

AU OPTRONICS CORPORATION
B170PW06 V3

| (V |) Preliminary Specifications |
|-----|------------------------------|
| (|) Final Specifications |

| Module | 17.0" WXGA+ Color TFT-LCD |
|------------|---------------------------|
| Model Name | B170PW06 V3 |

| Customer Date | Approved by Date |
|---|--|
| | |
| Checked & Approved by | Prepared by |
| Howard Lee 2006/11/30 | |
| Note: This Specification is subject to change without notice. | NBBU Marketing Division / AU Optronics corporation |

document version 0 1/30



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B170PW06 V3

Contents

| 1. Handling Precautions | 4 |
|---|----|
| 2. General Description | 5 |
| 2.1 General Specification | 5 |
| 2.2 Optical Characteristics | 6 |
| 3. Functional Block Diagram | 10 |
| 4. Absolute Maximum Ratings | 11 |
| 4.1 Absolute Ratings of TFT LCD Module | 11 |
| 4.2 Absolute Ratings of Backlight Unit | 11 |
| 4.3 Absolute Ratings of Environment | 11 |
| 5. Electrical characteristics | 12 |
| 5.1 TFT LCD Module | 12 |
| 5.2 Backlight Unit | 14 |
| 6. Signal Characteristic | 16 |
| 6.1 Pixel Format Image | 16 |
| 6.2 The input data format | 17 |
| 6.3 Signal Description | 19 |
| 6.4 Interface Timing | 20 |
| 6.5 Power ON/OFF Sequence | 22 |
| 7. Connector Description | 23 |
| 7.1 TFT LCD Module | 23 |
| 7.2 Backlight Unit | 23 |
| 7.3 Signal for Lamp connector | 23 |
| 8. Vibration and Shock Test | 24 |
| 8.1 Vibration Test | 24 |
| 8.2 Shock Test Spec: | 24 |
| 9. Reliability | 25 |
| 10. Mechanical Characteristics | 26 |
| 10.1 LCM Outline Dimension | 26 |
| 10.2 Screw Hole Depth and Center Position | 28 |
| 11. Shipping and Package | 29 |
| 11.1 Shipping Label Format | 29 |
| 11.2. Carton Package | 29 |
| 12. Appendix: EDID description | 30 |



AU OPTRONICS CORPORATION B170PW06 V3

Record of Revision

| Version and Date Page O | | Old description | New Description | Remark |
|-------------------------|--|-----------------|-----------------|--------|
| V0 2006/11/27 | | Initial Edition | | |
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document version 0 3/30



AU OPTRONICS CORPORATION

B170PW06 V3

1. Handling Precautions

- 1) Since front polarizer is easily damaged, pay attention not to scratch it.
- 2) Be sure to turn off power supply when inserting or disconnecting from input connector.
- 3) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
- 4) When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth.
- 5) Since the panel is made of glass, it may break or crack if dropped or bumped on hard surface.
- 6) Since CMOS LSI is used in this module, take care of static electricity and insure human earth when handling.
- 7) Do not open nor modify the Module Assembly.
- 8) Do not press the reflector sheet at the back of the module to any directions.
- 9) In case if a Module has to be put back into the packing container slot after once it was taken out from the container, do not press the center of the CCFL Reflector edge. Instead, press at the far ends of the CFL Reflector edge softly. Otherwise the TFT Module may be damaged.
- 10)At the insertion or removal of the Signal Interface Connector, be sure not to rotate nor tilt the Interface Connector of the TFT Module.
- 11) After installation of the TFT Module into an enclosure (Notebook PC Bezel, for example), do not twist nor bend the TFT Module even momentary. At designing the enclosure, it should be taken into consideration that no bending/twisting forces are applied to the TFT Module from outside. Otherwise the TFT Module may be damaged.
- 12)Cold cathode fluorescent lamp in LCD contains a small amount of mercury. Please follow local ordinances or regulations for disposal.
- 13) Small amount of materials having no flammability grade is used in the LCD module. The LCD module should be supplied by power complied with requirements of Limited Power Source (IEC60950 or UL1950), or be applied exemption.
- 14)The LCD module is designed so that the CCFL in it is supplied by Limited Current Circuit (IEC60950 or UL1950). Do not connect the CCFL in Hazardous Voltage Circuit.

document version 0 4/30



AU OPTRONICS CORPORATION

B170PW06 V3

2. General Description

B170PW06 V3 is a Color Active Matrix Liquid Crystal Display composed of a TFT LCD panel, a driver circuit, and backlight system. The screen format is intended to support the WXGA+ (1440(H) x 900(V)) screen and 262k colors (RGB 6-bits data driver). All input signals are LVDS interface compatible. Inverter of backlight is not included.

B170PW06 V3 is designed for a display unit of notebook style personal computer and industrial machine.

2.1 General Specification

The following items are characteristics summary on the table at 25 $\,^{\circ}\!\mathbb{C}\,$ condition:

| Items | Unit | Specifications |
|-------------------------------|----------------------|---|
| Screen Diagonal | [mm] | 391 (17.0W") |
| Active Area | [mm] | 367.20(H) X 229.50(V) |
| Pixels H x V | | 1440x3(RGB)x900 |
| Pixel Pitch | [mm] | 0.255X0.255 |
| Pixel Arrangement | | R.G.B. Vertical Stripe |
| Display Mode | | Normally White |
| White Luminance (IccFL=6.5mA) | [cd/m ²] | 220 typ. (5 points average) |
| Note: IccFL is lamp current | | 200 min. (5 points average) (Note1) |
| Luminance Uniformity | | 1.2 max. (5 points) |
| Contrast Ratio | | 500 typ |
| Optical Rise Time/Fall Time | [msec] | 8ms typ. (14ms max) |
| Nominal Input Voltage VDD | [Volt] | +3.3 typ. (+3.0 min, +3.6 max) |
| Power Consumption | [Watt] | 7 typ (without inverter) |
| Weight | [Grams] | 660 typ. (700 max) |
| Physical Size | [mm] | TYP: 382.2(W)x244.5(H)x6.4 (D) MAX:382.7(W)x247.0(H)x7.0 (D) |
| Electrical Interface | | 2 channel LVDS |
| Surface Treatment | | Anti Glare (3H) |
| Support Color | | Native 262K colors (RGB 6-bit Data driver) |
| Temperature Range | | |
| Operating | [°C] | 0 to +50 |
| Storage (Non-Operating) | [°C] | -20 to +60 |
| RoHS Compliance | | RoHS Compliance |

document version 0 5/30



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B170PW06 V3

2.2 Optical Characteristics

The optical characteristics are measured under stable conditions at 25°C (Room Temperature):

| Item | Unit | Condi | tions | Min. | Тур. | Max. | Note |
|-----------------------------|----------------------|-----------------------|--------------------|-------|-------|-------|---------|
| White Luminance Iccfl=6.5mA | [cd/m ²] | 5 points av | erage | 200 | 220 | - | 1, 4, 8 |
| Viewing Angle | [degree] | Horizontal CR = 10 | (Right) (Left) | 40 | 45 | - | 7 |
| | [degree] | Vertical | | 40 | 45 | - | |
| | [degree] [degree] | CR = 10 | (Upper) (Lower) | 15 | 20 | - | |
| Luminance Uniformity | [uegree] | 5 Points | | 30 | 35 | - | |
| • | | | | | | 1.2 | 1,3 |
| Luminance Uniformity | | 13 Points | | | | 1.5 | 2,3 |
| CR: Contrast Ratio | | | | 300 | 400 | - | 4 |
| Cross talk | % | | | | | 4 | 5 |
| Response Time | [msec] | Rising | | - | 2 | 5 | 6 |
| | [msec] | Falling | | - | 6 | 9 | |
| | [msec] | Rising + Fa | ılling | | 8 | 14 | |
| Color / Chromaticity | | Red x | | 0.560 | 0.590 | 0.620 | 2,7 |
| Coordinates (CIE 1931) | | Red y | | 0.315 | 0.345 | 0.375 | |
| (OIL 1551) | | Green x | | 0.285 | 0.315 | 0.345 | |
| | | Green y | | 0.525 | 0.555 | 0.585 | |
| | | Blue x | | 0.125 | 0.155 | 0.185 | |
| | | Blue y | | 0.125 | 0.155 | 0.185 | |
| | | White x | | 0.283 | 0.313 | 0.343 | |
| | | White y | | 0.299 | 0.329 | 0.359 | |

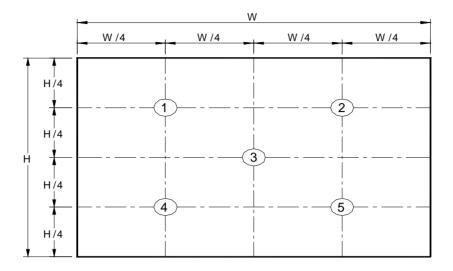
document version 0 6/30



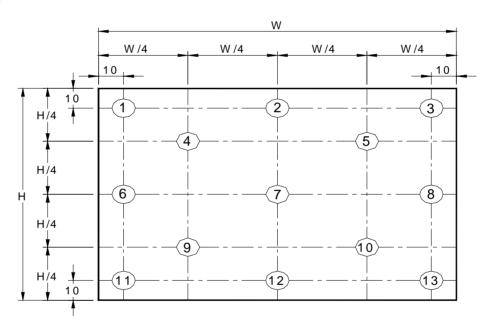
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Note 1: 5 points position (Display area: 367.20(H) X 229.50(V))mm)



Note 2: 13 points position



Note 3: The luminance uniformity of 5 and 13 points is defined by dividing the maximum luminance values by the minimum test point luminance

| _ 2 | Maximum Brightness of five points | |
|------------------|-----------------------------------|---------------------------------------|
| δ _{W5} | = | Minimum Brightness of five points |
| 2 | | Maximum Brightness of thirteen points |
| δ _{W13} | = ' | Minimum Brightness of thirteen points |

document version 0 7/30

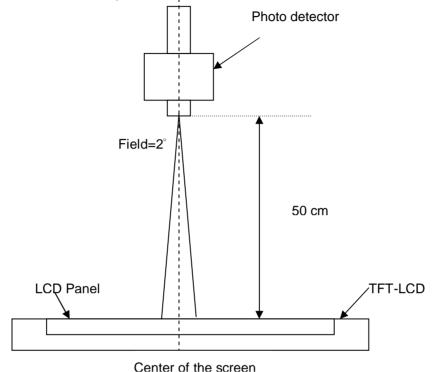


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Note 4: Measurement method

The LCD module should be stabilized at given temperature for 30 minutes to avoid abrupt temperature change during measuring. In order to stabilize the luminance, the measurement should be executed after lighting Backlight for 30 minutes in a stable, windless and dark room.

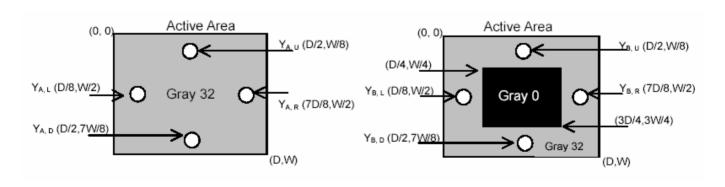


Note 5 : Definition of Cross Talk (CT) $CT = |Y_B - Y_A| / Y_A \times 100 (\%)$

Where

YA = Luminance of measured location without gray level 0 pattern (cd/m2)

Y_B = Luminance of measured location with gray level 0 pattern (cd/m₂)



document version 0 8/30

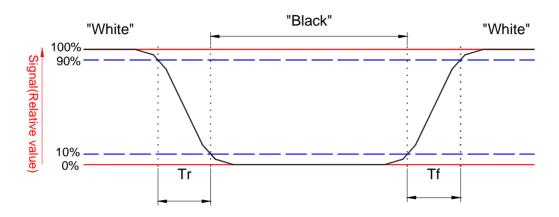


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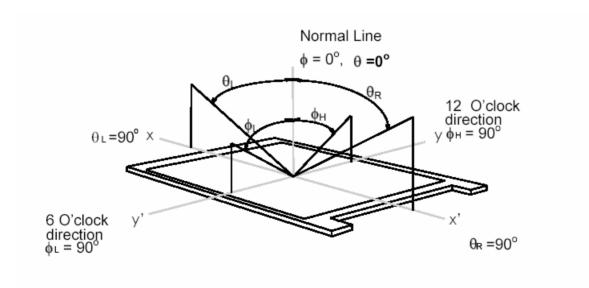
Note 6: Definition of response time:

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



Note 7. Definition of viewing angle

Viewing angle is the measurement of contrast ratio \geq 10, at the screen center, over a 180° horizontal and 180° vertical range (off-normal viewing angles). The 180° viewing angle range is broken down as follows; 90° (θ) horizontal left and right and 90° (Φ) vertical, high (up) and low (down). The measurement direction is typically perpendicular to the display surface with the screen rotated about its center to develop the desired measurement viewing angle.



Note 8. Brightness measured with Foxconn inverter T73I019.01, under 6.5mA lamp current input.

document version 0 9/30

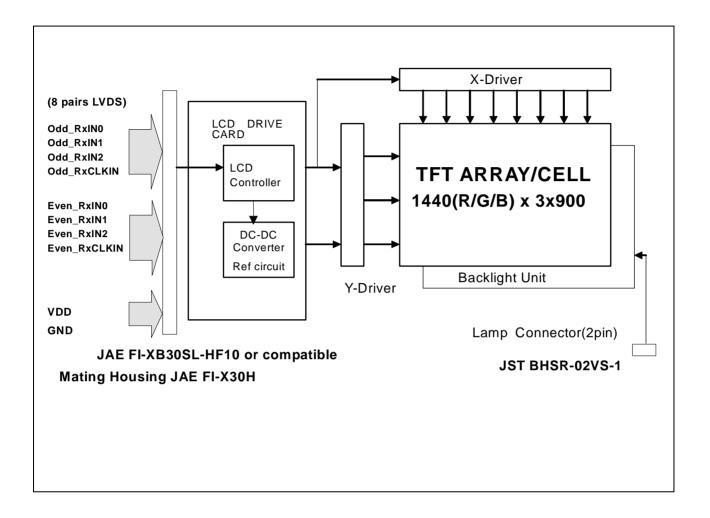


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B170PW06 V3

3. Functional Block Diagram

The following diagram shows the functional block of the 17.0 inches wide Color TFT/LCD Module:



document version 0 10/30



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B170PW06 V3

4. Absolute Maximum Ratings

Absolute maximum rating of the module is as following:

4.1 Absolute Ratings of TFT LCD Module

| Item | Symbol | Min | Max | Unit | Conditions |
|-----------------|--------|------|------|--------|------------|
| Logic/LCD Drive | Vin | -0.3 | +4.0 | [Volt] | Note 1,2 |

4.2 Absolute Ratings of Backlight Unit

| Item | Symbol | Min | Max | Unit | Conditions |
|--------------|--------|-----|-----|----------|------------|
| CCFL Current | ICCFL | - | 7 | [mA] rms | Note 1,2 |

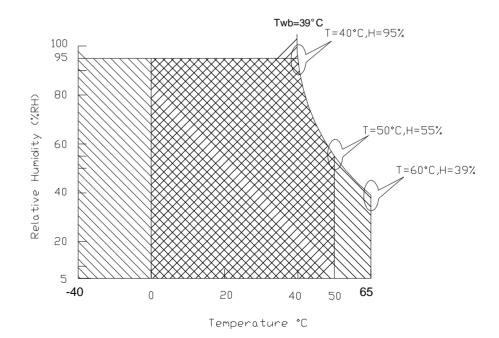
4.3 Absolute Ratings of Environment

| Item | Symbol | Min | Max | Unit | Conditions |
|-----------------------|--------|-----|-----|-------|------------|
| Operating Temperature | TOP | 0 | +50 | [°C] | Note 3 |
| Operation Humidity | HOP | 5 | 95 | [%RH] | Note 3 |
| Storage Temperature | TST | -20 | +60 | [°C] | Note 3 |
| Storage Humidity | HST | 5 | 95 | [%RH] | Note 3 |

Note 1: Within Ta (25°C)

Note 2: Permanent damage to the device may occur if exceed maximum values

Note 3: For quality performance, please refer to AUO IIS(Incoming Inspection Standard).



Operating Range

Storage Range

+

document version 0 11/30



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B170PW06 V3

5. Electrical characteristics

5.1 TFT LCD Module

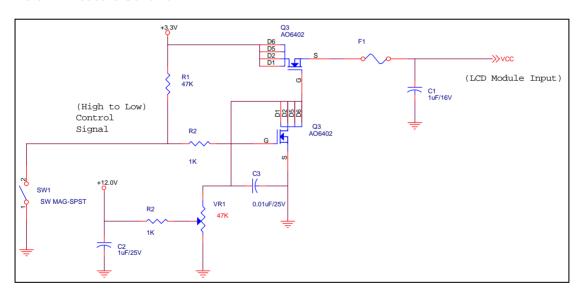
5.1.1 Power Specification

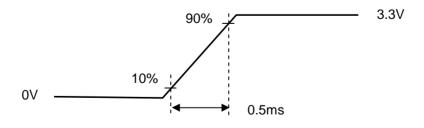
Input power specifications are as follows;

| Symble | Parameter | Min | Тур | Max | Units | Note |
|--------|-----------------------------------|-----|-----|------|--------|-------------------|
| VDD | Logic/LCD Drive Voltage | 3.0 | 3.3 | 3.6 | [Volt] | |
| PDD | VDD Power | | | 2.1 | [Watt] | Note 1 |
| IDD | IDD Current | | 580 | 680 | [mA] | Note 1 ,VDD=3.3 V |
| IRush | Inrush Current | | | 2000 | [mA] | Note 2 |
| VDDrp | Allowable | | | 100 | [mV] | |
| | Logic/LCD Drive Ripple Voltage | | | | p-p | |

Note 1: Maximum Measurement Condition: Black Pattern

Note 2: Measure Condition





Vin rising time

document version 0 12/30



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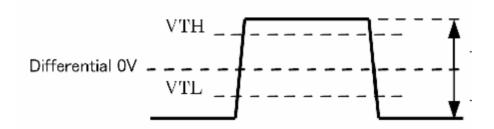
B170PW06 V3

5.1.2 Signal Electrical Characteristics
Input signals shall be low or High-impedance state when VDD is off.

Signal electrical characteristics are as follows;

| Parameter | Condition | Min | Max | Unit |
|-----------|--|------|------|------|
| Vth | Differential Input High Threshold (Vcm=+1.2V) | | 100 | [mV] |
| VtI | Differential Input Low Threshold (Vcm=+1.2V) | -100 | | [mV] |
| Vcm | Differential Input Common Mode Voltage | 1.1 | 1.45 | [V] |

Note: LVDS Differential Voltage



document version 0 13/30



AU OPTRONICS CORPORATION

B170PW06 V3

5.2 Backlight Unit

Parameter guideline for CCFL Inverter

| Parameter | Min | Тур | Max | Units | Condition |
|----------------------------|------|------|------|----------------------|------------|
| White Luminance | 2250 | 2450 | | [cd/m ²] | (Ta=25°ℂ) |
| | | | | | Note 1 |
| CCFL current(ICCFL) | 3.0 | 6.5 | 7.0 | [mA] rms | (Ta=25°ℂ) |
| | | | | | Note 2 |
| CCFL Frequency (FCCFL) | 40 | 60 | 80 | [KHz] | (Ta=25°ℂ) |
| | | | | | Note 3,4 |
| CCFL Ignition Voltage (Vs) | | | 1700 | [Volt] | (Ta= 0°C) |
| | | | | rms | Note 5 |
| CCFL Ignition Voltage(Vs) | | | 1310 | [Volt] | (Ta= 25°ℂ) |
| | | | | rms | Note 5 |
| CCFL Voltage (Reference) | 666 | 740 | 814 | [Volt] | (Ta=25°ℂ) |
| | | | | rms | Note 6 |
| CCFL Power consumption | 2.22 | 4.8 | 5.2 | [Watt] | (Ta=25°ℂ) |
| | | | | | Note 6 |
| CCFL Set up Time | 1 | _ | | [Sec] | |
| | | | | | |

Note 1: Typ are AUO recommended Design Points.

- *1 All of characteristics listed are measured under the condition using the AUO Test inverter.
- *2 In case of using an inverter other than listed, it is recommended to check the inverter carefully. Sometimes, interfering noise stripes appear on the screen, and substandard luminance or flicker at low power may happen.
- *3 In designing an inverter, it is suggested to check safety circuit very carefully. Impedance of CCFL, for instance, becomes more than 1 [M ohm] when CFL is damaged.
- *4 Generally, CCFL has some amount of delay time after applying kick-off voltage. It is recommended to keep on applying kick-off voltage for 1 [Sec] until discharge.
- *5 CCFL discharge frequency must be carefully chosen so as not to produce interfering noise stripes on the screen.
- *6 Reducing CCFL current increases CCFL discharge voltage and generally increases CCFL discharge frequency. So all the parameters of an inverter should be carefully designed so as not to produce too much leakage current from high-voltage output of the inverter.
- Note 2: It should be employed the inverter which has "Duty Dimming", if ICCFL is less than 4mA.
- Note 3: CCFL discharge frequency should be carefully determined to avoid interference between inverter and TFT LCD.
- Note 4: The frequency range will not affect to lamp life and reliability characteristics.

document version 0 14/30



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B170PW06 V3

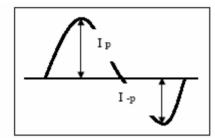
Note 5: CCFL inverter should be able to give out a power that has a generating capacity of over 1,430 voltage. Lamp units need 1,400 voltage minimum for ignition.

Note 6: Calculator value for reference (ICCFL×VCCFL=PCCFL)

Note 7: Requirements for a system inverter design, which is intended to have a better display performance, a better power efficiency and a more reliable lamp, are following.

It shall help increase the lamp lifetime and reduce leakage current.

- a. The asymmetry rate of the inverter waveform should be less than 10%.
- b. The distortion rate of the waveform should be within $\sqrt{2} \pm 10\%$.
- * Inverter output waveform had better be more similar to ideal sine wave.



* Asymmetry rate:

| I p - I _p | / I rms * 100%

* Distortion rate

| p (or I _p) / I rms

document version 0 15/30



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6. Signal Characteristic

6.1 Pixel Format Image

Following figure shows the relationship of the input signals and LCD pixel format.

| | | 1 | | | 2 | | | 1 | 43 | 9 | 14 | 140 | 0 |
|------------|---|---|---|---|---|---|---|---|----|---|----|-----|---|
| 1st Line | R | G | В | R | G | В | | R | G | В | R | G | В |
| | | , | | | 1 | | 1 | | | | | 1 | |
| | | ١ | | | | | • | | | | | | |
| | | • | | | | | • | | • | | | | |
| | | • | | | • | | | | | | | | |
| | | , | | | | | • | | • | | | 1 | |
| | | , | | | 1 | | • | | | | | | |
| 900th Line | R | G | В | R | G | В | | R | G | В | R | G | В |

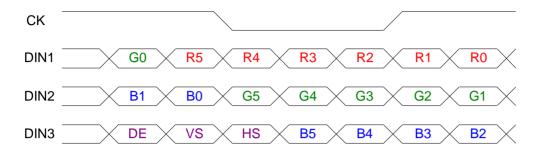
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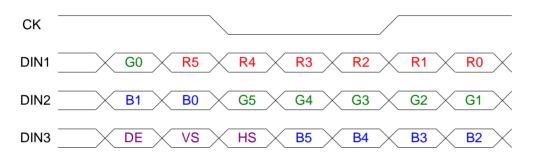
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6.2 The input data format ODD pair(1st pixel input)



Even pair(2nd pixel input)



| Signal Name | Description | |
|-------------|--------------------|---|
| R5 | Red Data 5 (MSB) | Red-pixel Data |
| R4 | Red Data 4 | Each red pixel's brightness data consists of these 6 bits |
| R3 | Red Data 3 | pixel data. |
| R2 | Red Data 2 | |
| R1 | Red Data 1 | |
| R0 | Red Data 0 (LSB) | |
| | Red-pixel Data | |
| G5 | Green Data 5 (MSB) | Green-pixel Data |
| G4 | Green Data 4 | Each green pixel's brightness data consists of these 6 bits |
| G3 | Green Data 3 | pixel data. |
| G2 | Green Data 2 | |
| G1 | Green Data 1 | |
| G0 | Green Data 0 (LSB) | |
| | Green-pixel Data | |
| B5 | Blue Data 5 (MSB) | Blue-pixel Data |
| B4 | Blue Data 4 | Each blue pixel's brightness data consists of these 6 bits |
| B3 | Blue Data 3 | pixel data. |
| B2 | Blue Data 2 | |
| B1 | Blue Data 1 | |
| B0 | Blue Data 0 (LSB) | |
| | Blue-pixel Data | |
| RxCLKIN | Data Clock | The typical frequency is 48.2 MHz. The signal is used to |
| | | strobe the pixel data and DSPTMG signals. All pixel data shall be valid at the falling edge when the DSPTMG |
| | | signal is high. |

document version 0 17/30



AU OPTRONICS CORPORATION

B170PW06 V3

| DE | Display Timing | This signal is strobed at the falling edge of -DTCLK. When the signal is high, the pixel data shall be valid to be displayed. |
|----|-----------------|---|
| VS | Vertical Sync | The signal is synchronized to -DTCLK. |
| HS | Horizontal Sync | The signal is synchronized to -DTCLK. |

Note: Output signals from any system shall be low or Hi-Z state when VDD is off.

document version 0 18/30



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6.3 Signal Description

LVDS is a differential signal technology for LCD interface and high speed data transfer device.

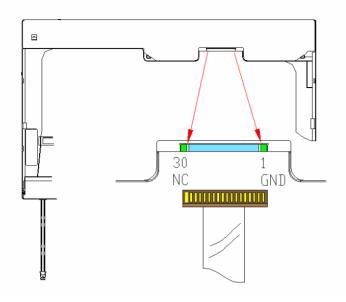
| Pin no | Symbol | Function | Etc. |
|--------|----------------------|---------------------------------------|------|
| 1 | GND | Ground | |
| 2 | VDD | Power supply ,3.3 V (typical) | |
| 3 | VDD | Power supply ,3.3 V (typical) | |
| 4 | V_{EDID} | DDC 3.3V power | |
| 5 | NC | No Connection (Reserved for AUO) test | |
| 6 | CLK _{EDID} | DDC Clock | |
| 7 | Data _{EDID} | DDC data | |
| 8 | Odd_RxIN0- | -LVDS differential data input | |
| 9 | Odd_RxIN0+ | +LVDS differential data input | |
| 10 | GND | Ground | |
| 11 | Odd_RxIN1- | -LVDS differential data input | |
| 12 | Odd_RxIN1+ | +LVDS differential data input | |
| 13 | GND | Ground | |
| 14 | Odd_RxIN2- | -LVDS differential data input | |
| 15 | Odd_RxIN2+ | +LVDS differential data input | |
| 16 | GND | Ground | |
| 17 | Odd_RxCLKIN- | -LVDS differential clock input | |
| 18 | Odd_RxCLKIN+ | +LVDS differential clock input | |
| 19 | GND | Ground | |
| 20 | Even_RxIN0- | -LVDS differential data input | |
| 21 | Even_RxIN0+ | +LVDS differential data input | |
| 22 | GND | Ground | |
| 23 | Even_RxIN1- | -LVDS differential data input | |
| 24 | Even_RxIN1+ | +LVDS differential data input | |
| 25 | GND | Ground | |
| 26 | Even_RxIN2- | -LVDS differential data input | |
| 27 | Even_RxIN2+ | +LVDS differential data input | |
| 28 | GND | Ground | |
| 29 | Even_RxCLKIN- | -LVDS differential clock input | |
| 30 | Even_RxCLKIN+ | +LVDS differential clock input | |

document version 0 19/30



AU OPTRONICS CORPORATION

B170PW06 V3



Note1: Start from right side

Note2: Please follow VESA standard.

Note3: Input signals shall be low or High-impedance when VDD is off.

Internal circuit of LVDS inputs are as following.

The module uses a 100ohm resistor between positive and negative data lines of each receiver input

6.4 Interface Timing

6.4.1 Timing Characteristics

Basically, interface timings should match the 1440x900 manufacturing guide line timing.

| Signal | Item | Symbol | Min | Тур | Max | Unit |
|------------|----------------|----------|-------|-------|------|------|
| Vertical | Period | Tv | 904 | 912 | 2048 | Th |
| Section | Active | Tdisp(v) | 900 | 900 | 900 | Th |
| | Blanking | Tblk(v) | 4 | 12 | - | Th |
| Horizontal | Period | Th | 760 | 880 | 1024 | Tclk |
| Section | Active | Tdisp(h) | 720 | 720 | 720 | Tclk |
| | Blanking | Tblk(h) | 40 | 160 | - | Tclk |
| Clock | Period | Tclk | 16.61 | 20.75 | - | Ns |
| | Frequency@60Hz | Freq | - | 48.2 | 60.2 | MHz |

Note: DE mode only

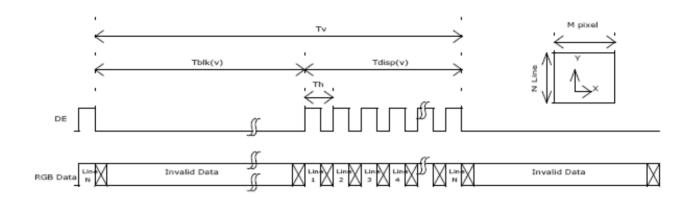
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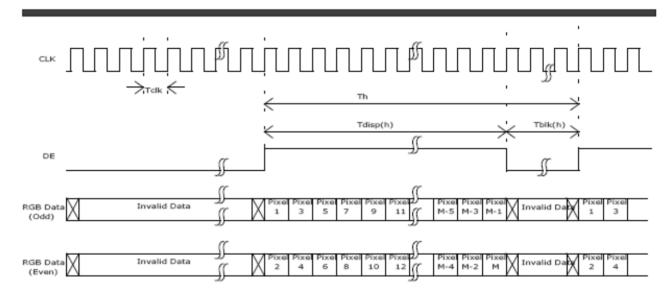


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6.4.2 Timing diagram





document version 0 21/30

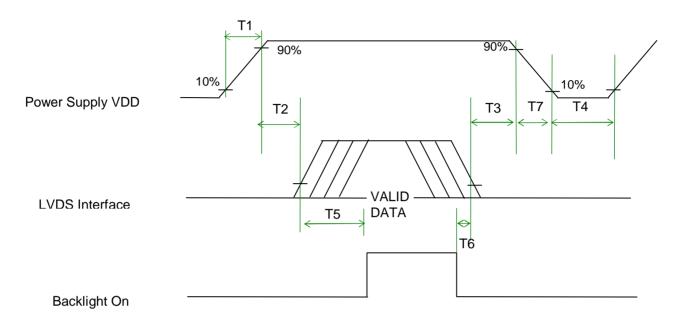


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B170PW06 V3

6.5 Power ON/OFF Sequence

VDD power and lamp on/off sequence is as follows. Interface signals are also shown in the chart. Signals from any system shall be Hi-Z state or low level when VDD is off.



Power Sequence Timing

| Parameter | Min. | Тур. | Max. | Units |
|-----------|------|------|------|-------|
| T1 | 0.5 | - | 10 | (ms) |
| T2 | 0 | - | 50 | (ms) |
| Т3 | 0 | - | 50 | (ms) |
| T4 | 500 | - | - | (ms) |
| T5 | 200 | - | - | (ms) |
| T6 | 200 | - | - | (ms) |
| T7 | 0 | - | 10 | (ms) |

document version 0 22/30



AU OPTRONICS CORPORATION

B170PW06 V3

7. Connector Description

Physical interface is described as for the connector on module.

These connectors are capable of accommodating the following signals and will be following components.

7.1 TFT LCD Module

| Connector Name / Designation | For Signal Connector |
|------------------------------|------------------------------|
| Manufacturer | JAE or compatible |
| Type / Part Number | FI-XB30SL-HF10 or compatible |
| Mating Housing/Part Number | FI-X30H |
| Mating Contact/Part Number | FI-XC3-1-15000 |

7.2 Backlight Unit

Physical interface is described as for the connector on module.

These connectors are capable of accommodating the following signals and will be following components.

| Connector Name / Designation | For Lamp Connector |
|------------------------------|--------------------|
| Manufacturer | JST |
| Type / Part Number | BHSR-02VS-1 |
| Mating Type / Part Number | SM02B-BHSS-1-TB |

7.3 Signal for Lamp connector

| Pin # | Cable color | Signal Name | | |
|-------|-------------|-------------------|--|--|
| 1 | Red | Lamp High Voltage | | |
| 2 | White | Lamp Low Voltage | | |

document version 0 23/30



AU OPTRONICS CORPORATION

B170PW06 V3

8. Vibration and Shock Test

8.1 Vibration Test

Test Spec:

I Test method: Non-Operation

Acceleration: 1.5G

Frequency: 10 - 500Hz Random

I Sweep: 30 Minutes each Axis (X, Y, Z)

8.2 Shock Test Spec:

Test Spec:

I Test method: Non-Operation

I Acceleration: 180 G , Half sine wave

I Active time: 2 ms

Pulse: X,Y,Z .one time for each side

document version 0 24/30



AU OPTRONICS CORPORATION

B170PW06 V3

9. Reliability

| Items | Required Conditions | | | |
|---|---|--|--|--|
| Operating Life – High Temp. | Temp.= +50°C, Dynamic. 250 Hours, Humidity 20% | | | |
| Operating Life – Low Temp. | Temp.= 0°C, Dynamic, 250 Hours, Humidity 20% | | | |
| High Temp. Storage Life – Non-Operating | Temp.= +60°C, Non-Operating, 250 Hours, Humidity 20% | | | |
| Low Temp. Storage Life – Non-Operating | Temp.= -20°C, Non-Operating, 250 Hours | | | |
| High Temp & High Humidity | emp.=+40°C, | | | |
| Operating Life | Dynamic Humidity 95%(Non-Condensing), 250 Hours | | | |
| Shock – Non-Operating | 180g, 2.0 ms, Half Sine Wave | | | |
| Vibration – Non-Operating | Random vibration, 1.5 G zero-to-peak, 10 to 500 Hz, 30 minutes in each of three mutually perpendicular axes | | | |
| Temp. Cycle – Non-Operating | -20°C to +60°C, Ramp ≤20°C/min, Duration at Temp. = 30min, Test Cycles = 50 | | | |
| ESD | Contact: ±8KV/ operation Air: ±15KV / operation | | | |
| Room temperature Test | 25°C, 2000hours, Operating with loop pattern | | | |

Note1: According to EN61000-4-2, ESD class B: Some performance degradation allowed. No data lost

. Self-recoverable. No hardware failures.

Note2: CCFL Life time: 15,000 hours minimum under normal module usage.

Note3: MTBF (Excluding the CCFL): 30,000 hours with a confidence level 90%

document version 0 25/30

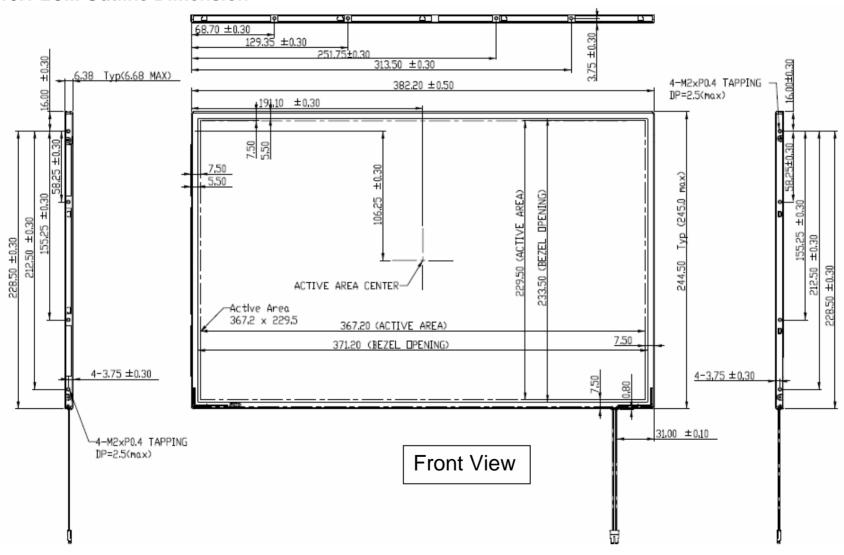


AU OPTRONICS CORPORATION

B170PW06 V3

10. Mechanical Characteristics

10.1 LCM Outline Dimension

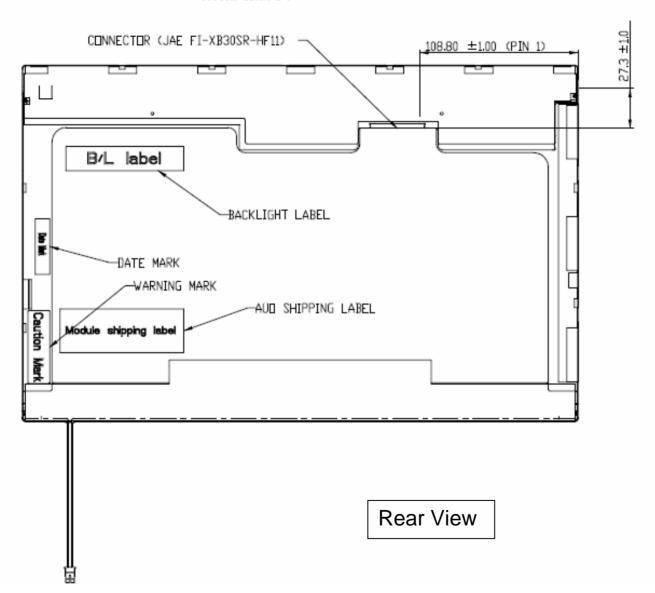


document version 0 26/30



AU OPTRONICS CORPORATION

R170PW06 V3



document version 0 27/30



AU OPTRONICS CORPORATION

B170PW06 V3

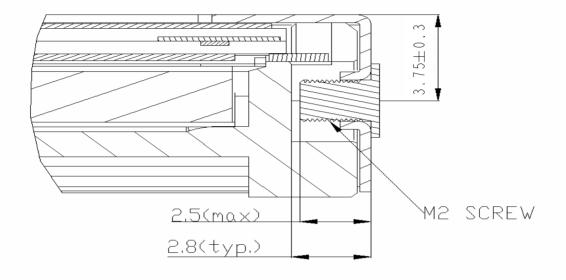
10.2 Screw Hole Depth and Center Position

Screw hole minimum depth, from side surface =2.8 mm (See drawing)

Screw hole center location, from front surface = 3.75± 0.3mm (See drawing)

Screw maximum length = 2.5 mm (See drawing)

Screw Torque: Maximum2.5 kgzf-cm



document version 0 28/30

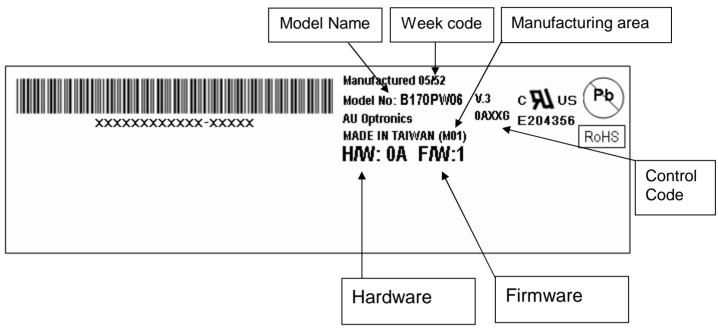


AU OPTRONICS CORPORATION

B170PW06 V3

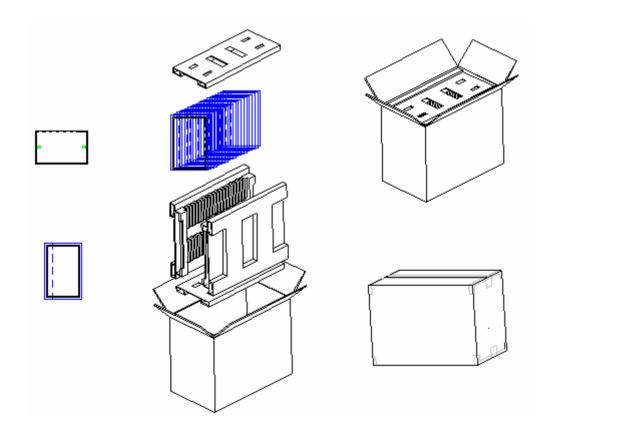
11. Shipping and Package

11.1 Shipping Label Format



11.2. Carton Package

Packing is 20 pcs / box.



document version 0 29/30



AU OPTRONICS CORPORATION
B170PW06 V3

12. Appendix: EDID description

TBD

document version 0 30/30