

Version :4.0

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| <p style="text-align: center;">TECHNICAL SPECIFICATION</p> <p style="text-align: center;">MODEL NO : PD050VL1</p> |
|---|

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Customer's Confirmation

Customer _____

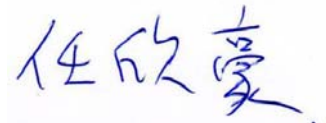
Date _____

By _____

PVI's Confirmation



Confirmed By _____



Prepared By _____

Revision History

| Rev. | Issued Date | Revised |
|-------------|--------------------|---|
| 1.0 | May 7, 2007 | New |
| 2.0 | Mar 12, 2008 | Delete Page4 2. Features: Image Reversion : Up/Down and Left/Right |
| 3.0 | March.24.2008 | Add Page 19 14.Handling Cautions 14-1 item e) |
| 4.0 | Aug. 18,2009 | Modified Page 22 16.Packing Diagram |

TECHNICAL SPECIFICATION**CONTENTS**

| NO. | ITEM | PAGE |
|------------|--|-------------|
| - | Cover | 1 |
| - | Revision History | 2 |
| - | Contents | 3 |
| 1 | Application | 4 |
| 2 | Features | 4 |
| 3 | Mechanical Specifications | 4 |
| 4 | Mechanical Drawing of TFT-LCD module | 5 |
| 5 | Input Terminals | 7 |
| 6 | Absolute Maximum Ratings | 9 |
| 7 | Electrical Characteristics | 9 |
| 8 | Pixel Arrangement | 10 |
| 9 | Display Color and Gray Scale Reference | 11 |
| 10 | Block Diagram | 12 |
| 11 | Interface Timing | 13 |
| 12 | Power On Sequence | 16 |
| 13 | Optical Characteristics | 16 |
| 14 | Handling Cautions | 19 |
| 15 | Reliability Test | 21 |
| 16 | Packing Diagram | 22 |

1. Application

PD050VL1 module applies to computer peripheral, industrial meter, car TV, image communication and multi-media, which requires high quality flat panel display. If you must use in severe reliability environment, please don't extend over PVI's reliability test conditions.

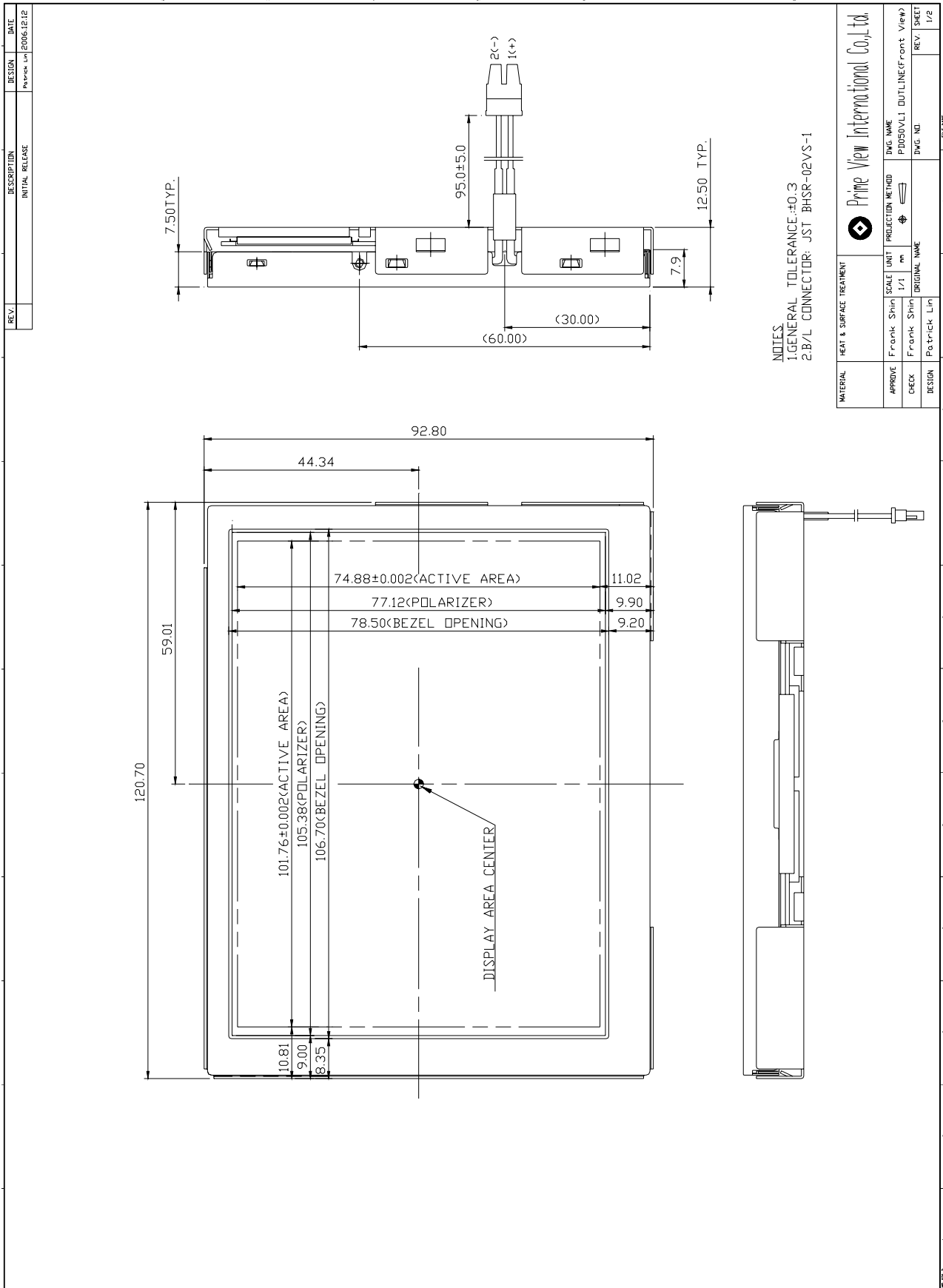
2. Features.

- . Support the DENB mode, Sync mode (Hsync+Vsync)
- . Pixel in stripe configuration
- . Slim and compact
- . Amorphous silicon TFT LCD panel with LED B/L
- . LVDS transmission interface

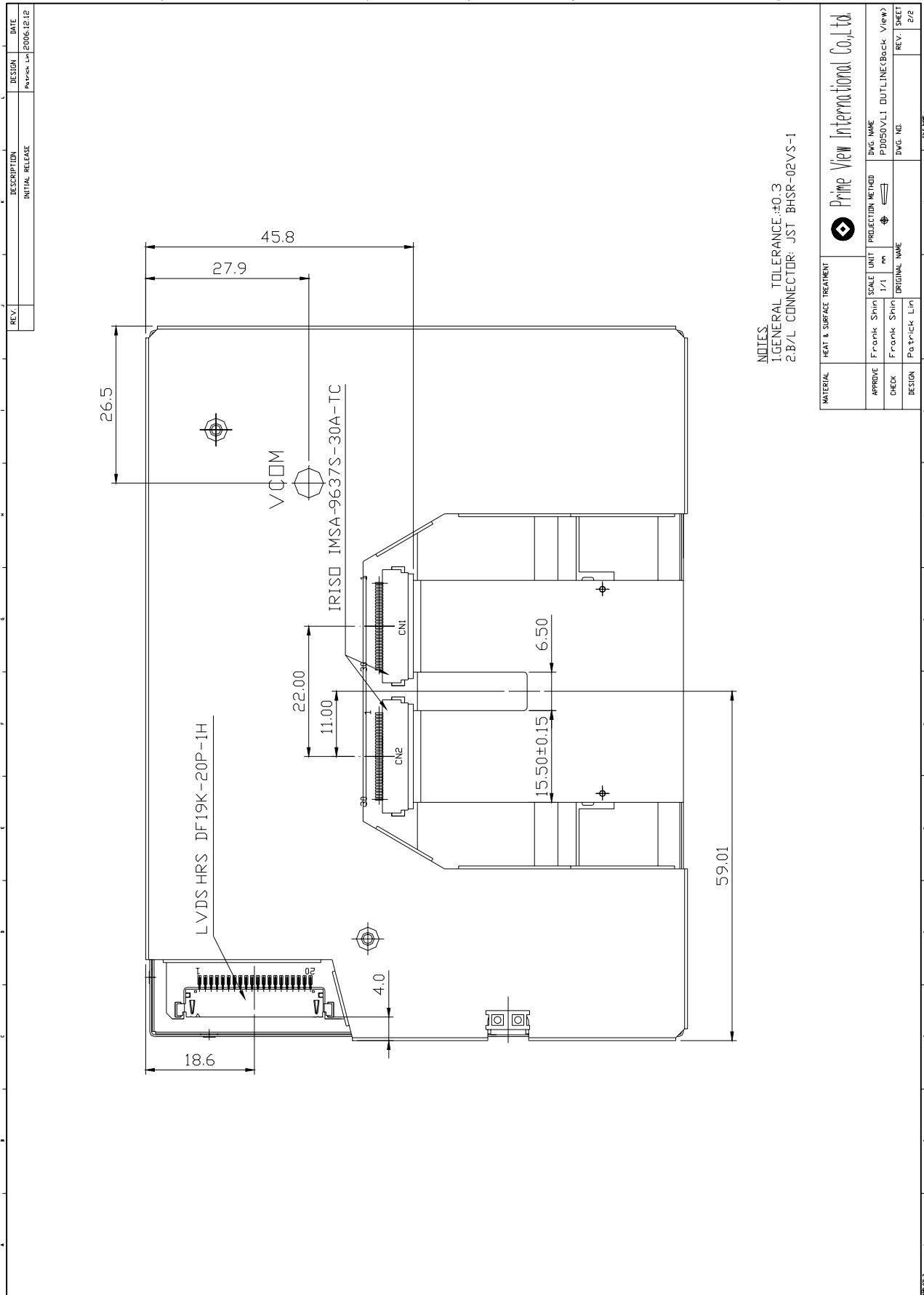
3. Mechanical Specifications

| Parameter | Specifications | Unit |
|--------------------------------|---------------------------------|---------|
| Screen Size | 5(diagonal) | inch |
| Display Format | 640×(R,G,B)×480 | dot |
| Display Colors | 262K | |
| Active Area | 101.76 (H)×74.88(V) | mm |
| Pixel Pitch | 0.159(H)×0.156(V) | mm |
| Pixel Configuration | Stripe | |
| Outline Dimension | 120.7(H)×92.8(V)×12.5(D) (Typ.) | mm |
| Back-light | 24-LED | |
| Weight | 173.6±10 | g |
| Surface treatment | Anti-glare and SWV film | |
| Display mode | Normally white | |
| Gray scale inversion direction | 6 (ref to Note 13-1) | o'clock |

4.Mechanical Drawing of TFT-LCD Module
Outline Drawing : Front View (unit mm)



Outline Drawing : Rear View (unit mm)



NOTES:
 1.GENERAL TOLERANCE:±0.3
 2.B/L CONNECTOR: JST BHSR-02VS-1

| | | | |
|------------|--------------------------|------------------------------------|--------------------|
| MATERIAL | HEAT & SURFACE TREATMENT | Prime View International Co., Ltd. | |
| APPROVE | SCALE | UNIT | DWG NAME |
| Frank Shim | 1/1 | mm | PD050VL1 |
| CHECK | PROJECTION METHOD | ORIGINAL NAME | DUTLINE(Back View) |
| Frank Shim | | | DWG. NO. |
| DESIGN | PATRICK LIN | | REV. SHEET |
| | | | 2/2 |

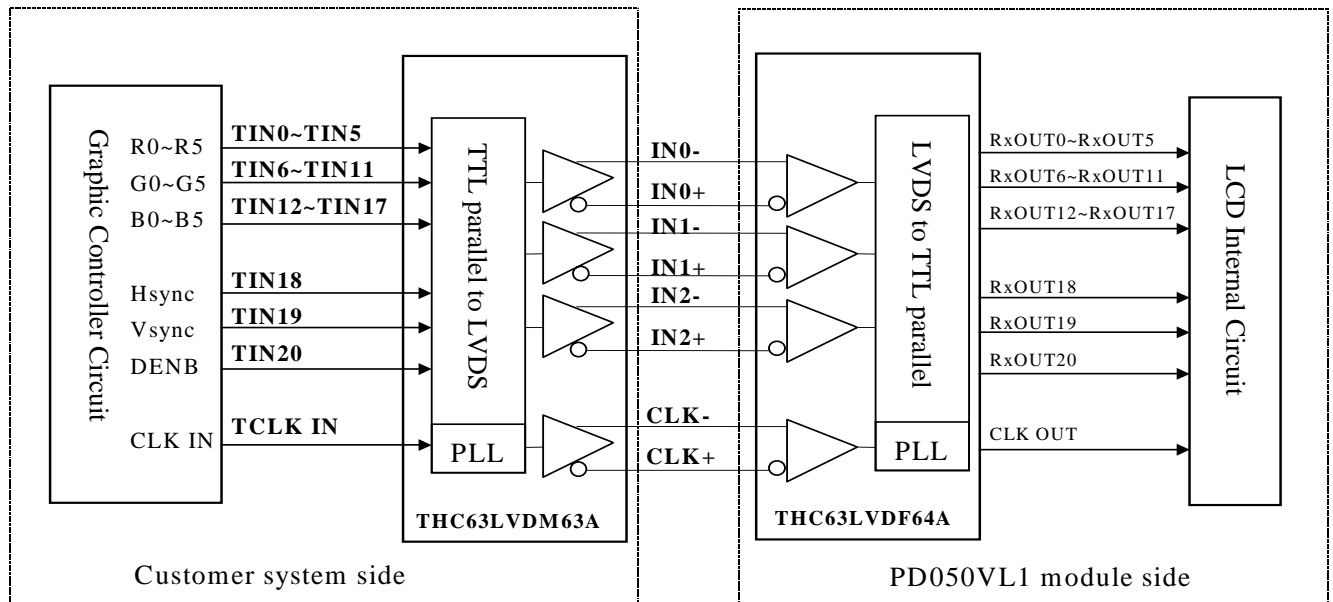
5. Input Terminals

5-1) TFT-LCD Panel Driving

Connector type: DFL19K-20P-1H(HRS)

| Pin No. | Symbol | Function | Remark |
|---------|--------|--------------------------------|--------|
| 1 | Vcc | +3.3V Power Supply | |
| 2 | Vcc | +3.3V Power Supply | |
| 3 | GND | Ground | |
| 4 | GND | Ground | |
| 5 | INO- | LVDS receiver signal channel 0 | |
| 6 | INO+ | LVDS receiver signal channel 0 | |
| 7 | GND | Ground | |
| 8 | IN1- | LVDS receiver signal channel 1 | |
| 9 | IN1+ | LVDS receiver signal channel 1 | |
| 10 | GND | Ground | |
| 11 | IN2- | LVDS receiver signal channel 2 | |
| 12 | IN2+ | LVDS receiver signal channel 2 | |
| 13 | GND | Ground | |
| 14 | CLK- | LVDS receiver signal clock | |
| 15 | CLK+ | LVDS receiver signal clock | |
| 16 | GND | Ground | |
| 17 | NC | No connection | |
| 18 | NC | No connection | |
| 19 | GND | Ground | |
| 20 | GND | Ground | |

LVDS Interface Block Diagram

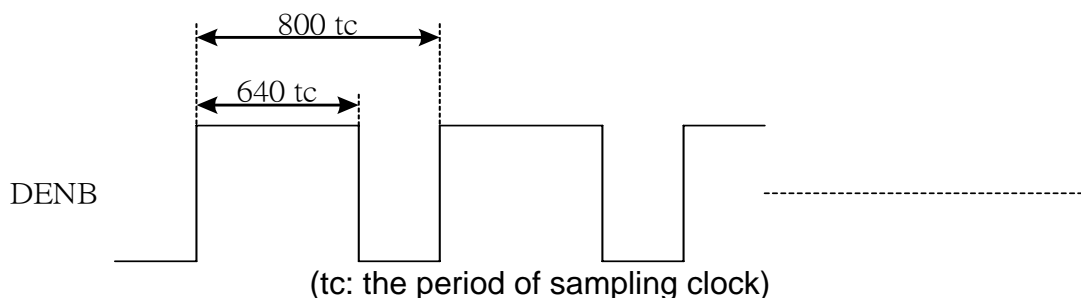


Recommended Transmitter (THC63LVDM63A Thane) to PD050VL1 interface Assignment:

| Input terminal of THC63LVDM63A | | Graphic controller output signal | | Output signal symbol | To PD050VL1 interface terminal (Symbol) |
|--------------------------------|-----|----------------------------------|---------------------------------|------------------------|---|
| Symbol | No. | Symbol | Function | | |
| TIN0 | 44 | R0 | Red pixel data (LSB) | } Tout0- } Tout0+ | No.5 : IN0- No.6 : IN0+ |
| TIN1 | 45 | R1 | Red pixel data | | |
| TIN2 | 47 | R2 | Red pixel data | | |
| TIN3 | 48 | R3 | Red pixel data | | |
| TIN4 | 1 | R4 | Red pixel data | | |
| TIN5 | 3 | R5 | Red pixel data(MSB) | } Tout1- } Tout1+ | No.8 : IN1- No.9 : IN1+ |
| TIN6 | 4 | G0 | Green pixel data (LSB) | | |
| TIN7 | 6 | G1 | Green pixel data | | |
| TIN8 | 7 | G2 | Green pixel data | | |
| TIN9 | 9 | G3 | Green pixel data | | |
| TIN10 | 10 | G4 | Green pixel data | } Tout2- } Tout2+ | No.11 : IN2- No.12 : IN2+ |
| TIN11 | 12 | G5 | Green pixel data(MSB) | | |
| TIN12 | 13 | B0 | Blue pixel data(LSB) | | |
| TIN13 | 15 | B1 | Blue pixel data | | |
| TIN14 | 16 | B2 | Blue pixel data | | |
| TIN15 | 18 | B3 | Blue pixel data | } Tout2- } Tout2+ | No.11 : IN2- No.12 : IN2+ |
| TIN16 | 19 | B4 | Blue pixel data | | |
| TIN17 | 20 | B5 | Blue pixel data(MSB) | | |
| TIN18 | 22 | Hsync | Horizontal Synchronous Signal | | |
| TIN19 | 23 | Vsync | Vertical Synchronous Signal | } Tout2- } Tout2+ | No.11 : IN2- No.12 : IN2+ |
| TIN20 | 25 | DENB | Compound Synchronization signal | | |
| CLK in | 26 | CLK | Data sampling clock | TCLK out- TCLK out+ | No.14 : CLK - No.15 : CLK + |

DENB input signal.

If customer wanted to off the DENB mode , you must keep the DENB always High or Low.



5-2) Backlight driving

Connector type: JST BHSR-02VS-1, PIN No 2 pin

| Pin No | Symbol | Description | Remark |
|--------|--------|--|--------------------|
| 1 | + | Input terminal (Positive electrode side) | Wire color : Red |
| 2 | - | Input terminal (Ground side) | Wire Color : Black |

6. Absolute Maximum Ratings :

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

GND=0V, Ta=25°C

| Parameters | Symbol | MIN. | MAX. | Unit | Remark |
|-----------------------|------------------|------|----------------------|------|----------|
| Supply Voltage | V _{CC} | -0.3 | +7.0 | V | |
| Input Signals Voltage | V _{sig} | -0.3 | V _{CC} +0.3 | V | Note 6-1 |

Note 6-1 : Input signals include CLK , Hsync , Vsync , DENB , R[0:5] , G[0:5] and B[0:5].

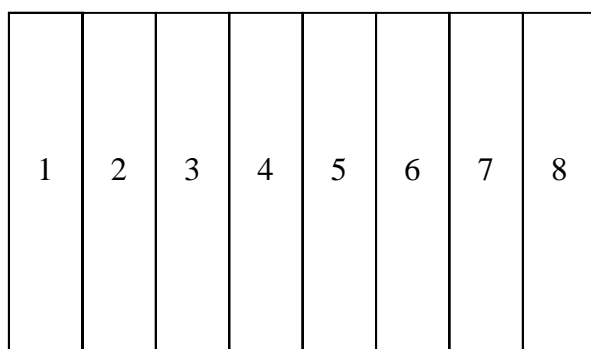
7. Electrical Characteristics

7-1) Recommended Operating Conditions:

GND = 0V , Ta = 25°C

| Item | Symbol | Min. | Typ. | Max. | Unit | Remark |
|--|------------------|------|-------|------|------|----------|
| Supply Voltage | V _{CC} | 3.0 | 3.3 | 3.6 | V | |
| Current Dissipation | I _{CC} | - | 77.90 | - | mA | Note 7-1 |
| LVDS Differential input high threshold | V _{TH} | - | - | 100 | mV | Note7-2 |
| LVDS Differential input low threshold | V _{TL} | -100 | - | - | | |
| V _{com} Voltage | V _{com} | - | 2.7 | - | V | |

Note 7-1 : To test the current dissipation of VCC using the “color bars” testing pattern shown as below



1. White
2. Yellow
3. Cyan
4. Green
5. Magenta
6. Red
7. Blue
8. Black

I_{DD} current dissipation testing pattern

Note7-2 : Please refers to THC63LVDF64A specification by THINE Corporation.
This LCD module conforms to LVDS standard.

PD050VL1

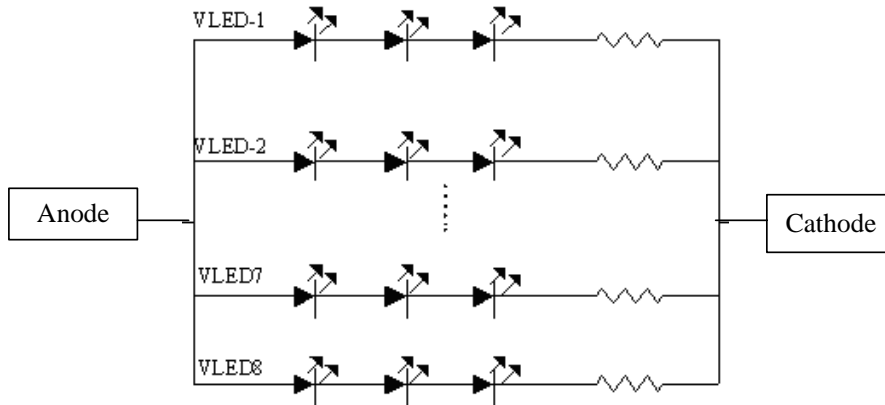
7-2) Recommended driving condition for LED backlight

GND = 0V · Ta = 25°C

| Parameter | Symbol | Min | TYP | MAX | Unit | Remark |
|---------------------------------|------------------|-----|------|------|------|------------------------|
| Supply voltage of LED backlight | V _{LED} | - | 11.0 | 11.5 | V | I _L = 20 mA |
| Supply current of LED backlight | I _{LED} | - | 20 | - | mA | Note 7-3 |
| Backlight Power Consumption | P _{LED} | - | 1.76 | 1.84 | W | Note 7-4 |

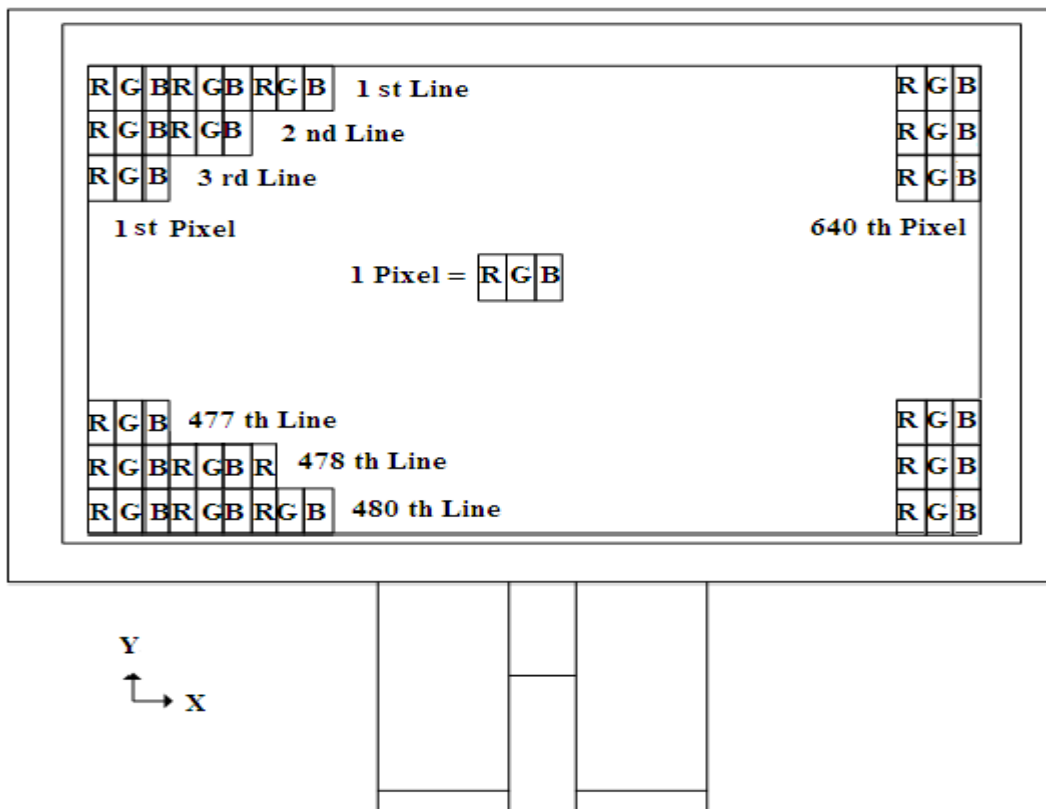
Note 7-3: The LED driving condition is defined for each LED module. (3 LED Serial)

Note 7-4: $P_{LED} = V_{LED1} * I_{LED1} + V_{LED2} * I_{LED2} + \dots + V_{LED7} * I_{LED7} + V_{LED8} * I_{LED8}$



8. Pixel Arrangement

The LCD module pixel arrangement is the stripe.

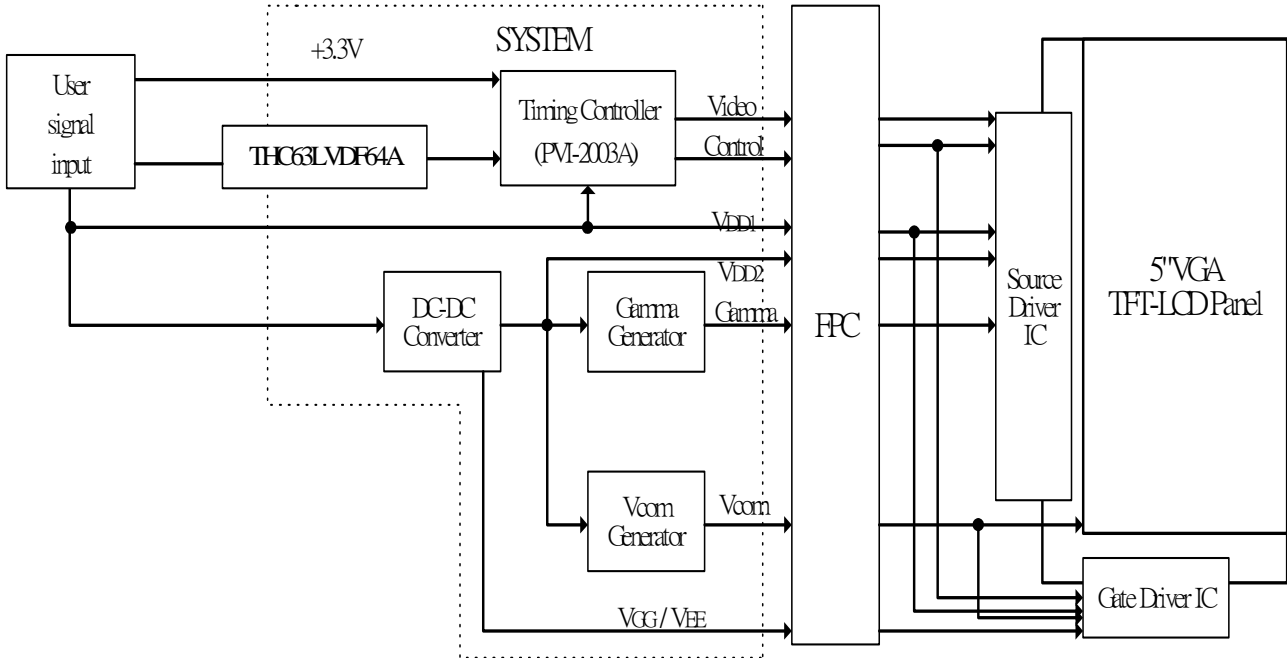


9. Display Color and Gray Scale Reference

| Color | | Input Color Data | | | | | | | | | | | | | | | | | |
|--------------|------------|------------------|----|----|----|----|----|-------|----|----|----|----|----|------|----|----|----|----|----|
| | | Red | | | | | | Green | | | | | | Blue | | | | | |
| | | R5 | R4 | R3 | R2 | R1 | R0 | G5 | G4 | G3 | G2 | G1 | G0 | 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 |
| | 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 (00) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Red (01) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Red (02) | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Darker | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| | Brighter | | | | | | | | | | | | | | | | | | |
| | Red (61) | 1 | 1 | 1 | 1 | 0 | 1 | 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 (00) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Green (01) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Green (02) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Darker | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| | Brighter | | | | | | | | | | | | | | | | | | |
| | Green (61) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 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 (00) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Blue (01) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Blue (02) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | Darker | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| | Brighter | | | | | | | | | | | | | | | | | | |
| | Blue (61) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 |
| | 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 |

10. Block Diagram

10-1) TFT-module Block Diagram

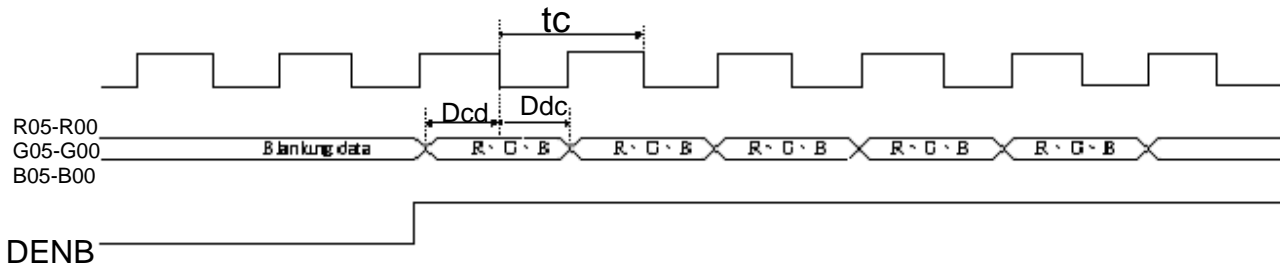


11. Interface Timing

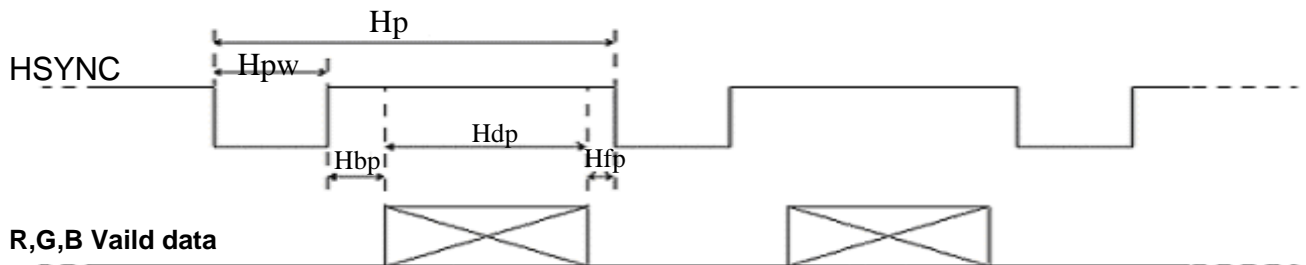
11-1) Timing Parameters

| | | Symbol | Min. | Typ. | Max. | Unit | |
|--------------|----------------------------|--------|------|------|-------|------|----|
| Power supply | | VCC | 3.0 | 3.3 | 3.6 | V | |
| CLK | Frequency | 1/tc | - | 25 | - | MHz | |
| | | tc | - | 40 | - | ns | |
| HSYNC | Period | Hp | - | 32 | - | us | |
| | | | - | 800 | - | tc | |
| | Display period | Hdp | - | 640 | - | tc | |
| | Pulse width | Hpw | - | 96 | - | tc | |
| | Back-porch | Hbp | - | 46 | - | tc | |
| | Front-porch | Hfp | - | 18 | - | tc | |
| | Hpw+Hbp | | | - | 142 | - | tc |
| | Hsync-CLK | Hhc | 10 | - | Tc-10 | ns | |
| Vsync-Hsync | Hvh | 0 | 0 | 200 | tc | | |
| VSYNC | Period | Vp | - | 16.8 | - | ms | |
| | | | - | 525 | - | Hp | |
| | Display period | Vdp | - | 480 | - | Hp | |
| | Pulse width | Vpw | - | 2 | - | Hp | |
| | Back-porch | Vbp | - | 33 | - | Hp | |
| | Front-porch | Vfp | - | 10 | - | Hp | |
| Vpw+Vbp | | | - | 35 | - | Hp | |
| DENB | Horizontal scanning period | T1 | - | 800 | - | tc | |
| | Horizontal display period | T2 | - | 640 | - | tc | |
| | Vertical display period | T3 | - | 480 | - | T1 | |
| | Frame cycling period | T4 | 520 | 525 | 800 | T1 | |
| R,G,B | CLK-DATA | Dcd | 10 | - | - | ns | |
| | DATA-CLK | Ddc | 8 | - | - | ns | |

11-2) The Timing Diagram
a.1 Input signal range



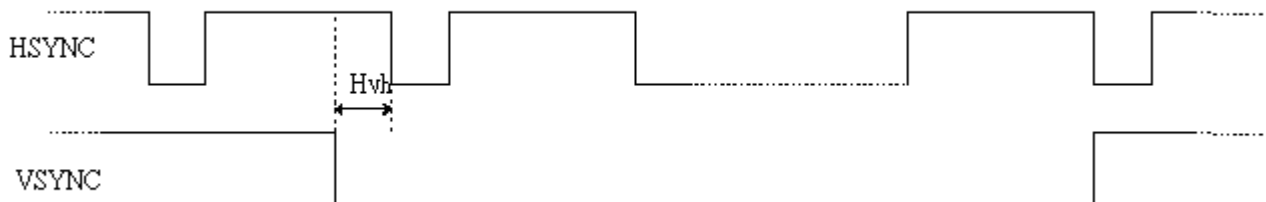
a.2 HSYNC timing



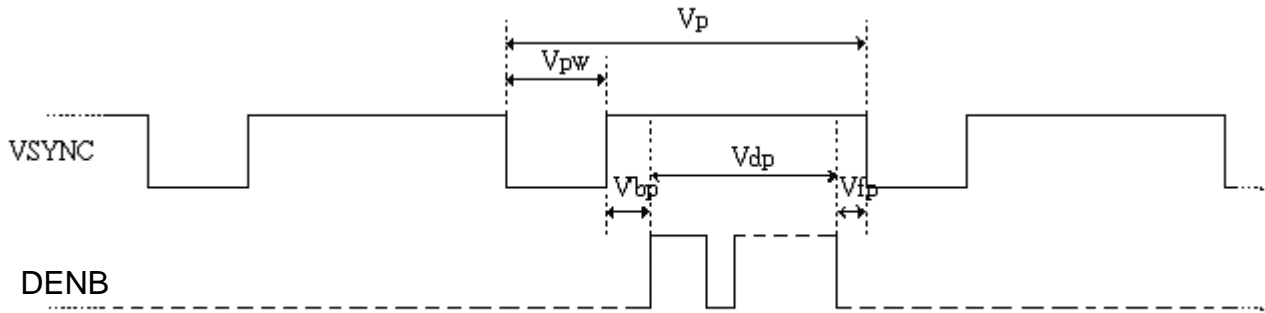
a.3 CLK, HSYNC relationship



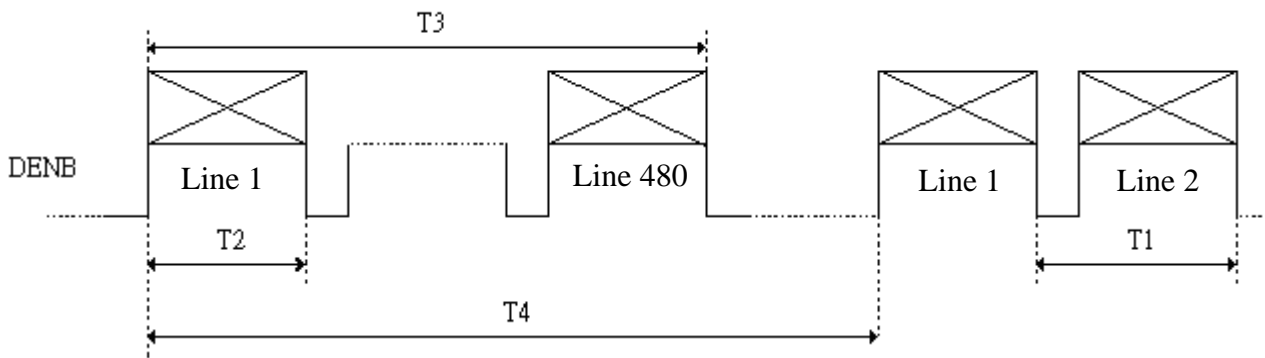
a.4 HSYNC, VSYNC relationship



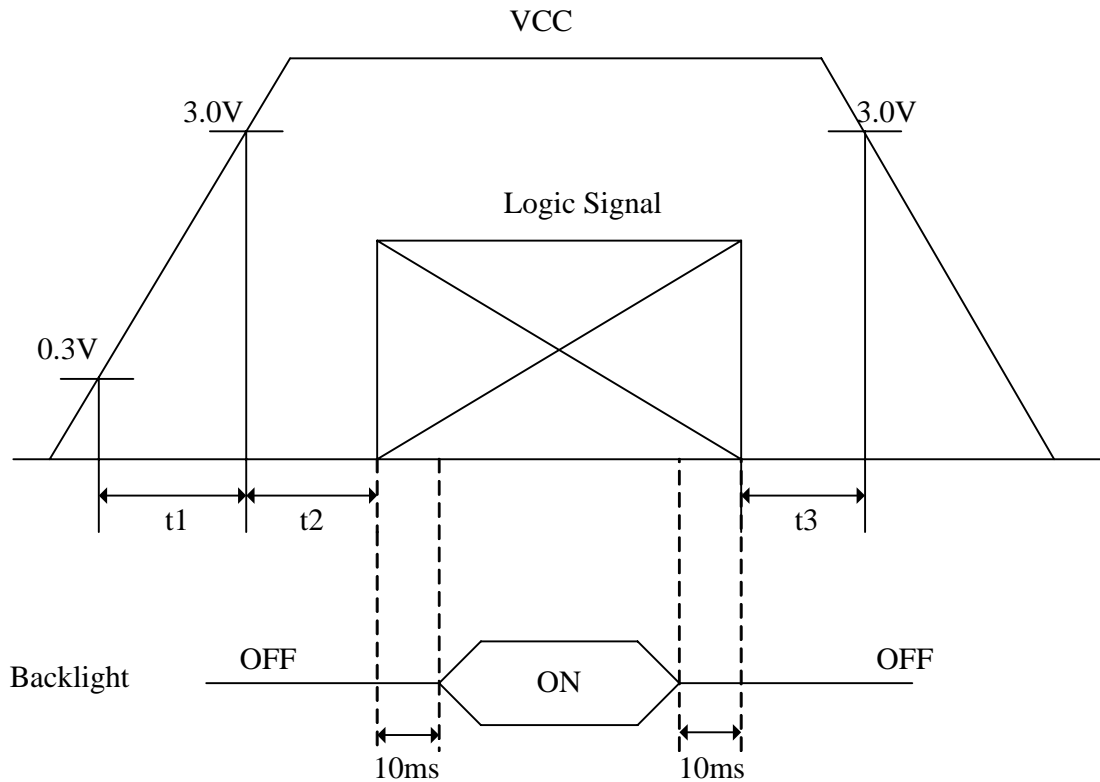
a.5 VSYNC timing



a.6 DENB timing



12. Power On Sequence



1. $0 < t_1 \leq 20\text{ms}$
2. $0 < t_2 \leq 50\text{ms}$
3. $0 < t_3 \leq 1\text{s}$

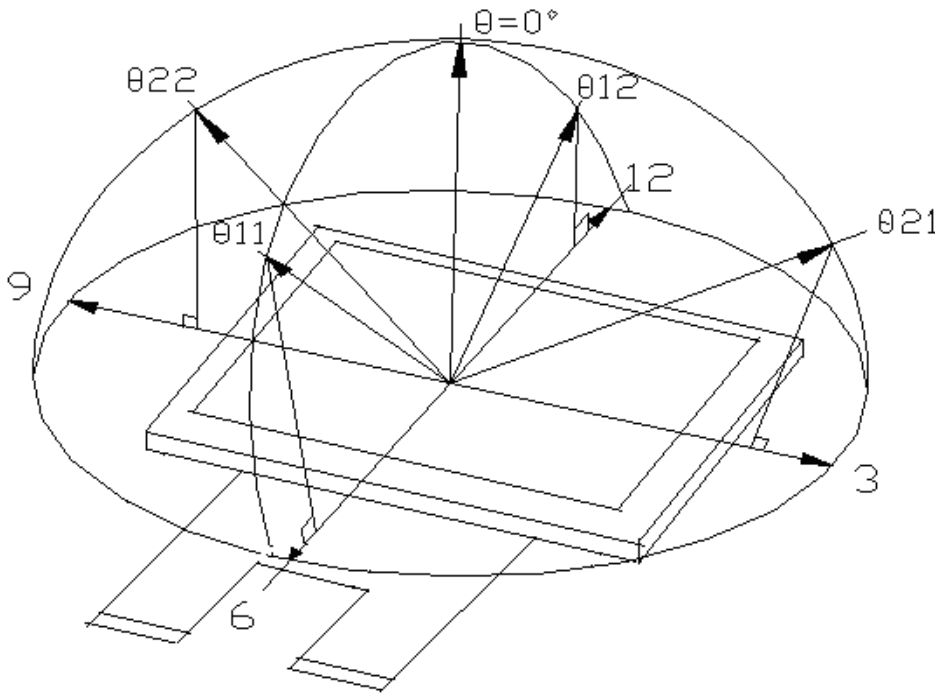
13. Optical Characteristics

13-1) Specification:

$T_a=25^\circ\text{C}$

| Parameter | | Symbol | Condition | MIN. | TYP. | MAX. | Unit | Remarks |
|--------------------|------------|----------------------------|----------------------------|--------|--------|------|------------------------|-----------|
| Viewing Angle | Horizontal | θ_{21}, θ_{22} | $CR > 10$ | 55 | 60 | - | deg | Note 13-1 |
| | Vertical | θ_{12} | | 35 | 40 | - | deg | |
| | | θ_{11} | | 50 | 55 | - | deg | |
| Contrast Ratio | | CR | At optimized Viewing angle | 200 | 400 | - | - | Note 13-2 |
| Response time | Rise | T_r | $\theta = 0^\circ$ | - | 15 | 30 | ms | Note 13-4 |
| | Fall | T_f | | - | 25 | 50 | ms | |
| Brightness | | L | $\theta = 0^\circ$ | 400 | 450 | - | cd/m^2 | Note 13-3 |
| Uniformity | | U | | 70 | 80 | - | % | Note 13-6 |
| Cross Talk | | - | $\theta = 0^\circ$ | - | - | 3.5 | % | Note 13-7 |
| White Chromaticity | | x | $\theta = 0^\circ$ | 0.28 | 0.31 | 0.34 | - | Note 13-3 |
| | | y | | 0.31 | 0.34 | 0.37 | - | |
| LED Life Time | | | $+25^\circ\text{C}$ | 20,000 | 30,000 | - | hrs | Note 13-5 |

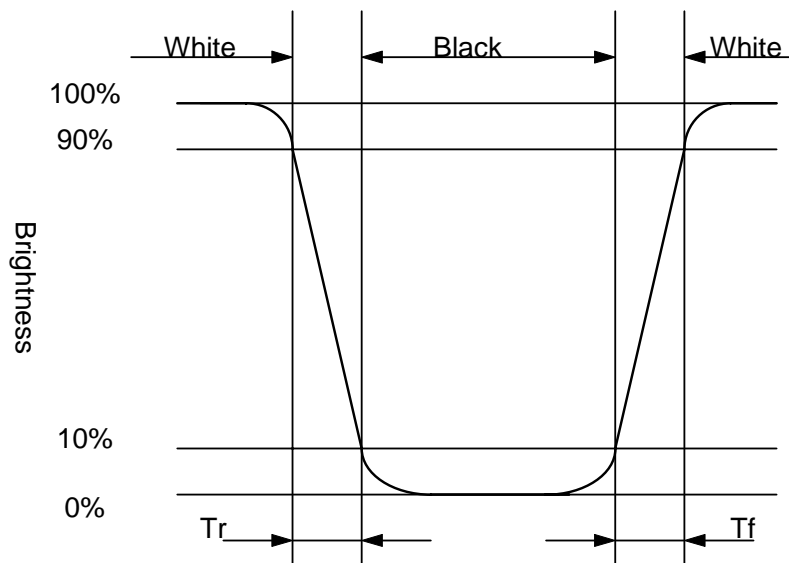
Note 13-1 : The definitions of viewing angle diagrams :



Note 13-2: $CR = \frac{\text{Luminance when LCD is White}}{\text{Luminance when LCD is Black}}$
 Contrast Ratio is measured in optimum common electrode voltage.

Note 13-3 : Topcon BM-7 (fast) luminance meter 1° field of view is used in the testing (after 20~30 minutes operation).

Note 13-4 : The definitions of response time T_r and T_f :



Note 13-5: The “LED Life time “ is defined as the module brightness decrease to 50% original Brightness that the ambient temperature is 25°C and $I_{LED} = 160mA$.

Note 13-6 : The uniformity of LCD is defined as

$$U = \frac{\text{The Minimum Brightness of the 9 testing Points}}{\text{The Maximum Brightness of the 9 testing Points}}$$

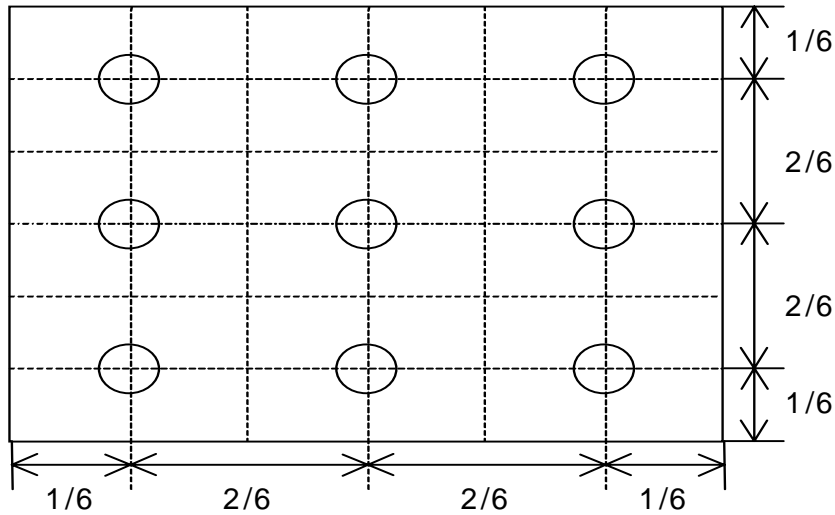
Luminance meter : BM-5A or BM-7 fast (TOPCON)

Measurement distance : 500 mm +/- 50 mm

Ambient illumination : < 1 Lux

Measuring direction : Perpendicular to the surface of module

The test pattern is white (Gray Level 63).



Note 13-7: Cross Talk (CTK) = $\frac{|YA-YB|}{YA} \times 100\%$

YA: Brightness of Pattern A

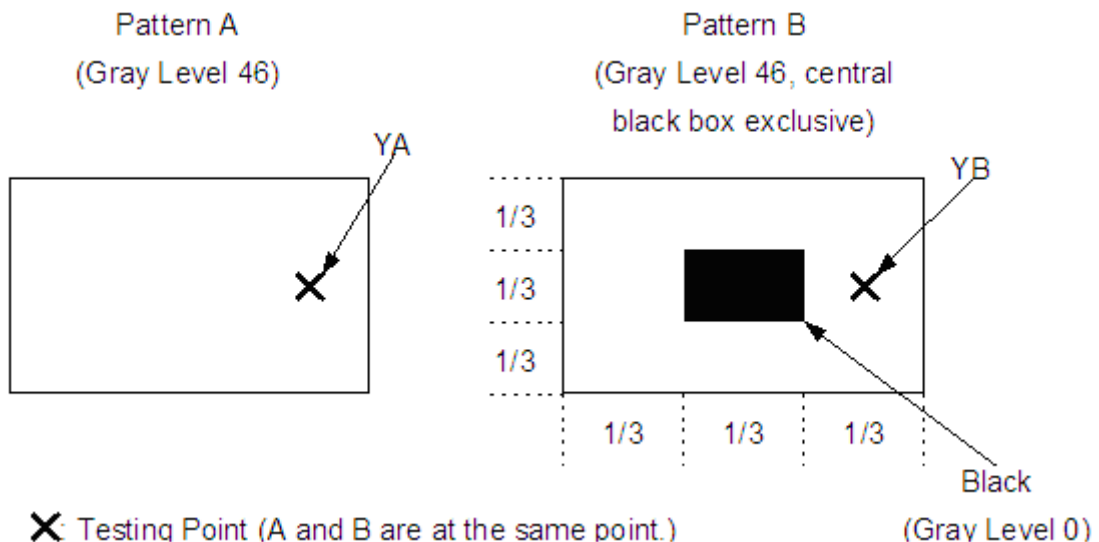
YB: Brightness of Pattern B

Luminance meter : BM 5A or BM-7 fast (TOPCON)

Measurement distance : 500 mm +/- 50 mm

Ambient illumination : < 1 Lux

Measuring direction : Perpendicular to the surface of module



14. Handling Cautions

14-1) Mounting of module

- a) Please power off the module when you connect the input/output connector.
- b) Please connect the ground pattern of the inverter circuit surely. If the connection is not perfect, some following problems may happen possibly.
 - 1. The noise from the backlight unit will increase.
 - 2. The output from inverter circuit will be unstable.
 - 3. In some cases a part of module will heat.
- c) Polarizer which is made of soft material and susceptible to flaw must be handled carefully.
- d) Protective film (Laminator) is applied on surface to protect it against scratches and dirt.
- e) Please following the tear off direction as figure14-1 to remove the protective film as slowly as possible, so that electrostatic charge can be minimized.

14-2) Precautions in mounting

- a) When metal part of the TFT-LCD module (shielding lid and rear case) is soiled, wipe it with soft dry cloth.
- b) Wipe off water drops or finger grease immediately. Long contact with water may cause discoloration or spots.
- c) TFT-LCD module uses glass, which breaks or cracks easily if dropped or bumped on hard surface. Please handle with care.
- d) Since CMOS LSI is used in the module. So take care of static electricity and earth yourself when handling.

14-3) Adjusting module

- a) Adjusting volumes on the rear face of the module have been set optimally before shipment.
- b) Therefore, do not change any adjusted values. If adjusted values are changed, the specifications described may not be satisfied.

14-4) Others

- a) Do not expose the module to direct sunlight or intensive ultraviolet rays for many hours.
- b) Store the module at a room temperature place.
- c) The voltage of beginning electric discharge may over the normal voltage because of leakage current from approach conductor by to draw lump read lead line around.
- d) If LCD panel breaks, it is possibly that the liquid crystal escapes from the panel. Avoid putting it into eyes or mouth. When liquid crystal sticks on hands, clothes or feet. Wash it out immediately with soap.
- e) Observe all other precautionary requirements in handling general electronic components.
- f) Please adjust the voltage of common electrode as material of attachment by 1 module.

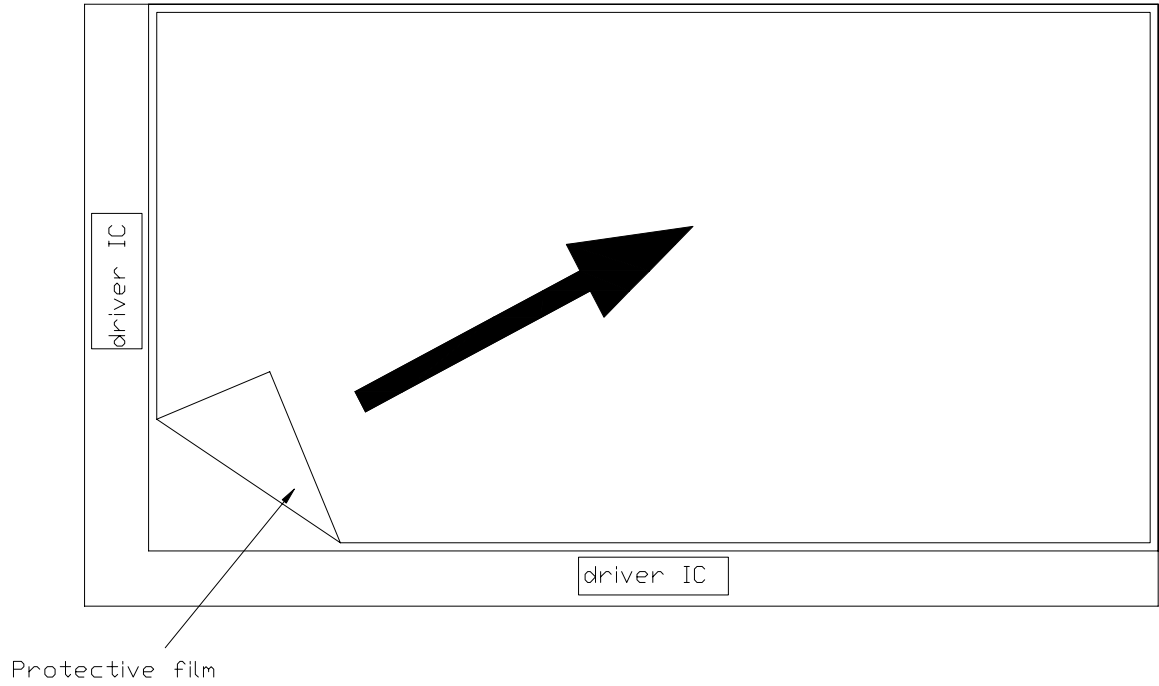


Figure 14-1 the way to peel off protective film

15. Reliability Test

| No | Test Item | Test Condition |
|----|---|--|
| 1 | High Temperature Storage Test | Ta = +90°C, 240 hrs |
| 2 | Low Temperature Storage Test | Ta = -40°C, 240 hrs |
| 3 | High Temperature Operation Test | Ta = +80°C, 240 hrs |
| 4 | Low Temperature Operation Test | Ta = -30°C, 240 hrs |
| 5 | High Temperature & High Humidity Operation Test | Ta = +60°C, 90%RH, 240 hrs |
| 6 | Thermal Cycling Test (non-operating) | -30°C → +80°C, 200 Cycles 30 min 30 min |
| 7 | Vibration Test (non-operating) | Frequency : 10 ~ 55 Hz Amplitude : 1 mm Sweep time: 11 mins Test Period: 6 Cycles for each direction of X, Y, Z |
| 8 | Shock Test (non-operating) | 100G, 6ms Direction: ±X, ±Y, ±Z Cycle: 3 times |
| 9 | Electrostatic Discharge Test (non-operating) | 150pF, 330Ω Air : ±15KV ; Contact : ±8KV 10 times/point , 9 points/panel face |

Ta: ambient temperature

[Criteria]

In the standard conditions, there is not display function NG issue occurred. (including: line defect ,no image).All the cosmetic specification is judged before the reliability stress.

16. Packing Diagram

| REV | DESCRIPTION | DESIGN | DATE |
|-----|------------------------------|-------------|------------|
| 01 | INITIAL RELRASE | Patrick Lin | 2006.11.01 |
| 02 | CHG 50-0500181 to 50-0510092 | Patrick Lin | 2009.08.14 |

NOTE:
 1.Q'TY: 40 pcs panel/carton.
 2.Dimension: 530*295*230mm
 3.Weight: 9.5 Kg

| ITEM | PART NO. | DESCRIPTION | QTY | REMARK |
|------|------------|--------------------|-----|--------|
| 4 | 50-0100111 | CARTON | 1 | |
| 3 | 50-0510092 | PINK Bag 195*105mm | 40 | 抗靜電 |
| 2 | | 5" Module | 40 | |
| 1 | 50-0301661 | 瓦楞隔板緩衝材 | 1 | 上蓋+底座 |

| | | | | | | | |
|-----------|----------|-------------------|---------|--------|-----------|--|---------|
| MTL.SPEC. | | UNSPECIFIED TOL'S | | REMARK | | 元太科技工業股份有限公司 Prime View International Co., Ltd. | |
| | | ANGLE | | | | | |
| | | ROUGHNESS | | | | DWG.TITLE | |
| APPROVE | Franks | '06.12.01 | SCALE | UNIT | SHEET | PD050VL1 Packing Draw | |
| CHECK | Franks | '06.12.01 | | | 1 OF 1 | | |
| DRAWN | Patrickl | '06.12.01 | MTL.NO. | | DWG FILE: | | REV. 01 |
| | | | | | | | A4 SIZE |