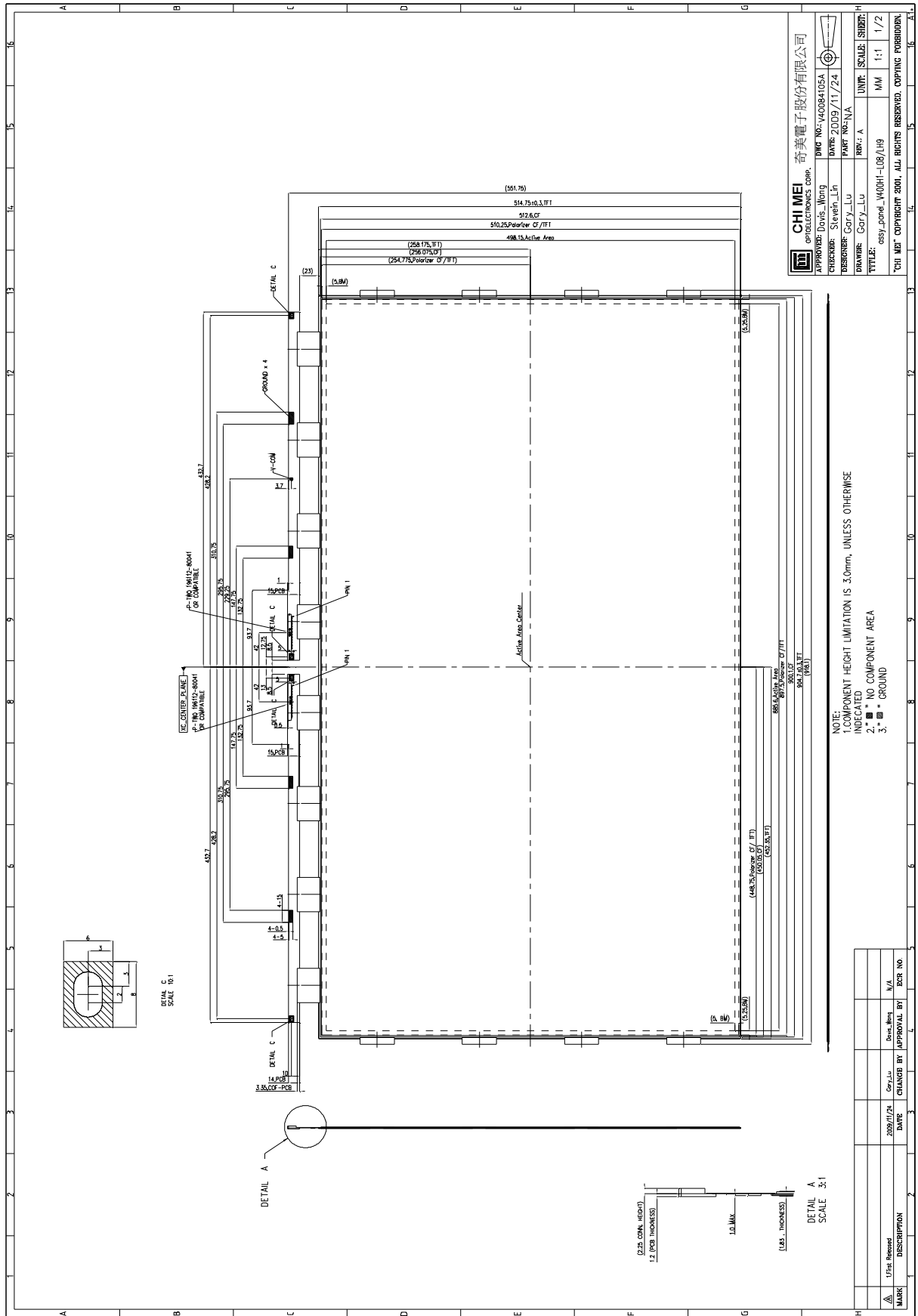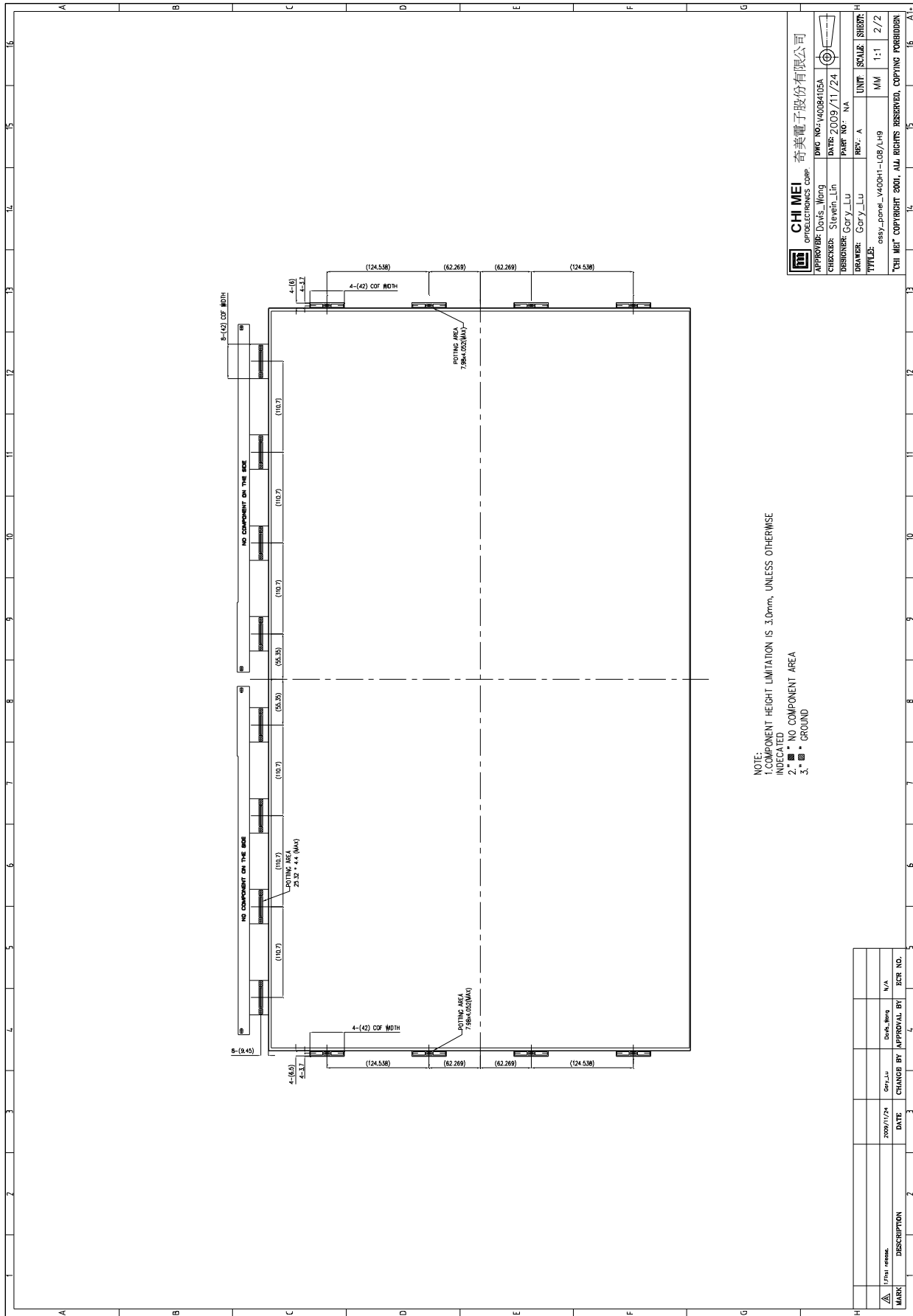
CHI MEI
OPTOELECTRONICS CORP.

奇美電子股份有限公司

APPROVED: Davis_Wong		DWG NO.: V4Q084105A			
CHECKED: Stevein_Lin		DATE: 2009/11/24			
DESIGNER: Gary_Lu		PART NO.: NA			
DRAWER: Gary_Lu		REV.: A	UNIT:	SCALE:	SHEET:
TITLE: assy_panel_V40QH1-L08/LH9			MM	1:1	2/2

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MARK	DESCRIPTION	DATE	CHANGED BY	APPROVAL BY	ECR NO.
△	1.First release	2009/11/24	Gary_Lu	Davis_Wong	N/A