MindTech Display Co., LTD.

| Document Title | M141NWW1 Tentative Specification | | | Page No. | 1/34 |
|---|---|---|---|---|---|
| Document No. | | Issue date | 2007/6/5 | Revision | 03 |

# *MTDis Product Specification*

## Model Name: M141NWW1-101

## Issue date: 2007/06/05

| Product Development and Customer Engineering Division | Customer |
|---|---|
| *Calo* 2007/7/3 | |



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MindTech Display Co., LTD.

| Document Title | M141NWW1 Tentative Specification | | | Page No. | 2/34 |
|---|---|---|---|---|---|
| Document No. | | Issue date | 2007/6/5 | Revision | 03 |

| Revision | Date | Page | Old Description | New Description | Remark |
|---|---|---|---|---|---|
| 01 | 2007/05/23 | -- | -- | M141NWW1 tentative spec. was first issued. | |
| 02 | 2007/5/31 | 11 | Definition of Luminance Uniformity | UNF(13 pin)=Min/max | |
| | | 24 | The 7.6 mm position of the arrow | Shift to new position | |
| 03 | 2007/6/5 | 12 | Inverter Ignition design point Voltage:132 @Ta=0℃ ,1200 Vrms @Ta=25℃ | Inverter Ignition minimum Voltage:1320 @Ta=0℃ ,1200 Vrms @Ta=25℃ | |
| | | | CCFL Frequency 62k Hz | CCFL Frequency 50k Hz | |
| | | 13 | -- | The inverter kick-off output voltage should be larger than the minimum lamp starting voltage.(Kick-off voltage at Ta = 0 ℃ exceeds minimum value. | |
| | | 4 | -- | Screw torque maximum 2 kgf.cm | |
| | | 6 | Shcok 240G max | Shock 220G max | |
| | | 26 | Weight 395(max) | Weight 395(max) | |
| | | | BM： \| a-b \| & \| c-d \| =2.0mm | BM： \| a-b \| & \| c-d \| ≦1.0mm | |
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# Contents

# 1.0 GENERAL DESCRIPTIONS

## 1.1 Introduction

The M1410NWW1 is a color active matrix thin film transistor (TFT) liquid crystal display (LCD) that uses amorphous silicon TFT as a switching device. It is composed of a TFT LCD panel, a timing controller, voltage reference, common voltage, driver DC-DC converter, column driver, and row driver circuit. This TFT LCD has a 14.1-inch diagonally measured active display area with WXGA resolution (1280 vertical by 800 horizontal pixel array).

## 1.2 Features

- 14.1”WXGA TFT LCD Panel
- 1 CCFL Backlight System
- Supported WXGA (V:1280 lines, H:800 pixels) resolution
- Compatible with RoHS Standard
- VESA Compliant

## 1.3 Product Summary

| Items | Specifications | Unit |
|---|---|---|
| Screen Diagonal | 14.1 inch Diagonal | Inch |
| Active Area | 303.36(H) x 189.6(V) | mm |
| Pixels H x V | 1,280 (x3) x 800 | |
| Pixel Pitch | 0.237×0.237 | mm |
| Pixel Arrangement | R.G.B. Vertical Stripe | |
| Display Mode | Normally White | |
| White Luminance | 200 typical | cd/ $m^2$ (CCFL current 6.0mA) |
| Contrast Ratio | 350 : 1 typical | |
| Response Time | 10 typical | msec |
| Input Voltage | +3.3 typical | V |
| Power Consumption | 5.4W | Watt |
| Weight | 395 maximum | g |
| Outline Dimension | 320.0(H) × 206.0(V) × 5.5(T) Max | mm |
| Electrical Interface (Logic) | LVDS | |
| Support Color | 262 K | |
| Optimum Viewing Direction | 6 o’colok | |
| Surface Treatment | Glare + HC | |
| Screw torque value | 2 (max) | kgf.cm |

### 1.4 Functional Block Diagram

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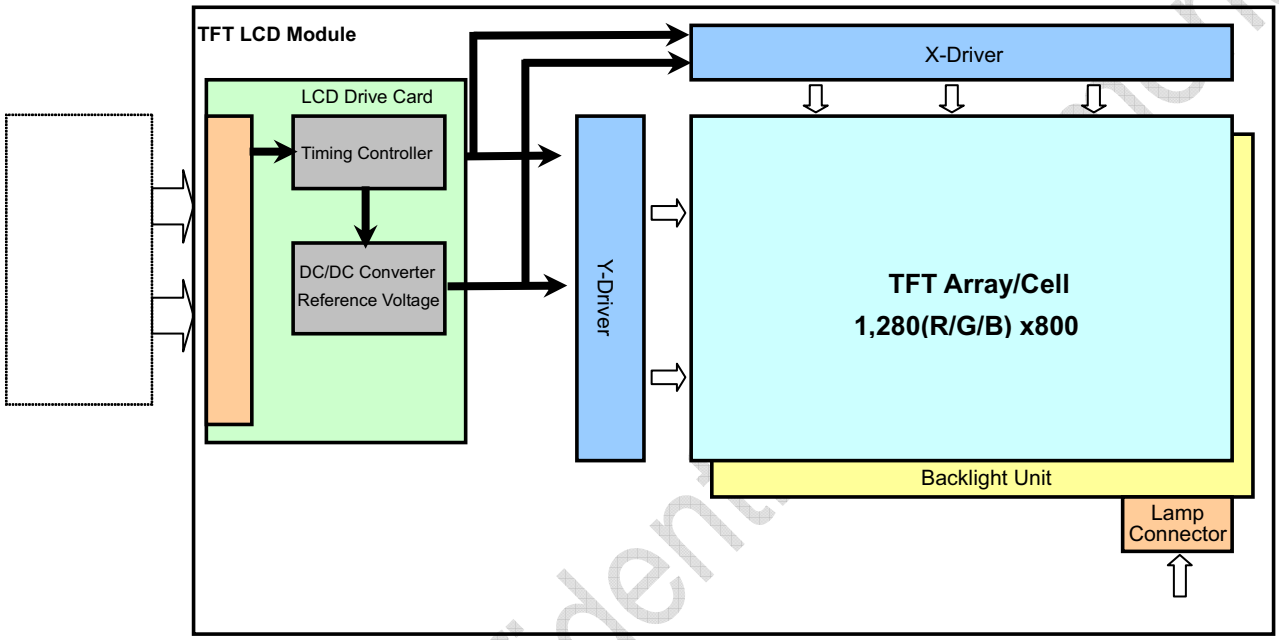
**Figure 1** shows the functional block diagram of the LCD module.

**Figure 1 Block Diagram**

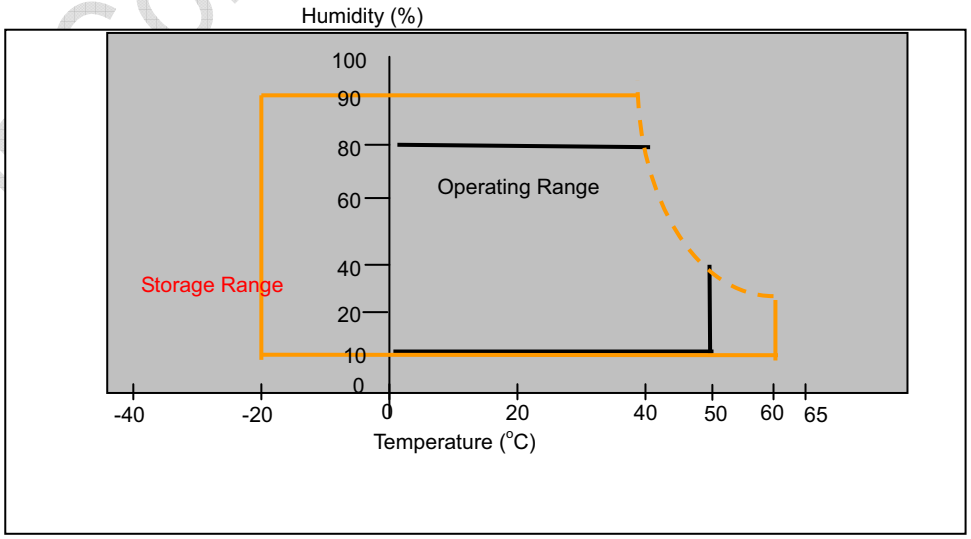


## 2.0 Absolute Maximum Ratings

| Item | Symbol | Min | Max | Unit | Conditions |
|---|---|---|---|---|---|
| Supply Voltage | VDD | -0.5 | 4.0 | V | |
| Input Signal | | -0.5 | 2.6 | V | LVDS signals |
| Operating Temperature | TOP | 0 | 50 | deg. C | (Note) |
| Operating Humidity | HOP | -- | 80 | %RH | (Note) |
| Storage Temperature | TST | -20 | 60 | deg. C | (Note) |
| Storage Humidity | HST | -- | 90 | %RH | at Ta＜40℃, No condensation. |
| Vibration | -- | -- | 1.5G<br>10-500Hz | G<br>Hz | 30min for X, Y, Z axis |
| Shock | -- | -- | 220G<br>2ms | G<br>ms | Half sign wave |
| CCFL Current | ICCFL | -- | 6 | mArms | |

Note (1)Storage /Operating temperature. Maximum Wet-Bulb should be 39 degree C. No condensation.

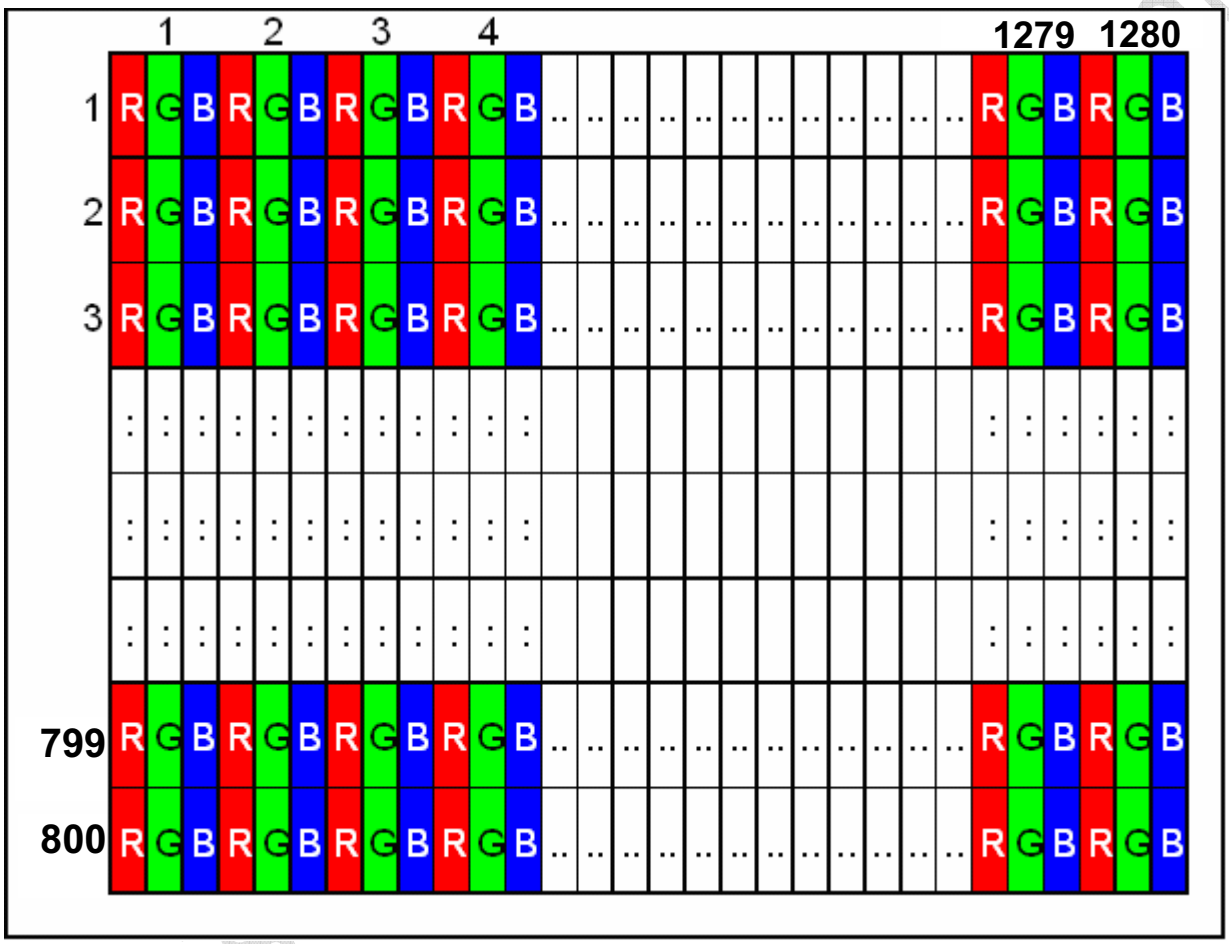
(2)When you apply the LCD module for OA system. Please make sure to keep the temperature of LCD module is less than 60℃



## 3.0 Pixel Format Image

**Figure 2** shows the relationship of the input signals and LCD pixel format image.

**Figure 2 Pixel Format**



## 4.0 Optical Characteristics

The optical characteristics are measured under stable conditions as following notes

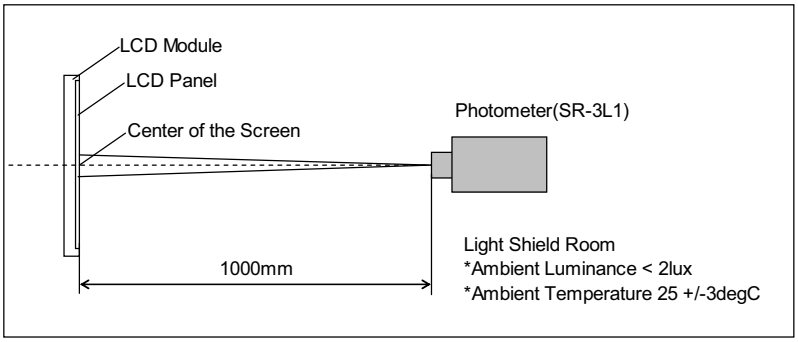
**Table 1 Optical characteristics**

| Item | Conditions | | Specification | | | |
|---|---|---|---|---|---|---|
| | | | Min | Typ. | Max | Note |
| Viewing Angle [degrees] K=Contrast Ratio>10 | Horizontal | Left | 40 | 45 | -- | A, B |
| | | Right | 40 | 45 | -- | |
| | Vertical | Up | 15 | 20 | -- | |
| | | Down | 40 | 45 | -- | |
| Contrast ratio | Center | | -- | 350 | -- | A, C |
| Response Time [ms] | Rising + Falling | | -- | 10 | 20 | A, D |
| Color Chromaticity (CIE1931) | Red | x | 0.557 | 0.587 | 0.617 | A, |
| | Red | y | 0.314 | 0.344 | 0.374 | A, |
| | Green | x | 0.282 | 0.312 | 0.342 | A, |
| | Green | y | 0.538 | 0.568 | 0.598 | A, |
| | Blue | x | 0.126 | 0.156 | 0.186 | A, |
| | Blue | y | 0.096 | 0.126 | 0.156 | A, |
| | White | x | 0.283 | 0.313 | 0.343 | A, |
| | White | y | 0.299 | 0.329 | 0.359 | A, |
| White Luminance [cd/m^2] | ICCFL=6.0mA | | 150 | 200 | | 5point A, E |
| Luminance Uniformity | ICCFL=6.0mA, 13points | | 55 | 65 | -- | |
| | ICCFL=6.0mA, 5points | | 75 | 85 | | A, F |

Note: A. Measurement Setup:

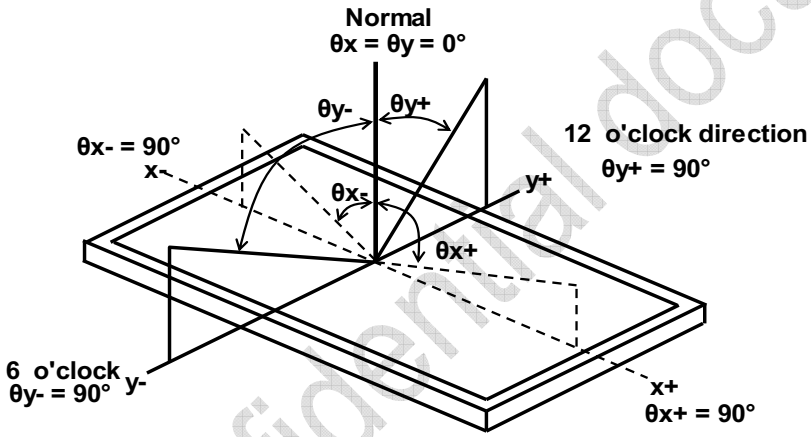
The LCD module should be stabilized at given temperature for 20 minutes to avoid abrupt temperature change during measuring. In order to stabilize the luminance, the measurement should be executed after lighting backlight for 20 minutes in a windless room.

**Figure 3 Measurement Setup**




B. Definition of Viewing Angle

**Figure 4 Definition of Viewing Angle**




C. Definition of Contrast Ratio (CR)

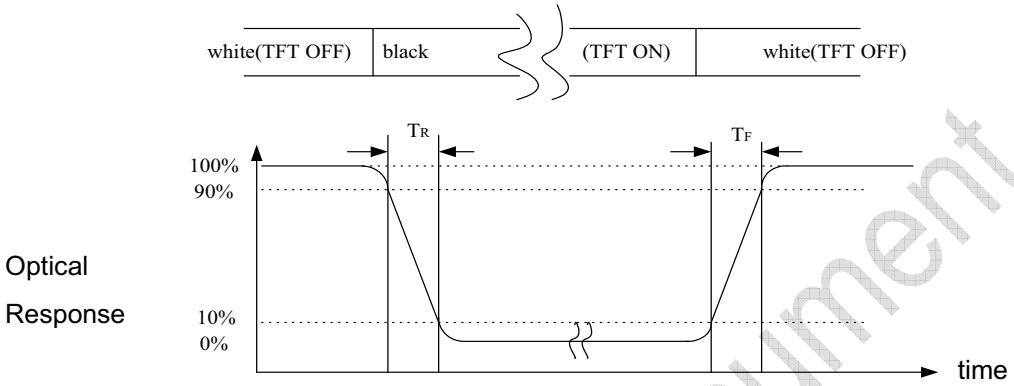
The contrast ratio can be calculated by the following expression

Contrast Ratio (CR) = L63 / L0

L63: Luminance of gray level 63, L0: Luminance of gray level 0

D. Definition of Response Time ($T_R$, $T_F$)

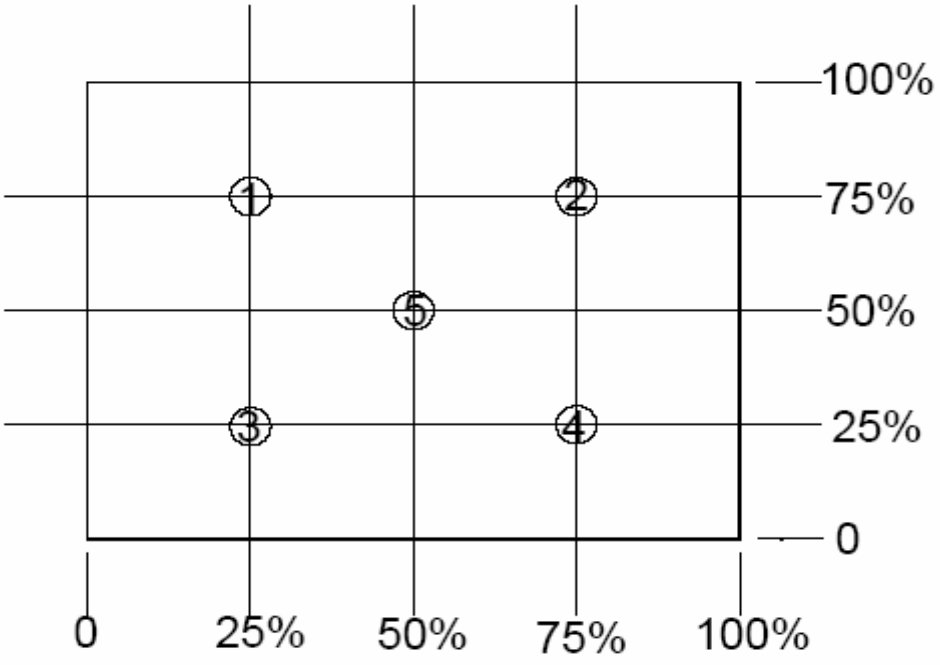
**Figure 5 Definition of Response Time**




E. Definition of Luminance White

Measure the luminance of gray level 63 at center point

$$\text{Display Luminance} = \frac{1 + 2 + 3 + 4 + 5}{5}$$



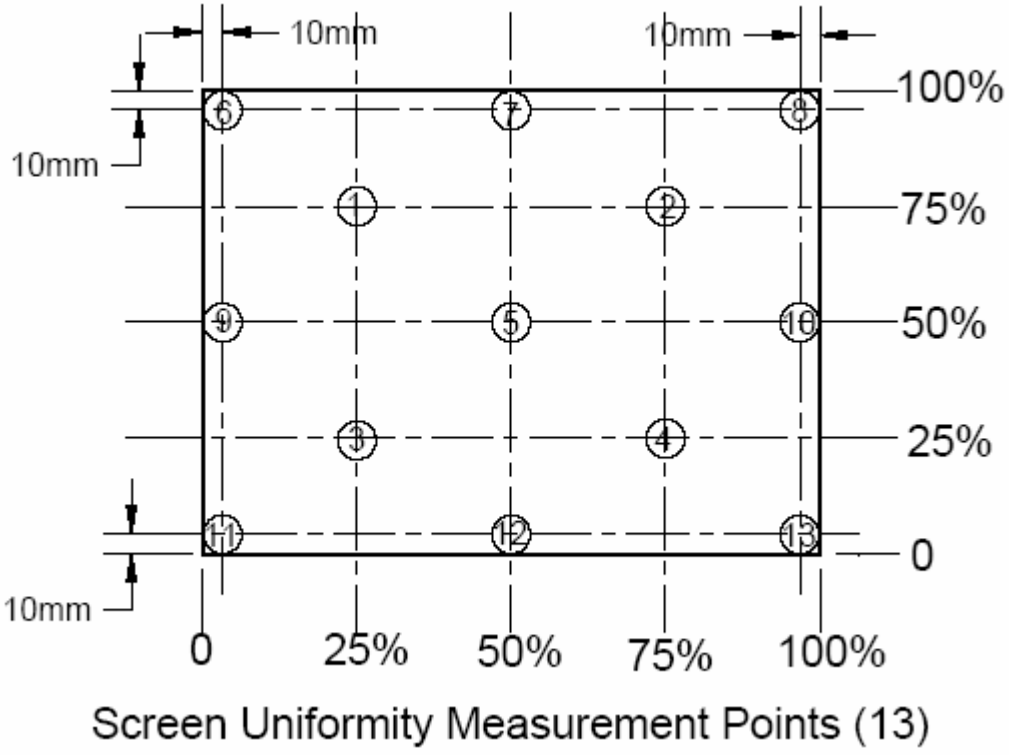

Screen Luminance Measurement Points (5)

F. Definition of Luminance Uniformity(Variation)

Measure the luminance of gray level 63 at 13 points.

$$\mathrm{UNF(13pts)} = \frac{\min(L1, L2, \Lambda\ L13)}{\max(L1, L2, \Lambda\ L13)}$$

**Figure 6 Measurement Locations of 13 Points**




Screen Uniformity Measurement Points (13)

## 5.0 Backlight Characteristics

### 5.1 CCFL Connector

**Table 2 Connector Name / Designation**

| | |
|---|---|
| Manufacturer | JST |
| Type / Part Number | BHSR-02VS-1 or equivalent |
| Mating Type / Part Number | SM02B-BHSS-1-TBor equivalent |

**Table 3 Signal assignment**

| Pin # | Signal Name |
|---|---|
| 1 | Lamp High Voltage |
| 2 | Lamp Low Voltage |

### 5.2 Parameter Guideline for CCFL Inverter

**Table 4 Parameter guideline for CCFL Inverter**

| SYMBOL | PARAMETER | MIN | Design Point | MAX | UNITS | CONDITION |
|---|---|---|---|---|---|---|
| (L63) | White Luminance (Center) | -- | 200 | | [cd/m$^2$] | Ta=25[deg C] |
| ICCFL | CCFL current | | 6.0 | | [mArms] | Ta=25[deg C] **(Note A)** |
| FCCFL | CCFL Frequency | | 50 | | [kHz] | Ta=25[deg C] **(Note B)** |
| VCCFLi | Inverter Ignition Voltage | 1320 | -- | | [Vrms] | Ta=0[deg C] **(Note C)** |
| | | 1200 | -- | | [Vrms] | Ta=25[deg C] **(Note C)** |
| VCCFL | CCFL Voltage | 590 | 655 | 720 | [Vrms] | @ ICCFL=6mA Ta=25[deg C] |
| LT | Lamp Life Time | 15,000 | | | Hours | **(Note E)** |

Note:

A. If it exceeds MIN/MAX values, then "CCFL Life", "ON/OFF Cycle", and "SAFETY" will not be guaranteed.

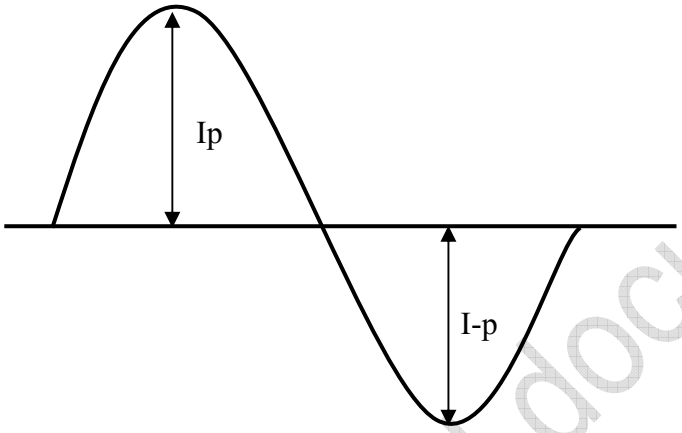
B. CCFL Frequency should be carefully determined to avoid interference between inverter and TFT LCD.

C. The voltage over specified value (VCCFLi) should be applied to the lamp more than 1 second after startup. Otherwise, the lamp may not be turned on. The used lamp current is the lamp typical current.

The inverter kick-off output voltage should be larger than the minimum lamp starting voltage.(Kick-off voltage at Ta = 0 ℃ exceeds minimum value.)

D. The distortion tae of the waveform should be within √2±10%

The inverter output waveform should be better similar to the ideal sine wave.




Asymmetry rate = $|I_p - I_{-p}| / I_{rms} \times 100\%$

Distortion rate = $I_p$ (or $I_{-p}$) / $I_{rms}$

**Figure 7 Recommendation of Lighting Waveform**

E. Ta=25+/-3degC and ICCFL=6.0mA, brightness becomes lower than 50% of initial value.

## 6.0 Electrical Characteristics

### 6.1 Interface Connector

**Table 5 Connector Name / Designation**

| Manufacturer | JAE (or equivalent) |
|---|---|
| Type / Part Number | MDF76LBRW-30S-1H(58)<br>(equivalent to JAE FI-XB30SRL-HF11) |
| Mating Receptacle/Part Number | JAE FI-X30H(L), JAE FI-X30C*(L), JAE FI-X30M* |

**Table 6 Signal pin assignment**

| Pin # | Signal Name | Description | Remarks |
|---|---|---|---|
| 1 | Vss | Ground | |
| 2 | Vdd | Power supply 3.3V | |
| 3 | Vdd | Power supply 3.3V | |
| 4 | $V_{EEDID}$ | DDC 3.3V power | |
| 5 | Tp | TEST point | |
| 6 | $CLK_{EEDID}$ | DDC clock | |
| 7 | $Data_{EEDID}$ | DDC data | |
| 8 | Odd Rin 0- | LVDS differential data input | |
| 9 | Odd Rin 0+ | LVDS differential data input | |
| 10 | Vss | Ground | |
| 11 | Odd Rin 1- | LVDS differential data input | |
| 12 | Odd Rin 1+ | LVDS differential data input | |
| 13 | Vss | Ground | |
| 14 | Odd Rin 2- | LVDS differential data input | |
| 15 | Odd Rin 2+ | LVDS differential data input | |
| 16 | Vss | Ground | |
| 17 | Odd Clk in - | LVDS differential clock input | |
| 18 | Odd Clk in + | LVDS differential clock input | |
| 19 | Vss | Ground | |
| 20 | NC | Not connected | |
| 21 | NC | Not connected | |
| 22 | GND | GND | |
| 23 | NC | Not connected | |
| 24 | NC | Not connected | |
| 25 | GND | GND | |
| 26 | NC | Not connected | |

| | | | |
|---|---|---|---|
| 27 | NC | Not connected | |
| 28 | GND | GND | |
| 29 | NC | Not connected | |
| 30 | NC | Not connected | |

All input signals shall be low or Hi-Z state when VDD is off.

## 6.2 LVDS Receiver

### 6.2.1 Signal Electrical Characteristics for LVDS Receiver

The built-in LVDS receiver is compatible with (ANSI/TIA/TIA-644 ) standard.

**Table 7 LVDS Receiver Electrical Characteristics**

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|---|---|---|---|---|---|---|
| Differential Input High Threshold | Vth | | | +50 | mV | Vcm=+1.2V |
| Differential Input Low Threshold | Vtl | -50 | | | mV | Vcm=+1.2V |
| Magnitude Differential Input Voltage | \|Vid\| | 100 | | 600 | mV | |
| Common Mode Voltage | Vcm | \|Vid\|/2+0.6 | 1.2 | 1.8-\|Vid\|/2 | V | |
| Common Mode Voltage Offset | ΔVcm | | | 50 | mV | Vcm=+1.2V |

Note:

A. Input signals shall be low or Hi-Z state when VDD is off.

B. All electrical characteristics for LVDS signal are defined and shall be measured at the interface connector of LCD.

**Table 8 Timing Requirements**

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions | Note |
|---|---|---|---|---|---|---|---|
| Clock Frequency | Fc | 65 | 71 | 77 | MHz | | |
| Input Data Skew Margin | Trskm | 620<br>540 | | | ps<br>ps | Fclk=68MHz<br>Fclk=82MHz | (Figure 11) |

Note: All values are at VDD=3.3V, Ta=25 degree C.

**Figure 8 Voltage Definitions**

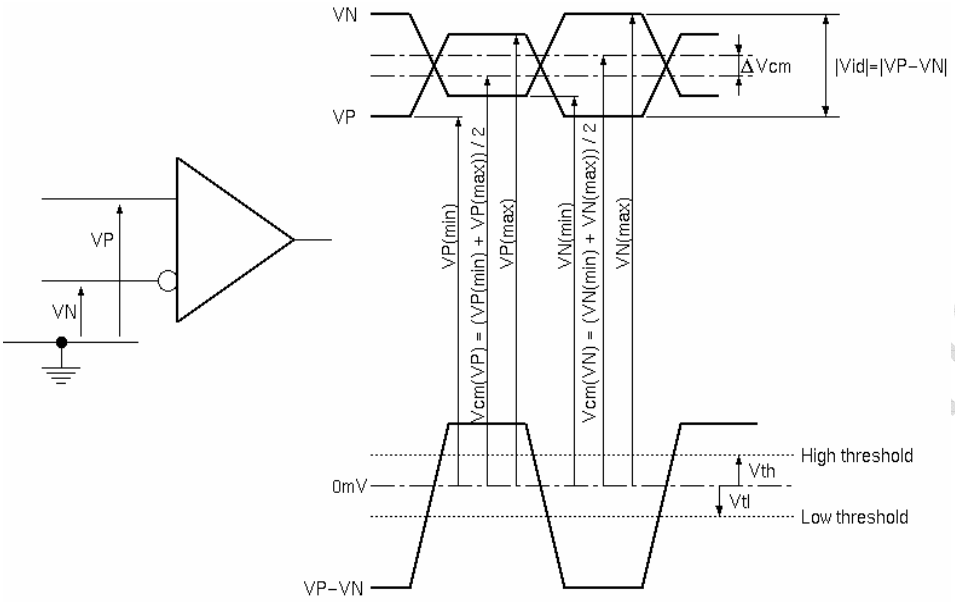



**Figure 9 Measurement System**

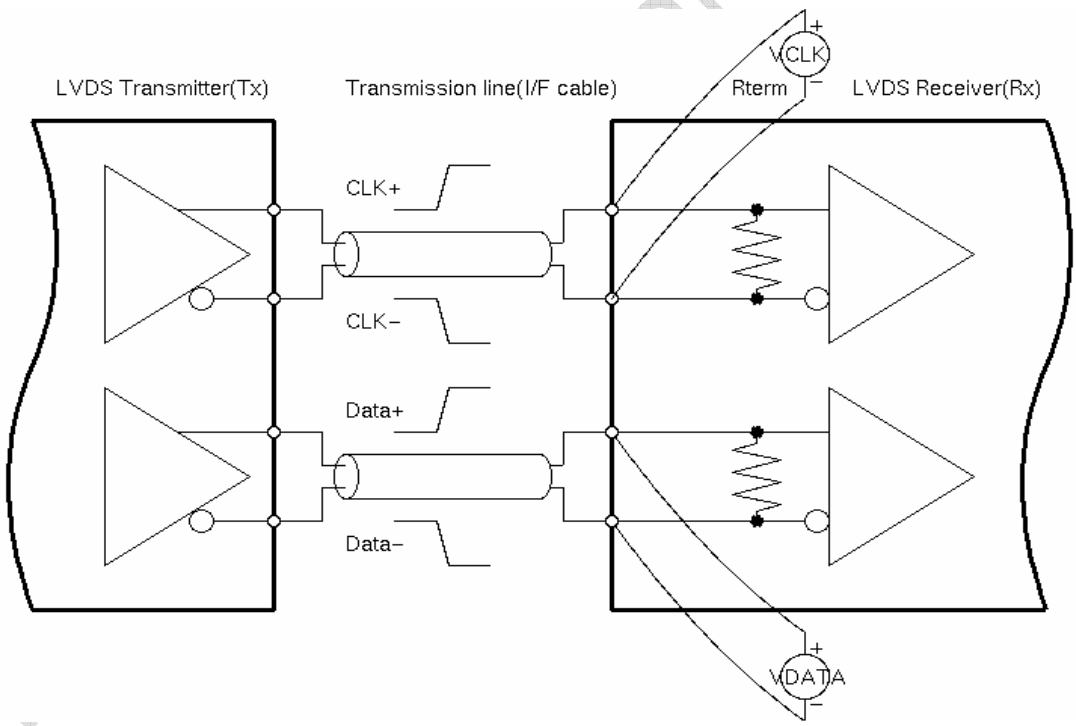


**Figure 10 Data mapping**

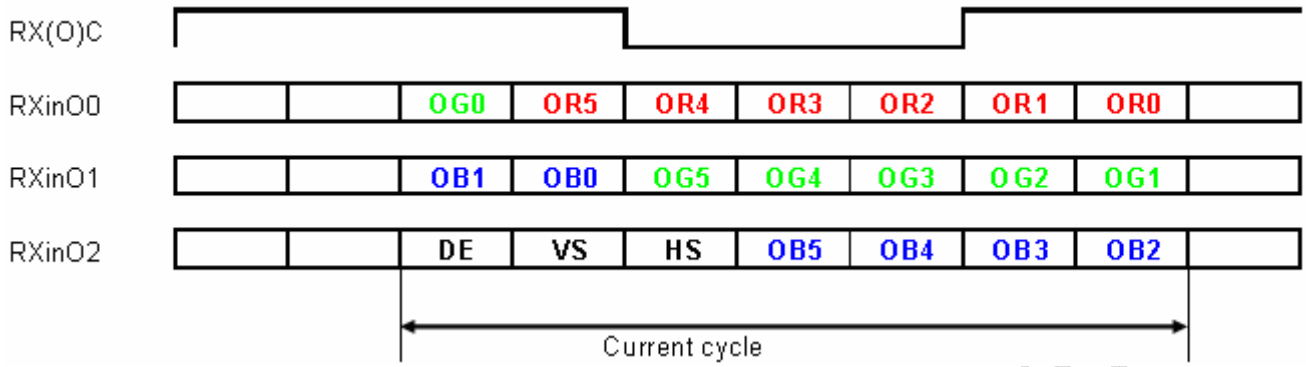
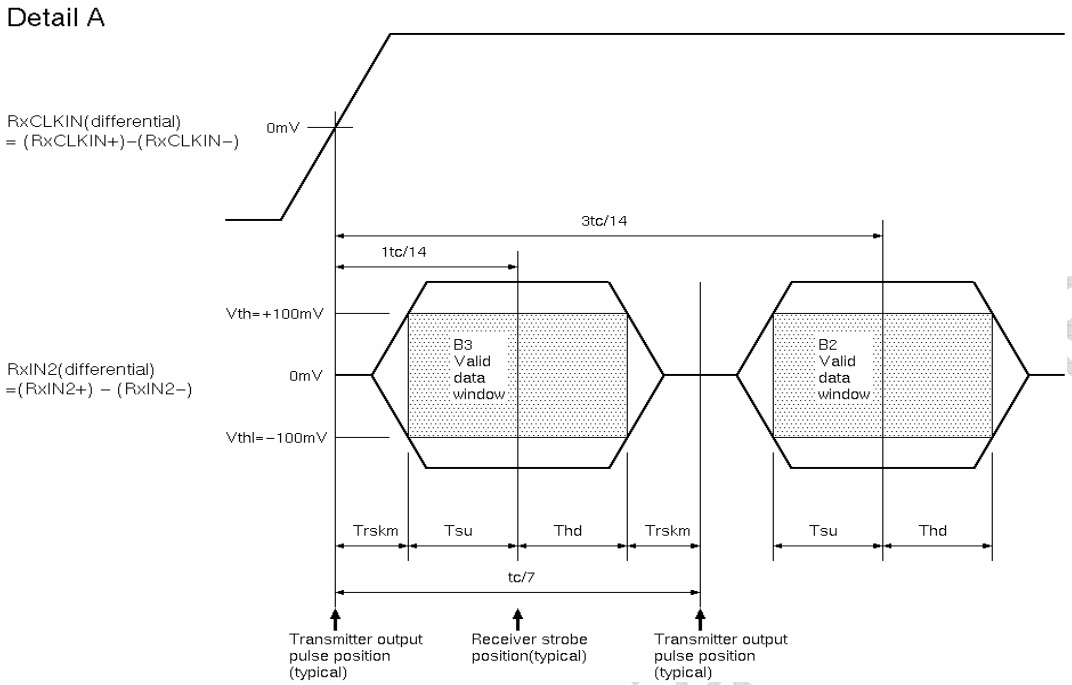


**Figure 11 Timing Definition**

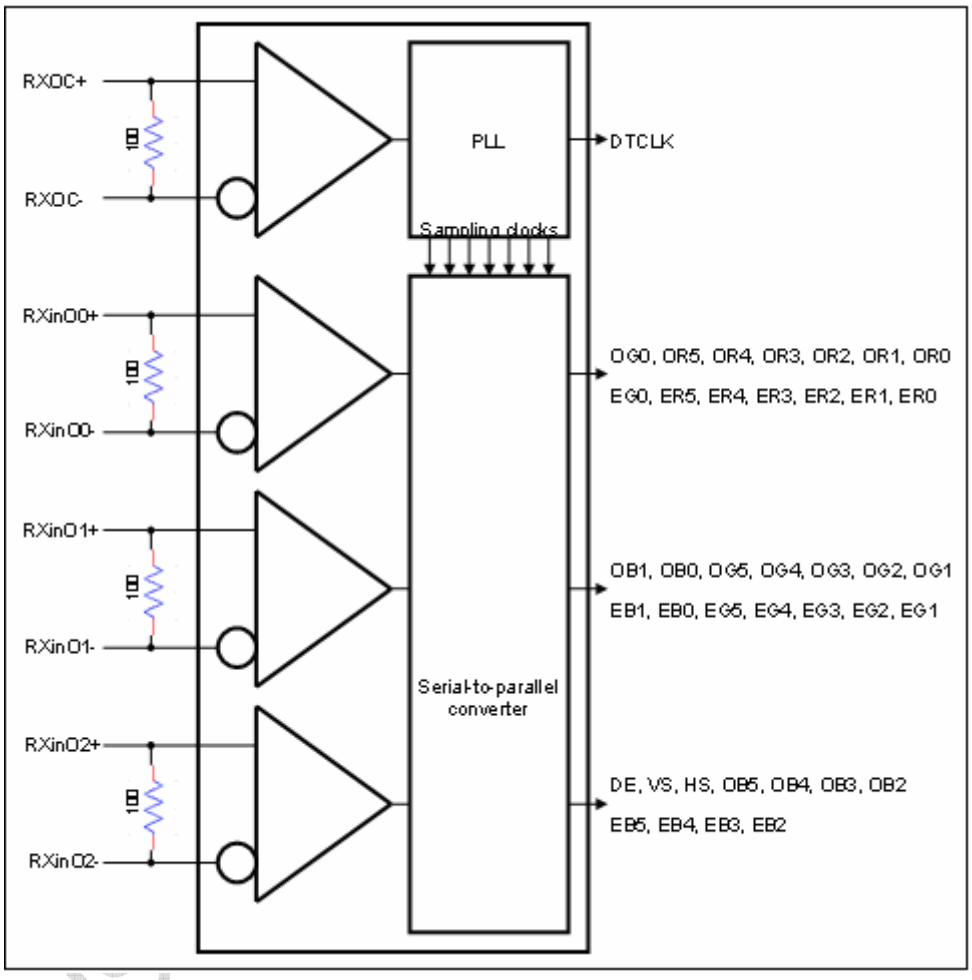



Note: Tsu and Thd is internal data sampling window of receiver. Trskm is the system skew margin; i.e., the sum of cable skew, source clock jitter, and other inter-symbol interference, shall be less than Trskm.

### 6.2.2 LVDS Receiver Internal Circuit

Figure 12 LVDS Receiver Internal Circuit shows the internal block diagram of the LVDS receiver. This LCD module equips termination resistors for LVDS link.

**Figure 12 LVDS Receiver Internal Circuit**



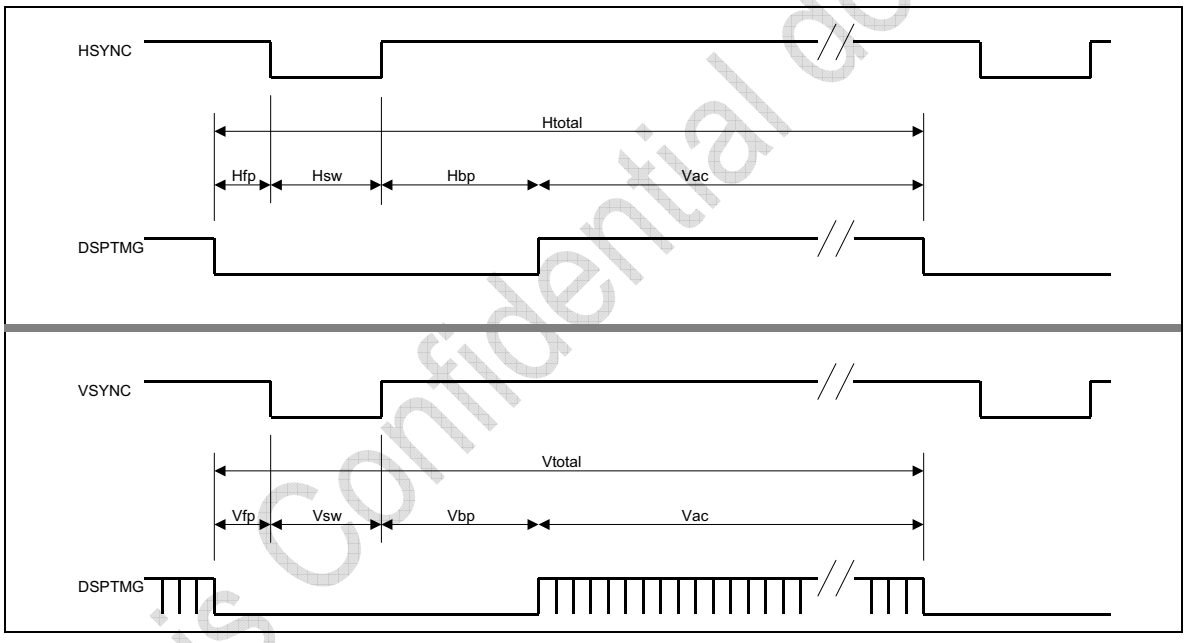
## 7.0 Interface Timings

### 7.1 Timing Characteristics

**Table 9 Interface timings**

| Parameter | Symbol | Unit | min | typ | Max |
|---|---|---|---|---|---|
| LVDS Clock Frequency(single) | Fdck | MHz | 65 | 71 | 77 |
| H Total Time | Htotal | clocks | - | 1440 | - |
| H Active Time | Hac | clocks | 1280 | 1280 | 1280 |
| V Total Time | Vtotal | lines | - | 823 | - |
| V Active Time | Vac | lines | 800 | 800 | 800 |
| Frame Rate | Vsync | Hz | 55 | 60 | 65 |

**Figure 13 Timing Characteristics**



## 8.0 Power Consumption

Input power specifications are as follows.

**Table 10 Power consumption**

| SYMBOL | PARAMETER | Min | Typ | Max | UNITS | CONDITION |
|---|---|---|---|---|---|---|
| VDD | Logic/LCD Drive Voltage | 2.8 | 3.3 | 3.8 | [V] | |
| IDD | VDD Current | -- | 0.27 | TBD | [A] | All black pattern, 60Hz |
| | | -- | 0.36 | TBD | [A] | Max pattern, 75Hz |
| PDD | VDD Power | -- | 0.89 | TBD | [W] | All black pattern, 60Hz |
| | | -- | 1.19 | TBD | [W] | Max pattern, 75Hz |
| Irush | Rush Current | | TBD | TBD | [A] | |
| VDDrp | Allowable Logic/LCD Drive Ripple Voltage | | | 100 | [mVp-p] | |

## 9.0 Power ON/OFF sequence

VDD power, interface signals, and lamp on/off sequence are shown in Figure **14**.Signals shall be Hi-Z state or low level when VDD is off.

**Figure 14 Power sequence**

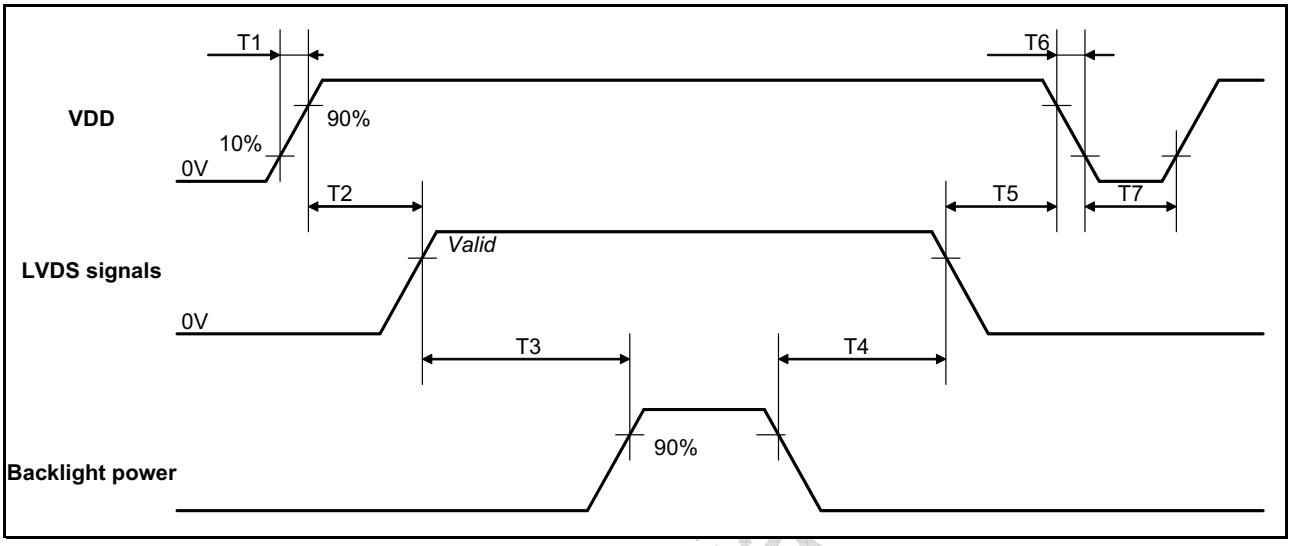



**Table 11 Power Sequencing Requirements**

| Parameter | Symbol | Unit | min | typ | max |
|---|---|---|---|---|---|
| VDD Rise Time | T1 | ms | 0.5 | 10 | |
| VDD Good to Signal Valid | T2 | ms | 0 | 50 | |
| Signal Valid to Backlight On | T3 | ms | 200 | -- | |
| Backlight Off to Signal Disable | T4 | ms | 200 | -- | |
| Signal Disable to Power Down | T5 | ms | 0 | 50 | |
| VDD Fall Time | T6 | ms | 0 | 10 | |
| Power Off | T7 | ms | 200 | -- | |

## 10.0 Mechanical Characteristics

**Figure 15 Reference outline drawing (Front side)** (follow PSWG Ver3.5)

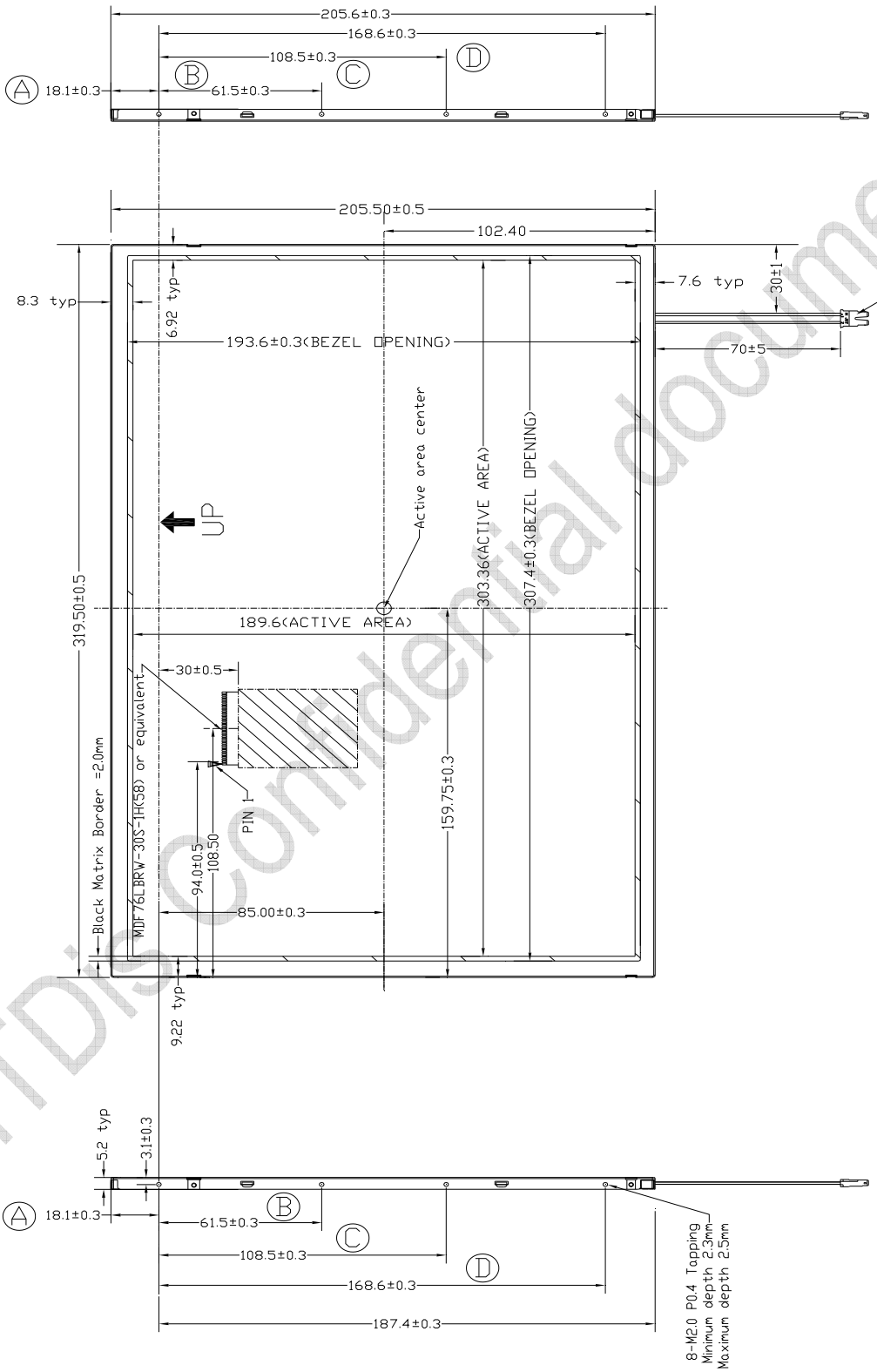
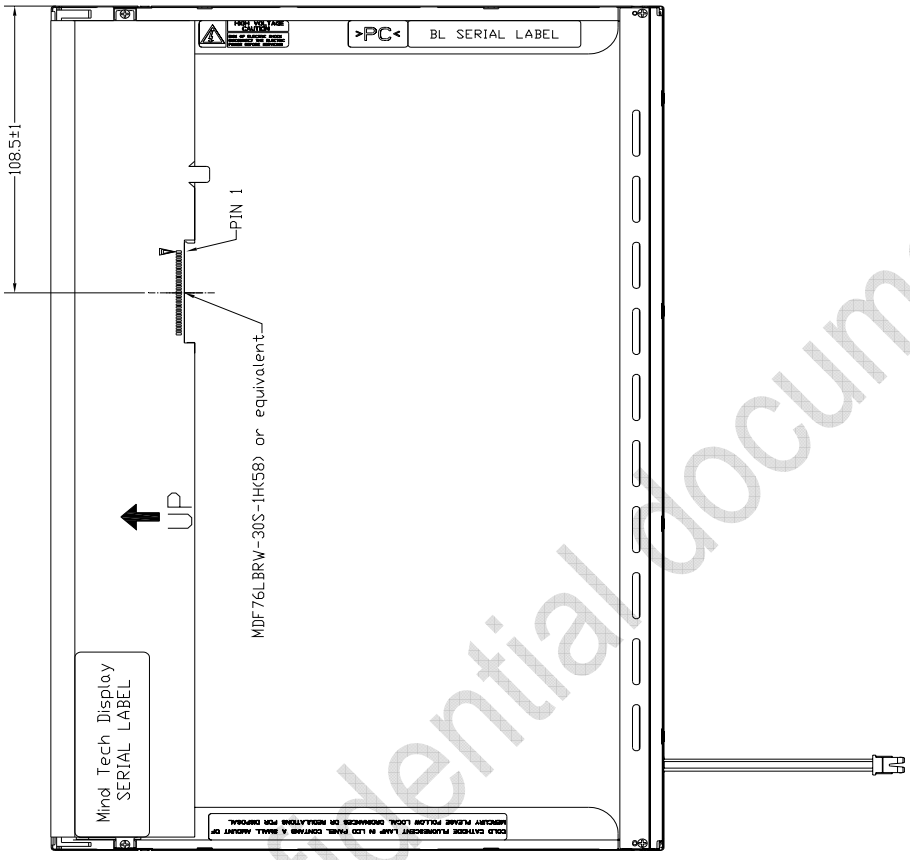


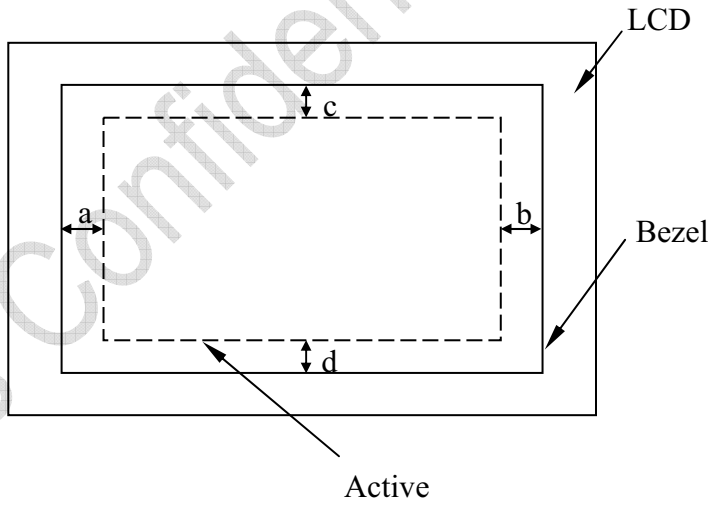
**Figure 16 Reference outline drawing (Back side)**



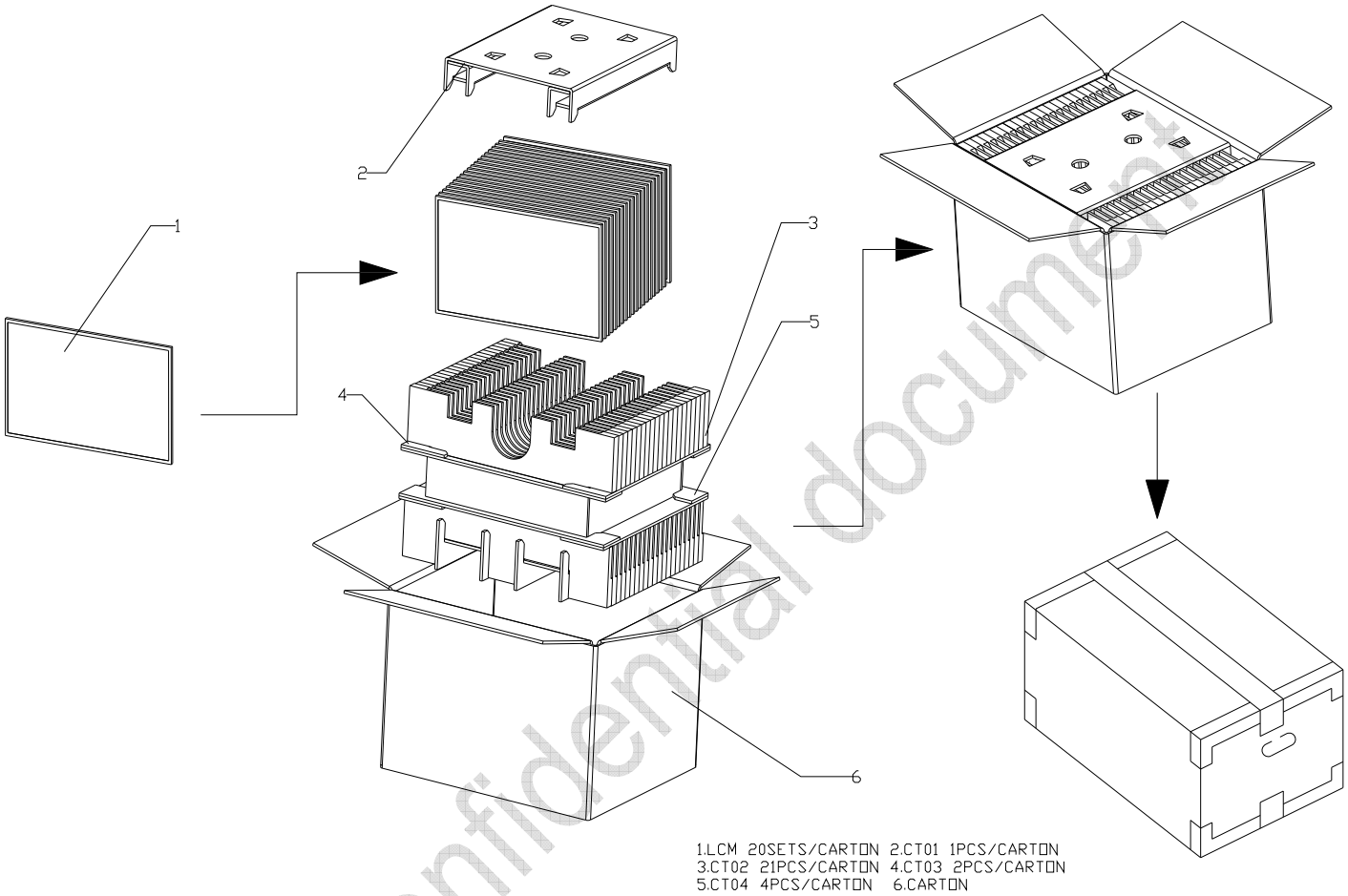
### 10.1 Dimension Specifications

**Table 12 Module Dimension Specifications**

| | | |
|---|---|---|
| Width [mm] | | 319.5±0.5 |
| Height [mm] | | 205.5±0.5 |
| Thickness [mm] | | 5.5(max) |
| Bezel Opening [mm] | X | 307.4±0.3 |
| | Y | 193.6±0.3 |
| Mounting Hole [mm] | A | 18.1±0.3 |
| | B | 61.5±0.3 |
| | C | 108.5±0.3 |
| | D | 168.6±0.3 |
| Connector position from screen center [mm] | X | |
| | Y | |
| CCFL harness length [mm] | | |
| Weight [g] | | 395g(max) |
| BM：\| a-b \| & \| c-d \| | | ≦ 1.0mm |



## 11.0 PACKAGE SPECIFICATION




1.LCM 20SETS/CARTON 2.CT01 1PCS/CARTON
3.CT02 21PCS/CARTON 4.CT03 2PCS/CARTON
5.CT04 4PCS/CARTON 6.CARTON

## 12.0 LOT MARK

### 12.1 Lot Mark

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

code 1,2,3,6,7,8,9,10,11: MTDis internal flow control code.
code 5: production location.
code 12: production year.
code 13: production month.
code 16,17,18,19,20: serial number.

Note (1) Production Year

| Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mark | 6 | 7 | 8 | 9 | A | B | C | D | F | G |

Note (2) Production Month

| Month | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mark | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C |

## 13.0 GENERAL PRECAUTION

### 13.1 Use Restriction

This product is not authorized for use in life supporting systems, aircraft navigation control systems, military systems and any other application where performance failure could be life-threatening or otherwise catastrophic.

### 13.2 Disassembling or Modification

Do not disassemble or modify the module. It may damage sensitive parts inside LCD module, and may cause scratches or dust on the display. MTD does not warrant the module, if customers disassemble or modify the module.

### 13.3 Breakage of LCD Panel

13.3.1 If LCD panel is broken and liquid crystal spills out, do not ingest or inhale liquid Crystal, and do not contact liquid crystal with skin.

13.3.2 If liquid crystal contacts mouth or eyes, rinse out with water immediately.

13.3.3 If liquid crystal contacts skin or cloths, wash it off immediately with alcohol and Rinse thoroughly with water.

13.3.4 Handle carefully with chips of glass that may cause injury, when the glass is Broken

### 13.4 Electric Shock

13.4.1 Disconnect power supply before handling LCD module.

13.4.2 Do not pull or fold the CCFL cable.

13.4.3 Do not touch the parts inside LCD modules and the fluorescent lamp's connector Or cables in order to prevent electric shock

### 13.5 Absolute Maximum Ratings and Power Protection Circuit

13.5.1 Do not exceed the absolute maximum rating values, such as the supply voltage variation, input voltage variation, variation in parts' parameters, environmental temperature; etc otherwise LCD module may be damaged.

13.5.2 Please do not leave LCD module in the environment of high humidity and high temperature for a long time.

13.5.3 It's recommended employing protection circuit for power supply.

### 13.6 Operation

13.6.1 Do not touch, push or rub the polarizer with anything harder than HB pencil lead. Use fingerstalls of soft gloves in order to keep clean display quality, when Persons handle the LCD module for incoming inspection or assembly.

13.6.2 When the surface is dusty, please wipe gently with absorbent cotton or other soft Material

13.6.3 Wipe off saliva or water drops as soon as possible. If saliva or water drops Contact with polarizer for a long time, they may causes deformation or color Fading

13.6.4 When cleaning the adhesives, please use absorbent cotton wetted with a little Petroleum benzene or other adequate solvent

### 13.7 Mechanism

Please mount LCD module by using mounting holes arranged in four corners tightly.

### 13.8 Static Electricity

13.8.1 Protection film must remove very slowly from the surface of LCD module to

Prevent from electrostatic occurrence.

11.8.2 Because LCD module uses CMOS-IC on circuit board and TFT-LCD panel, it is Very weak to electrostatic discharge, Please be careful with electrostatic Discharge

11.8.3 Persons who handle the module should be grounded through adequate methods.

**13.9 Strong Light Exposure**

The module shall not be exposed under strong light such as direct sunlight. Otherwise, Display characteristics may be changed.

**13.10 Disposal**

When disposing LCD module, obey the local environmental regulations.

## 14.0 EDID data structure

| Address (Decimal) | Address (HEX) | Field Name & Comments | Value (HEX) | Value (BIN) | Value (DEC) |
|---|---|---|---|---|---|
| 0 | 0 | Header | 0 | 00000000 | 0 |
| 1 | 1 | | ff | 11111111 | 255 |
| 2 | 2 | | ff | 11111111 | 255 |
| 3 | 3 | | ff | 11111111 | 255 |
| 4 | 4 | | ff | 11111111 | 255 |
| 5 | 5 | | ff | 11111111 | 255 |
| 6 | 6 | | ff | 11111111 | 255 |
| 7 | 7 | | ff | 11111111 | 255 |
| 8 | 8 | EISA Manuf. Code LSB ( 3 character ID = MTD) | 36 | 00110110 | 54 |
| 9 | 9 | Compressed ASCII | 84 | 10000100 | 132 |
| 10 | 0A | Product Code = 01 | 1 | 00000001 | 1 |
| 11 | 0B | hex, LSB first = 00 | 0 | 00000000 | 0 |
| 12 | 0C | 32-bit serial # | 0 | 00000000 | 0 |
| 13 | 0D | | 0 | 00000000 | 0 |
| 14 | 0E | | 0 | 00000000 | 0 |
| 15 | 0F | | 0 | 00000000 | 0 |
| 16 | 10 | Week of manufacture | 0 | 00000000 | 0 |
| 17 | 11 | Year of manufacture 2007 | 11 | 00010001 | 17 |
| 18 | 12 | EDID Structure Ver # = 1 | 1 | 00000001 | 1 |
| 19 | 13 | EDID revision # = 1 | 1 | 00000001 | 1 |
| 20 | 14 | Video input definition = Digital input | 80 | 10000000 | 128 |
| 21 | 15 | Max H image size = 303.36 cm | 21 | 00100001 | 33 |
| 22 | 16 | Max V image size = 189.6 cm | 15 | 00010101 | 21 |
| 23 | 17 | Display Gamma = 2.2 | 78 | 01111000 | 120 |
| 24 | 18 | Feature support (DPMS) = Active off, RGB color | A | 00001010 | 10 |
| 25 | 19 | Red/Green Low bits (RxRy/GxGy) | CF | 11001111 | 207 |
| 26 | 1A | Blue/White Low bits (BxBy/WxWy) | C0 | 11000000 | 192 |
| 27 | 1B | Red X Rx=0.593 | 97 | 10010111 | 151 |
| 28 | 1C | Red Y Ry=0.348 | 59 | 01011001 | 89 |
| 29 | 1D | Green X Gx=0.308 | 4E | 01001110 | 78 |
| 30 | 1E | Green Y Gy=0.57 | 91 | 10010001 | 145 |
| 31 | 1F | Blue X Bx=0.156 | 27 | 00100111 | 39 |

| Address (Decimal) | Address (HEX) | Field Name & Comments | Value (HEX) | Value (BIN) | Value (DEC) |
|---|---|---|---|---|---|
| 32 | 20 | Blue Y By=0.129 | 21 | 00100001 | 33 |
| 33 | 21 | White X Wx=0.313 | 50 | 01010000 | 80 |
| 34 | 22 | White Y Wy=0.329 | 54 | 01010100 | 84 |
| 35 | 23 | Established timing 1 | 0 | 00000000 | 0 |
| 36 | 24 | Established timing 2 (1280x800 @ 60Hz) | 0 | 00000000 | 0 |
| 37 | 25 | Manufacturer s timings | 0 | 00000000 | 0 |
| 38 | 26 | Standard timing #1 was not used | 1 | 00000001 | 1 |
| 39 | 27 | | 1 | 00000001 | 1 |
| 40 | 28 | Standard timing #2 was not used | 1 | 00000001 | 1 |
| 41 | 29 | | 1 | 00000001 | 1 |
| 42 | 2A | Standard timing #3 was not used | 1 | 00000001 | 1 |
| 43 | 2B | | 1 | 00000001 | 1 |
| 44 | 2C | Standard timing #4 was not used | 1 | 00000001 | 1 |
| 45 | 2D | | 1 | 00000001 | 1 |
| 46 | 2E | Standard timing #5 was not used | 1 | 00000001 | 1 |
| 47 | 2F | | 1 | 00000001 | 1 |
| 48 | 30 | Standard timing #6 was not used | 1 | 00000001 | 1 |
| 49 | 31 | | 1 | 00000001 | 1 |
| 50 | 32 | Standard timing #7 was not used | 1 | 00000001 | 1 |
| 51 | 33 | | 1 | 00000001 | 1 |
| 52 | 34 | Standard timing #8 was not used | 1 | 00000001 | 1 |
| 53 | 35 | | 1 | 00000001 | 1 |
| 54 | 36 | Detailed timing/monitor descriptor#1 | BC | 10111100 | 188 |
| 55 | 37 | 1280x800 @ 60Hz : Pixel Clock = 71 MHz | 1B | 00011011 | 27 |
| 56 | 38 | Hor active=1280 pixels | 0 | 00000000 | 0 |
| 57 | 39 | Hor blanking=160 pixels | A0 | 10100000 | 160 |
| 58 | 3A | Horizontal Active : Horizontal Blanking | 50 | 01010000 | 80 |
| 59 | 3B | Vertcal active= 800 lines | 20 | 00100000 | 32 |
| 60 | 3C | Vertical blanking=23 ines | 17 | 00010111 | 23 |
| 61 | 3D | Vertical Active : Vertical Blanking | 30 | 00110000 | 48 |
| 62 | 3E | H sync. Offset= 48 pixels | 30 | 00110000 | 48 |
| 63 | 3F | H sync. Width=32 pixels | 20 | 00100000 | 32 |

| Address (Decimal) | Address (HEX) | Field Name & Comments | Value (HEX) | Value (BIN) | Value (DEC) |
|---|---|---|---|---|---|
| 64 | 40 | V sync. Offset= 3 lines | 36 | 00110110 | 54 |
| 65 | 41 | V sync. Width= 6 lines | 0 | 00000000 | 0 |
| 66 | 42 | H image size= 303.36 mm | 2F | 00101111 | 47 |
| 67 | 43 | V image size = 189.6 mm | BE | 10111110 | 190 |
| 68 | 44 | Horizontal & Verical Image Size(303:190) | 10 | 00010000 | 16 |
| 69 | 45 | No Horizontal Border | 0 | 00000000 | 0 |
| 70 | 46 | No Vertical Border | 0 | 00000000 | 0 |
| 71 | 47 | Non-interlaced, Normal display, No stereo, Digital separate sync | 18 | 00011000 | 24 |
| 72 | 48 | Detailed timing/monitor descriptor#2 | 0 | 00000000 | 0 |
| 73 | 49 | | 0 | 00000000 | 0 |
| 74 | 4A | | 0 | 00000000 | 0 |
| 75 | 4B | | 0F | 00001111 | 15 |
| 76 | 4C | | 0 | 00000000 | 0 |
| 77 | 4D | | 0 | 00000000 | 0 |
| 78 | 4E | | 0 | 00000000 | 0 |
| 79 | 4F | | 0 | 00000000 | 0 |
| 80 | 50 | | 0 | 00000000 | 0 |
| 81 | 51 | | 0 | 00000000 | 0 |
| 82 | 52 | | 0 | 00000000 | 0 |
| 83 | 53 | | 0 | 00000000 | 0 |
| 84 | 54 | | 0 | 00000000 | 0 |
| 85 | 55 | | 0 | 00000000 | 0 |
| 86 | 56 | | 0 | 00000000 | 0 |
| 87 | 57 | | 0 | 00000000 | 0 |
| 88 | 58 | | 0 | 00000000 | 0 |
| 89 | 59 | Module revision | 1 | 00000001 | 1 |
| 90 | 5A | Detailed timing/monitor descriptor#3 | 0 | 00000000 | 0 |
| 91 | 5B | Flag | 0 | 00000000 | 0 |
| 92 | 5C | Flag | 0 | 00000000 | 0 |
| 93 | 5D | Data Type Tag : Module serial number | FE | 11111110 | 254 |
| 94 | 5E | | 0 | 00000000 | 0 |
| 95 | 5F | Manufacture M | 4D | 01001101 | 77 |

| Address (Decimal) | Address (HEX) | Field Name & Comments | Value (HEX) | Value (BIN) | Value (DEC) |
|---|---|---|---|---|---|
| 96 | 60 | Manufacture I | 49 | 01001001 | 73 |
| 97 | 61 | Manufacture N | 4E | 01001110 | 78 |
| 98 | 62 | Manufacture D | 44 | 01000100 | 68 |
| 99 | 63 | Manufacture T | 54 | 01010100 | 84 |
| 100 | 64 | Manufacture E | 45 | 01000101 | 69 |
| 101 | 65 | Manufacture C | 43 | 01000011 | 67 |
| 102 | 66 | Manufacture H | 48 | 01001000 | 72 |
| 103 | 67 | | 0 | 00000000 | 0 |
| 104 | 68 | | 0 | 00000000 | 0 |
| 105 | 69 | | 0 | 00000000 | 0 |
| 106 | 6A | | 0 | 00000000 | 0 |
| 107 | 6B | | A | 00001010 | 10 |
| 108 | 6C | Detailed timing/monitor descriptor #4 | 0 | 00000000 | 0 |
| 109 | 6D | | 0 | 00000000 | 0 |
| 110 | 6E | Color LCD | 0 | 00000000 | 0 |
| 111 | 6F | | FE | 11111110 | 254 |
| 112 | 70 | | 0 | 00000000 | 0 |
| 113 | 71 | Manufacture P/N M | 4D | 01001101 | 77 |
| 114 | 72 | Manufacture P/N 1 | 31 | 00110001 | 49 |
| 115 | 73 | Manufacture P/N 4 | 34 | 00110100 | 52 |
| 116 | 74 | Manufacture P/N 1 | 31 | 00110001 | 49 |
| 117 | 75 | Manufacture P/N N | 4E | 01001110 | 78 |
| 118 | 76 | Manufacture P/N W | 57 | 01010111 | 87 |
| 119 | 77 | Manufacture P/N W | 57 | 01010111 | 87 |
| 120 | 78 | Manufacture P/N 1 | 31 | 00110001 | 49 |
| 121 | 79 | Manufacture P/N 0 | 30 | 00110000 | 48 |
| 122 | 7A | Manufacture P/N 0 | 30 | 00110000 | 48 |
| 123 | 7B | Manufacture P/N 1 | 31 | 00110001 | 49 |
| 124 | 7C | | 20 | 00100000 | 32 |
| 125 | 7D | | 20 | 00100000 | 32 |
| 126 | 7E | Extension Flag = 00 | 0 | 00000000 | 0 |
| 127 | 7F | Checksum | 9A | 10011010 | 154 |