# Shenzhen Leadtek Electronics Co.,Ltd

# PRODUCT SPECIFICATION

# TFT-LCD MODULE

## Module No：LTK101WUBCT20-V0

☑ Preliminary Specification

☐ Approval Specification

| Designed by | Checked by | Approved by |
|---|---|---|
|  |  |  |

## Final Approval by Customer

| Approved by | Comment |
|---|---|
| | |

※The specification of “TBD” should refer to the measured value of sample . If there is difference between the design specification and measured value, we naturally shall negotiate and agree to solution with customer.

# 1.Document Revision History

| Version | Contents | Date | Note |
|---|---|---|---|
| V0 | Original | 2021.12.06 | |
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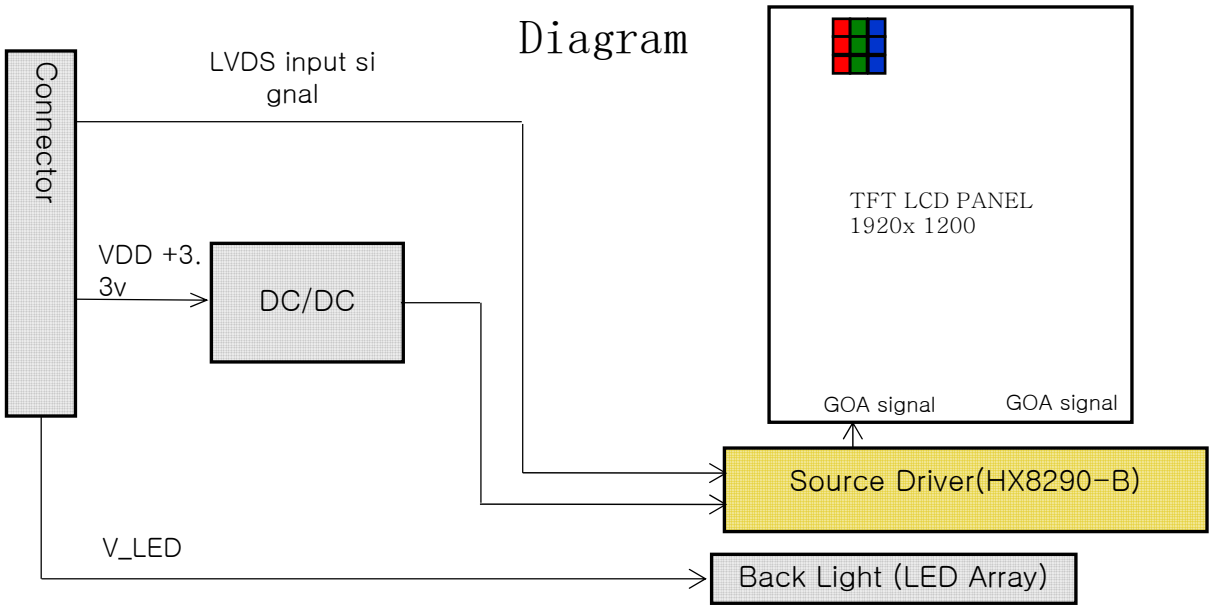
# Contents

# 1.GENERAL INFORMATION

| ITEM | STANDARD VALUES | UNITS |
|---|---|---|
| LCD type | 10.1”TFT | -- |
| Dot arrangement | 1920(H)×1200(V) | pixels |
| Pixel Arrangement | Pixels RGB stripe arrangement | -- |
| Display mode | Normally Black | -- |
| Viewing Direction | ALL | -- |
| LCM+CTP Outline Dimension | 253.58(W)×172.08(H)×6.75(T) | mm |
| Active area | 216.81(W)×135.50(H) | mm |
| Dot pitch | 0.03764(H)×RGB×0.11292(V) | -- |
| Display Colors | 16.7M(8bit ) | -- |
| Surface hardness | 7H | mm |
| CTP Driver IC | GT9271 | mm |
| CTP type | G+G | -- |
| TFT Driver IC | TBD | mm |
| Interface | LVDS | -- |
| Operating temperature | -20 ~ +70 | ℃ |
| Storage temperature | -30 ~ +80 | ℃ |
| Back Light | 36pcs White LED 6S6P | -- |
| Weight | TBD | g |

## 1.1 Introduction

LTK101WUBCT20-V0 is a color active matrix TFT LCM using amorphous silicon TFT‘s (Thin Film Transistors) as an active switching devices. This module has a 10.1 inch diagonally measured active area with WUXGA resolutions (1920 horizontal by 1200 vertical pixel array). Each pixel is divided into RED, GREEN, BLUE dots which are arranged in vertical stripe and this module can display 16.7M colors.



## 2.0 ABSOLUTE MAXIMUM RATINGS

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

**< Table 2. Absolute Maximum Ratings>**

| Parameter | | Symbol | Min. | Max. | Unit | Remarks |
|---|---|---|---|---|---|---|
| Power Supply | LCD Module | VDD | VSS-0.3 | 3.6 | V | Ta = 25 ℃ |
| Operating Temperature | | $T_{OP}$ | -20 | +70 | ℃ | |
| Storage Temperature | | $T_{ST}$ | -30 | +80 | ℃ | |
| Operating Ambient Humidity | | Hop | 20 | 90 | %RH | |
| Storage Humidity | | Hst | 10 | 90 | %RH | |

# 3.0 ELECTRICAL SPECIFICATIONS

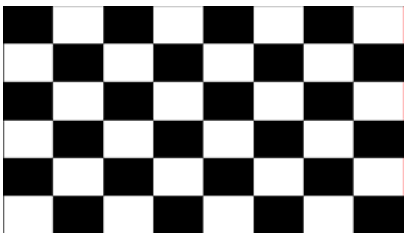
## 3.1 TFT LCD Module

**< Table 3. LCD Module Electrical specifications >** [Ta =25±2 ℃]

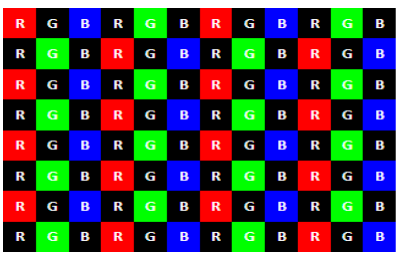
| Parameter | | Symbol | Values | | | Unit | Notes |
|---|---|---|---|---|---|---|---|
| | | | Min. | Typ. | Max. | | |
| Power Supply Voltage | | VDD | 3.0 | 3.3 | 3.6 | V | |
| | | VRP | | | 300 | mV | Ripple |
| Power Supply Current | | IDD | - | 300 | 360 | mA | Note 1 |
| Power Consumption | | PLCD | - | 1 | 1.2 | W | |
| Rush current | | IRUSH | - | - | 3.0 | A | Note 2 |
| CMOS Interface | Input Voltage | VIH | 2.7 | | 3.3 | V | |
| | | VIL | 0 | | 0.5 | V | |
| | Output Voltage | VOH | 2.7 | | 3.3 | V | |
| | | VOL | 0 | | 0.5 | V | |

Notes : 1. The supply voltage is measured and specified at the interface connector of LCM.
The current draw and power consumption specified is for VDD=3.3V, Frame rate $f_V$=60Hz and Clock frequency = 80MHz. Test Pattern of power supply current

a) Typ : Mosaic 8 x 6 Pattern(L0/L255)



b) Max : skip subPixel(L255)



2. The duration of rush current is about 2ms and rising time of Power Input is 1ms(min)

### 3.2 INPUT TERMINAL PIN ASSIGNMENT

This LCD employs one interface connections, a 45 pin connector is used for the LCD module electronics interface.

#### 3.2.1 Pin assignment for LCD module

Connector : FH34SRJ-45S-0.5SH(50) (HRS) or equivalent

**< Table4. Pin Assignment for LCD Module Connector >**

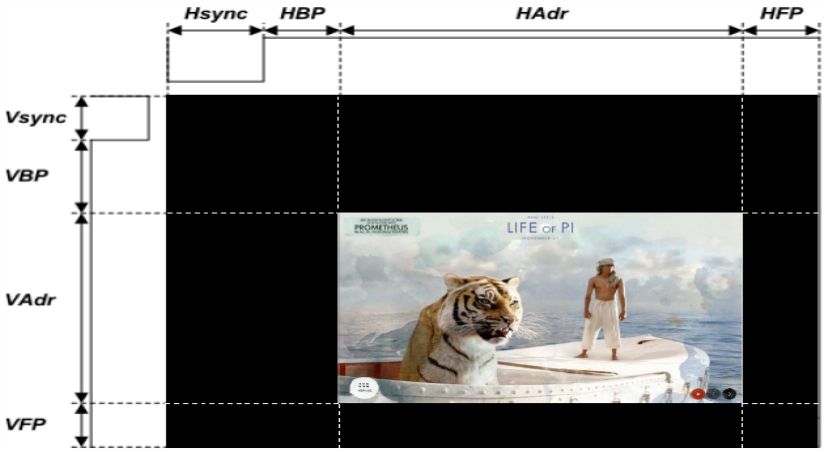
| Pin No. | Symbol | Description | I/O |
|---|---|---|---|
| 1 | K- | Backlit cathode | - |
| 2 | K- | Backlit cathode | - |
| 3 | A+ | Backlit anode | - |
| 4 | A+ | Backlit anode | - |
| 5 | NC | NC | - |
| 6 | GND | GROUND | P |
| 7 | ELV3P | EVEN LVDS Positive data signal (+) | I |
| 8 | ELV3N | EVEN LVDS Negative data signal (-) | I |
| 9 | GND | GROUND | P |
| 10 | ELV2P | EVEN LVDS Positive data signal (+) | I |
| 11 | ELV2N | EVEN LVDS Negative data signal (-) | I |
| 12 | GND | GROUND | P |
| 13 | ELVCLKP | EVEN LVDS Positive CLK signal (+) | I |
| 14 | ELVCLKN | EVEN LVDS Negative CLK signal (-) | I |
| 15 | GND | GROUND | P |
| 16 | ELV1P | EVEN LVDS Positive data signal (+) | I |
| 17 | ELV1N | EVEN LVDS Negative data signal (-) | I |
| 18 | GND | GROUND | P |
| 19 | ELV0P | EVEN LVDS Positive data signal (+) | I |
| 20 | ELV0N | EVEN LVDS Negative data signal (-) | I |

| Pin No. | Symbol | Description | I/O |
|---|---|---|---|
| 21 | GND | GROUND | P |
| 22 | OLV3P | Odd LVDS Positive data signal (+) | I |
| 23 | OLV3N | Odd LVDS Negative data signal (-) | I |
| 24 | GND | GROUND | P |
| 25 | OLV2P | Odd LVDS Positive data signal (+) | I |
| 26 | OLV2N | Odd LVDS Negative data signal (-) | I |
| 27 | GND | GROUND | P |
| 28 | OLVCLKP | Odd LVDS Positive CLK signal (+) | I |
| 29 | OLVCLKN | Odd LVDS Negative CLK signal (-) | I |
| 30 | GND | GROUND | P |
| 31 | OLV1P | Odd LVDS Positive data signal (+) | I |
| 32 | OLV1N | Odd LVDS Negative data signal (-) | I |
| 33 | GND | GROUND | P |
| 34 | OLV0P | Odd LVDS Positive data signal (+) | I |
| 35 | OLV0N | Odd LVDS Negative data signal (-) | I |
| 36 | GND | GROUND | P |
| 37 | I2C _SDA | Reserved for LCD manufacturer’ s use , not connection | I |
| 38 | I2C _SCL | | I |
| 39 | VDD_OTP | | P |
| 40 | EEPEN | Not Connection | I |
| 41 | VDDIN | Power supply VDDIN=3.3V (Typ.) | P |
| 42 | VDDIN | | P |
| 43 | VDDIN | | P |
| 44 | VDDIN | | P |
| 45 | VDDIN | | P |

### 3.3 Interface timing Parameter and AC/DC Parameter

**< Table5. LVDS Timing Parameter >**

| Parameter | Symbol | Value | | | Unit |
|---|---|---|---|---|---|
| | | Min. | Typ. | Max. | |
| DCLK Frequency | Fdclk | 74.5 | 77.56 | 85 | MHz |
| Horizontal display area | Thd | | 1920 | | DCLK |
| HSYNC period time | Th | 1910 | 1920 | 1960 | DCLK |
| Horizontal Blank | THB | 29 | 80 | 288 | DCLK |
| HSYNC pulse width | Thp | 2 | 10 | 255 | DCLK |
| HSYNC back porch | thbp | 3 | 6 | 255 | DCLK |
| HSYNC Front porch | thfp | 24 | 64 | 260 | DCLK |
| Vertical display area | Tvd | | 1200 | | H |
| VSYNC period time | Tv | 1243 | 1243 | 1560 | H |
| Vertical Blank | TVB | 43 | 43 | 360 | H |
| VSYNC Pluse width | Tvp | 4 | 4 | 20 | H |
| VSYNC back porch | Tvbp | 20 | 20 | 255 | H |
| VSYNC front porch | Tvfp | 19 | 19 | 260 | H |
| Frequency | fV | - | 60 | - | Hz |



## 3.4 LVDS mode AC electrical characteristics

| Parameter | Symbol | Spec. | | | Unit |
|---|---|---|---|---|---|
| | | Min. | Typ. | Max. | |
| Clock frequency | $F_{LVCYC}$ | 20 | | 85 | MHz |
| Clock period | $T_{LVCYC}$ | 11.76 | | | nsec |
| 1 data bit time | UI | | 1/7 | | $T_{LVCYC}$ |
| Clock high time | $T_{LVCH}$ | | 4 | | UI |
| Clock low time | $T_{LVCL}$ | | 3 | | UI |
| Position 1 | $T_{POS1}$ | -0.2 | 0 | 0.2 | UI |
| Position 0 | $T_{POS0}$ | 0.8 | 1 | 1.2 | UI |
| Position 6 | $T_{POS6}$ | 1.8 | 2 | 2.2 | UI |
| Position 5 | $T_{POS5}$ | 2.8 | 3 | 3.2 | UI |
| Position 4 | $T_{POS4}$ | 3.8 | 4 | 4.2 | UI |
| Position 3 | $T_{POS3}$ | 4.8 | 5 | 5.2 | UI |
| Position 2 | $T_{POS2}$ | 5.8 | 6 | 6.2 | UI |
| Input eye width | $T_{EYEW}$ | 0.6 | - | - | UI |
| Input eye border | $T_{EX}$ | - | - | 0.2 | UI |
| LVDS wake up time | $T_{ENLVDS}$ | - | - | 150 | μs |

**Table 1.1: LVDS mode AC electrical characteristics**

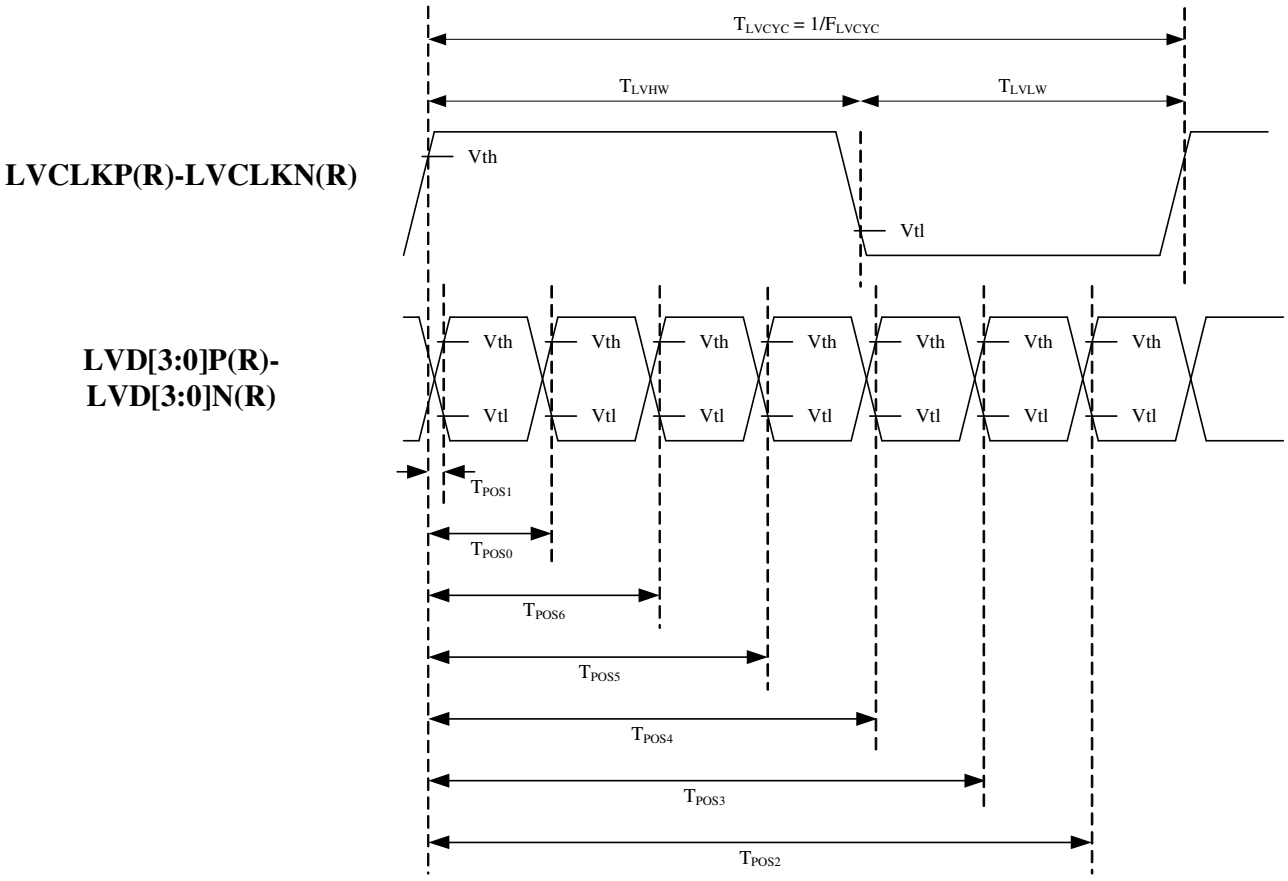
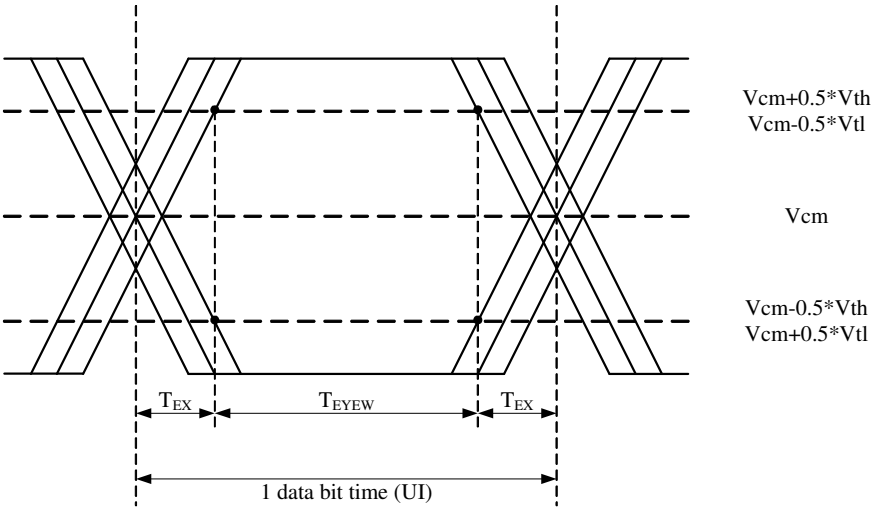



**Figure 1.2: LVDS input timing**

**Single-ended:**
**LVD[3:0]P,**
**LVD[3:0]N**




**Differential:**
**LVD[3:0]P-LVD[3:0]N**

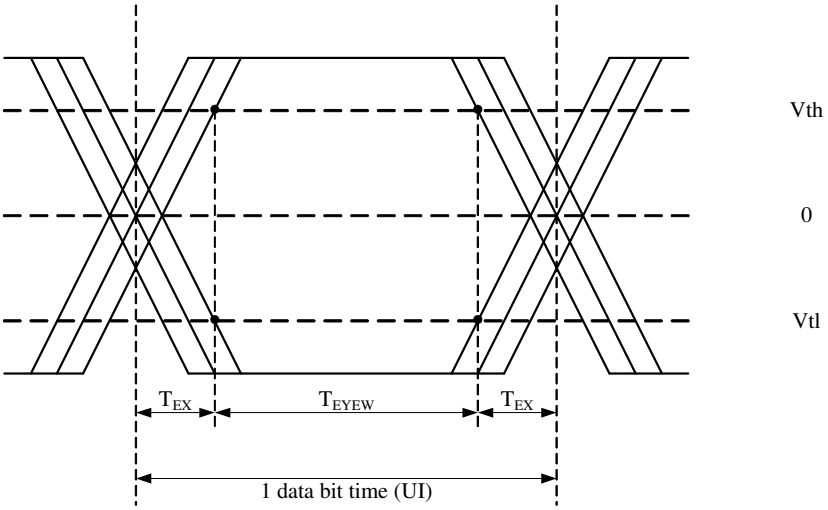



**Figure 1.3: LVDS input eye diagram**

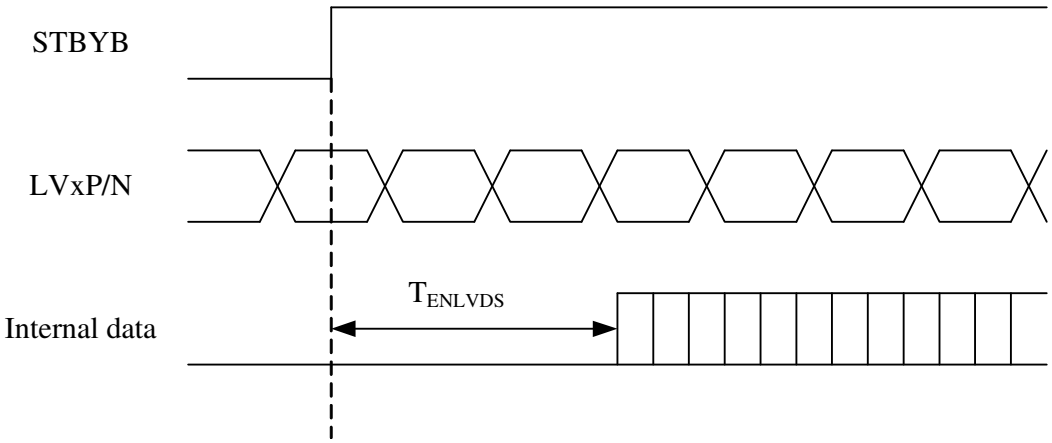



**Figure 1.4: LVDS wake up time**

## 3.5 Reset timing

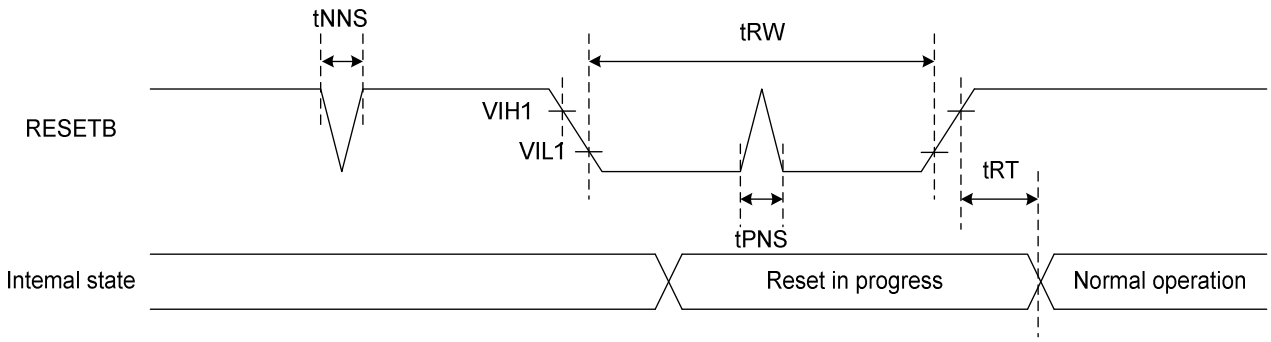



**Figure 11.6: Reset timing**

**(VCC1=VCC2=2.7 to 3.6V, GND=0V, $T_A$=-40 to +95 ℃)**

| Signal | Paramete | Symbol | Spec. | | | Unit | Remarks |
|---|---|---|---|---|---|---|---|
| | | | Min. | Typ. | Max. | | |
| RESETB | Reset pulse width | tRW | 10 | - | - | us | - |
| | Reset complete time | tRT | - | - | 5 | us | - |
| | Positive spike noise width | tPNS | - | - | 100 | ns | - |
| | Negative spike noise width | tNNS | - | - | 100 | ns | - |

**Table 11.4: Reset timing parameter**

# 4.0 OPTICAL SPECIFICATIONS

## 4.1 Overview

The test of optical specifications shall be measured in a dark room (ambient luminance ≤1lux and temperature = 25±2℃) with the equipment of Luminance meter system (Goniometer system and TOPCON BM-5) and test unit shall be located at an approximate distance 50cm from the LCD surface at a viewing angle of θ and Φ equal to 0°. We refer to θØ=0 (=θ3 ) as the 3 o'clock direction (the "right"), θØ=90 (= θ12 ) as the 12 O'clock direction ("upward"), θØ=180 (= θ9 ) as the 9 O'clock direction ("left") and θØ=270(= θ6 ) as the 6 O'clock direction ("bottom"). While scanning θ and/or Ø, the center of the measuring spot on the Display surface shall stay fixed.

## 4.2 Optical Specifications

**< Table9. Optical Table >**

| Item | Symbol | Condition | Min | Typ. | Max | Unit | Note |
|---|---|---|---|---|---|---|---|
| Viewing Angle | **θL** | **Cr≥10** | **70** | **80** | **--** | **deg** | **Note 1** |
| | **$\theta_R$** | | **70** | **80** | **--** | | |
| | **$\psi_T$** | | **70** | **80** | **--** | | |
| | **$\psi_B$** | | **70** | **80** | **--** | | |
| Luminance | **Lv** | **FF=0°** | **800** | **1000** | | **-** | |
| Response Time | **Tr+Tf** | | **--** | **30** | **35** | **ms** | **Note 3** |
| Color Coordinate of CIE1931 | **Rx** | **θ=0°** | **-0.03** | **0.644** | **+0.03** | **-** | **Note 4** |
| | **Ry** | | | **0.344** | | | |
| | **Gx** | | | **0.315** | | | |
| | **Gy** | | | **0.632** | | | |
| | **Bx** | | | **0.157** | | | |
| | **By** | | | **0.054** | | | |
| | **Wx** | | | **0.285** | | | |
| | **Wy** | | | **0.327** | | | |
| NTSC Ratio | **NTSC** | **CIE1931** | **--** | **72** | **--** | **%** | **Note 5** |
| Polarization Direction of Front Polarizer | **PdF** | **-** | | **0** | | **deg** | **Absorption axis** |
| Polarization Direction of Rear Polarizer | **PdR** | | | **90** | | **deg** | **Note 6** |

## 4.3 BACK LIGHT UNIT

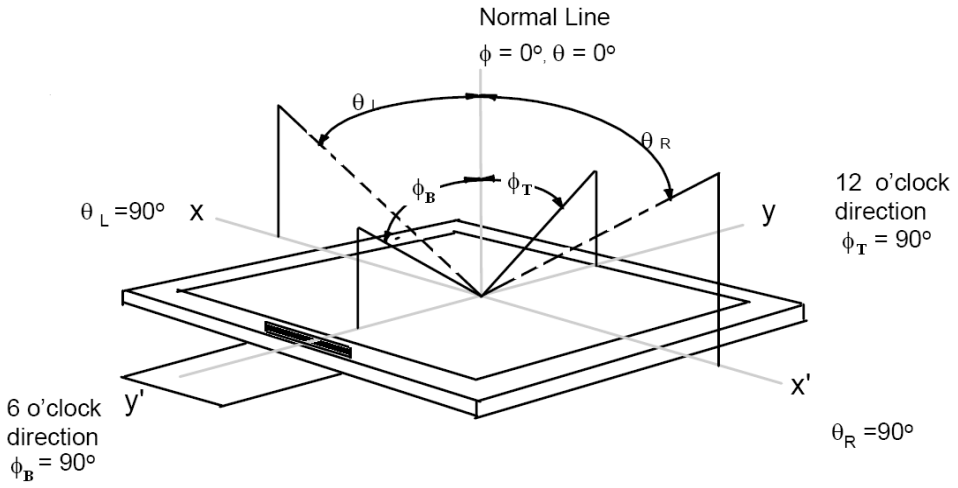
The edge-lighting type of back light unit consists of 40 LEDs which is connected in serial.

Table 4.2 Electrical Characteristics Of Back Light Unit

| Item | Units | Provisions | | | Conditions |
|---|---|---|---|---|---|
| | | MIN | TYP | MAX | |
| Voltage | Vrms | 23 | --- | 30 | I=180 ma Environmental Temperature 25±2°C<br>Environmental Temperature 25±2°C |
| Current | mA | -- | 180 | -- | I=180 ma Environmental Temperature 25±2°C |

Input interface is 2 PIN, black is negative, red is positive

**Note 1**:**The definition of Viewing Angle**
Refer to the graph below marked by *θ* and *Φ*.

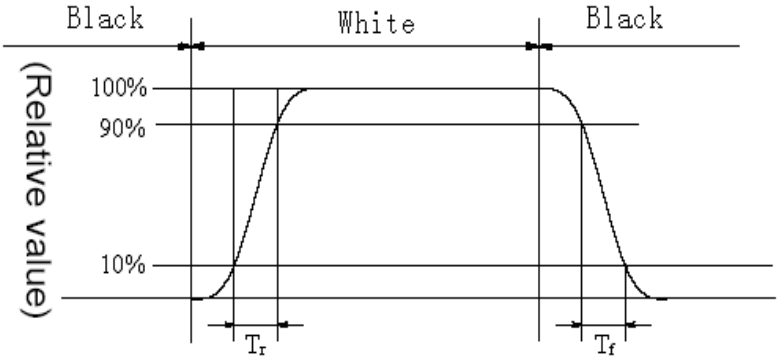



**Note2**:**ThedefinitionofContrastRatio**

$$\text{Contrast Ratio(CR)} = \frac{\text{Luminance When LCD is at "White" state}}{\text{Luminance When LCD is at "Black" state}}$$

(Contrast Ratio is measured in optimum common electrode voltage)

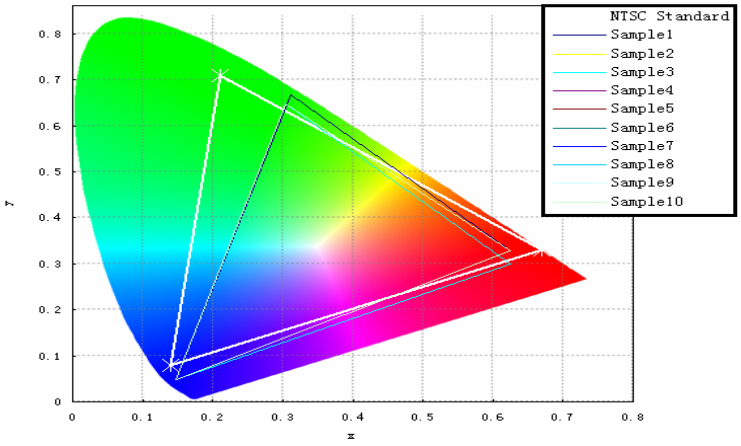
**Note3**:**DefinitionofResponse time.**(Test LCD using RD80S or similar equipments):
The output sign also photo detector are measured when the input sign also are changed from "black" to "white" (Voltage falling time)and from "white" to "black" (Voltage rising time), respectively .The response time is defined as the time interval between the 10% and 90% of amplitudes . Refer to figures below.




**Note 4: Color Coordinates of CIE 1931**
The test condition is at ILED=20mA and measured on the surface of LCD module at 25℃.
Measurement equipment:CS2000 or similar equipments
The Color Coordinate (CIE 1931) is the measurement of the center of the display shown in below figure.

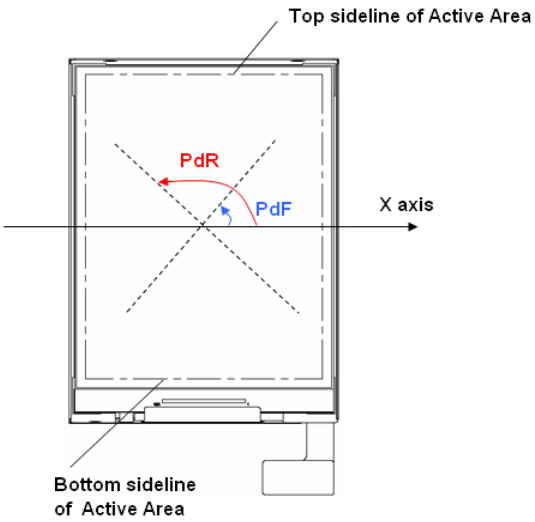
**Note 5: Definition of Color of CIE Coordinate and NTSC Ratio.**

$$S = \frac{\text{area of RGB triangle}}{\text{area of NTSC triangle}} \times 100\%$$




**Note 6: Polarization Direction Definition**

- Viewing direction is normal user viewing direction which is vertical to the display surface
- The polarizer which is closer to viewer is defined as Front Polarizer
- The polarizer which is on the rear side of viewer is defined as Rear Polarizer
- The X axis is defined as parallel line to top & bottom sidelines of the Active Area
- PdF which is marked in blue arrow is polarization degree of Front polarizer
- PdB which is marked in red arrow is polarization degree of Back polarizer
- The polarization degree parameter must be indicated in range of 0deg to 180deg according to above definitio n



## 5.0 RELIABLITY TEST

The Reliability test items and its conditions are shown in below.

**<Table 10. Reliability Test Parameters >**

| No | Test Items | Conditions |
|---|---|---|
| 1 | High temperature storage test | 80℃ 48hr |
| 2 | Low temperature storage test | -30℃ 48hr |
| 3 | Low temperature operation test | -20℃ 48hr |
| 4 | High temperature operation test | 70℃ 48hr |
| 5 | High temperature & high humidity (operation test) | 50℃ 90%RH 48hr |
| 6 | Thermal Shock Test | -10℃~60℃ 0.5hr/cycle 50cycle |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |
| … | | |

## 6.0 PACKING INFORMATIO

TBD

## 7.0 Product Label

TBD

# 8.0 Handling & Cautions

## 8.1 Mounting Method

- The panel of the LCD consists of two thin glasses with polarizers which easily get damaged. So extreme care should be taken when handling the LCD.
- Excessive stress or pressure on the glass of the LCD should be avoided. Care must be taken to insure that no torsional or compressive forces are applied to the LCD unit when it is mounted.
- If the customer's set presses the main parts of the LCD, the LCD may show the abnormal display. But this phenomenon does not mean the malfunction of the LCD and should be pressed by the way of mutual agreement.
- To determine the optimum mounting angle, refer to the viewing angle range in the specification for each model.
- Mount a LCD module with the specified mounting parts.

## 8.2 Caution of LCD Handling and Cleaning

- Since the LCD is made of glass, do not apply strong mechanical impact or static load onto it. Handling with care since shock, vibration,and careless handling may seriously affect the product. If it falls from a high place or receives a strong shock, the glass may be broken.
- The polarizers on the surface of panel are made from organic substances. Be very careful for chemicals not to touch the polarizers or it leads the polarizers to be deteriorated.
- If the use of a chemical is unavoidable, use soft cloth with solvent（recommended below）to clean the LCD‘s surface with wipe lightly.
  -IPA(Isopropyl Alcohol), Ethyl Alcohol, Trichlorotriflorothane
- Do not wipe the LCD's surface with dry or hard materials that will damage the polarizers and others. Do not use the following solvent.
  -Water, Ketone, Aromatics
- It is recommended that the LCD be handled with soft gloves during assembly, etc. The polarizers on the LCD's surface are vulnerable to scratch and thus to be damaged by sharp particles.
- Do not drop water or any chemicals onto the LCD's surface.
- A protective film is supplied on the LCD and should be left in place until the LCD is required for operation.
- The ITO pad area needs special careful caution because it could be easily corroded. Do not contact the ITO pad area with HCFC,Soldering flux,Chlorine,Sulfur,saliva or fingerprint. To prevent the ITO corrosion, customers are recommended that the ITO area would be covered by UV or silicon.

### 8.3 Caution Against Static Charge

- The LCD modules use C-MOS LSI drivers, so customers are recommended that any unused input terminal would be connected to Vdd or Vss, do not input any signals before power is turn on, and ground you body, work/assembly area, assembly equipments to protect against static electricity.
- Remove the protective film slowly, keeping the removing direction approximate 30-degree not vertical from panel surface, If possible, under ESD control device like ion blower, and the humidity of working room should be kept over 50%RH to reduce the risk of static charge.
- Avoid the use work clothing made of synthetic fibers. We recommend cotton clothing or other conductivity-treated fibers.
- In handling the LCD, wear non-charged material gloves. And the conducting wrist to the earth and the conducting shoes to the earth are necessary.

### 8.4 Caution For operation

- It is indispensable to drive the LCD within the specified voltage limit since the higher Voltage than the limit causes the shorter LCD's life. An electro-chemical reaction due to DC causes undesirable deterioration of the LCD so that the use of DC drive should avoid.
- Do not connect or disconnect the LCD to or from the system when power is on.
- Never use the LCD under abnormal conditions of high temperature and high humidity.
- When expose to drastic fluctuation of temperature (hot to cold or cold to hot），the LCD may be affected; Specifically, drastic temperature fluctuation from cold to hot ,produces dew on the LCD's surface which may affect the operation of the polarizer and the LCD.
- Response time will be extremely delayed at lower temperature than the operating temperature range and on the other hand at higher temperature LCD may turn black at temperature above its operational range. However those phenomena do not mean malfunction or out of order with the LCD. The LCD will revert to normal operation once the temperature returns to the recommended temperature range for normal operation.
- Do not display the fixed pattern for a long time because it may develop image sticking due to the LCD structure. If the screen is displayed with fixed pattern, use a screen saver.

### 8.5 Packaging

- Modules use LCD element, and must be treated as such.
  -Avoid intense shock and falls from a height.
  -To prevent modules from degradation, do not operate or store them exposed directly to sunshine or high temperature/humidity for long periods.

### 8.6 Storage

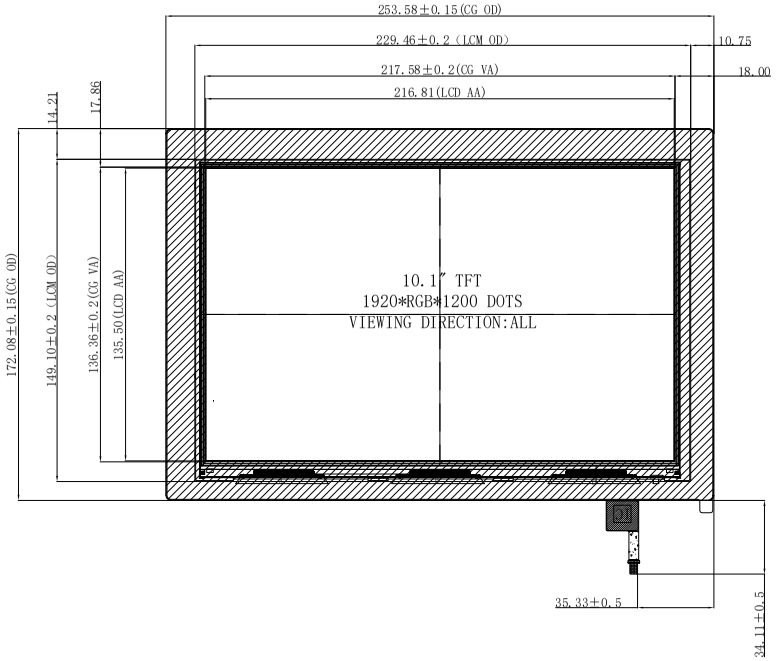
- A slight dew depositing on terminals is a cause for electro-chemical reaction resulting in terminal open circuit. Relative humidity of the environment should therefore be kept below 60%RH.
- Original protective film should be used on LCD's surface (polarizer). Adhesive type protective film should be avoided, because it may change color and/or properties of the polarizers.
- Do not store the LCD near organic solvents or corrosive gasses.
- Keep the LCD safe from vibration, shock and pressure.
- Black or white air-bubbles may be produced if the LCD is stored for long time in the lower temperature or mechanical shocks are applied onto the LCD.
- In the case of storing for a long period of time for the purpose or replacement use, the following ways are recommended.
  -Store in a polyethylene bag with sealed so as not to enter fresh air outside in it.
  -Store in a dark place where neither exposure to direct sunlight nor light is.
  -Keep temperature in the specified storage temperature range.
  -Store with no touch on polarizer surface by the anything else. If possible, store the LCD in the packaging situation LCD when it was delivered.

### 8.7 Safety

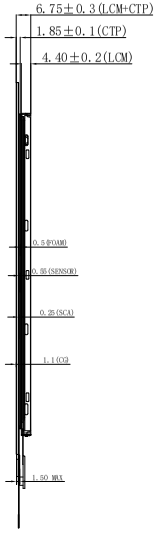
- For the crash damaged or unnecessary LCD, it is recommended to wash off liquid crystal by either of solvents such as acetone and ethanol an should be burned up later.
- In the case the LCD is broken, watch out whether liquid crystal leaks out or not. If your hands touch the liquid crystal, wash your hands cleanly with water an soap as soon as possible.
- If you should swallow the liquid crystal, first, wash your mouth thoroughly with water, then drink a lot of water and induce vomiting, and then, consult a physician.
- If the liquid crystal should get in your eyes, flush your eyes with running water for at least fifteen minutes.
- If the liquid crystal touches your skin or clothes, remove it and wash the affected part of your skin or clothes with soap and running water.

## 9.Mechanical Drawing

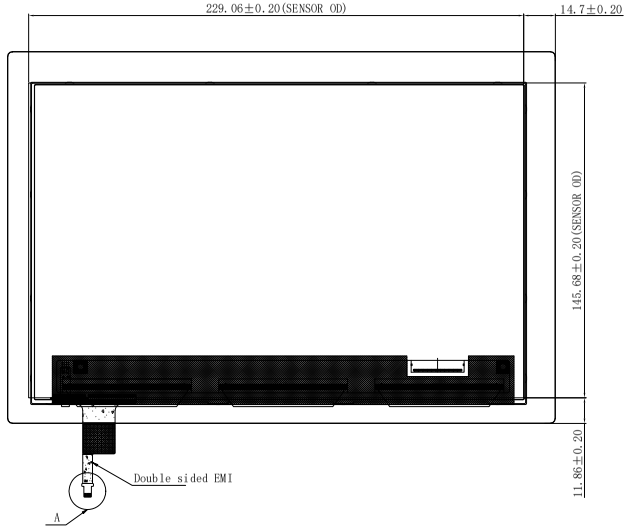
# Front View




# Side View




# Back View

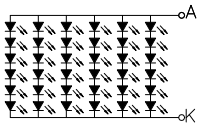



PIN DESCRIPTION

| | |
|---|---|
| 1 | K- |
| 2 | K- |
| 3 | A+ |
| 4 | A+ |
| 5 | NC |
| 6 | GND |
| 7 | ELV3P |
| 8 | ELV3N |
| 9 | GND |
| 10 | ELV2P |
| 11 | ELV2N |
| 12 | GND |
| 13 | ELVCLKP |
| 14 | ELVCLKN |
| 15 | GND |
| 16 | ELV1P |
| 17 | ELV1N |
| 18 | GND |
| 19 | ELV0P |
| 20 | ELV0N |
| 21 | GND |
| 22 | OLV3P |
| 23 | OLV3N |
| 24 | GND |
| 25 | OLV2P |
| 26 | OLV2N |
| 27 | GND |
| 28 | OLVCLKP |
| 29 | OLVCLKN |
| 30 | GND |
| 31 | OLV1P |
| 32 | OLV1N |
| 33 | GND |
| 34 | OLV0P |
| 35 | OLV0N |
| 36 | GND |
| 37 | I2C_SDA |
| 38 | I2C_SCL |
| 39 | VDD_OTP |
| 40 | EEPEN |
| 41 | WDDIN |
| 42 | WDDIN |
| 43 | WDDIN |
| 44 | WDDIN |
| 45 | WDDIN |

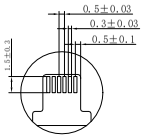
Skills requirement:
1. Structure: G+G.
2. Transmission rate: ⩾ 85% (550nm).
3. All unlabeled tolerances: ±0.10mm.
4. IC:GT9271
5. Tempering degree: 110g steel ball, height 60cm drop without breaking, surface hardness⩾ 7H (pencil hardness test).
6. CG unmarked at the button hole and edge safety edge ⩽ 0.20mm.
7. Working temperature: -20℃ ~ 70℃ , 20 ~ 85% RH, storage temperature; -30℃ ~ 80℃, 10-95% RH
8. Focus on control size.

| PIN | NAME |
|---|---|
| 1 | SDA |
| 2 | SCL |
| 3 | RST |
| 4 | INT |
| 5 | GND |
| 6 | VCC |




Backlight LED Circuit

If= 360 mA
Vf= 18 V(typ)




Detail A 5:1

Notes:
1. Display : 10.1″, TFT
2. Resolution: 1920xRGBx1200
3. LCD Viewing Direction: ALL,
4. Display Mode: Normally Black
5. LCM Bringhtness: 1000cd/㎡(TYP)
   LCM Bringhtness: 800cd/㎡(TYP)
6. unmark Tolerance:±0.2
7. OPERATING TEMP: -20° C~ +70° C
8. STORAGE TEMP: -30° C~ +80° C
9. Requirements on Environmental Protection: ROHS

| REV | DESCRIPTION | DATE | NAME |
|---|---|---|---|
| 3 | | | |
| 2 | | | |
| 1 | | | |
| 0 | NEW | 2023.03.29 | IAN |

LEADTEK DISPLAY

LEADTEK COMPANY LIMITED

| | | | | | | |
|---|---|---|---|---|---|---|
| SCALE:1/1 | UNIT:mm | PAGE:1/1 | | Approve | Check | Drawn |
| Part No: | LTK101WUBCT20 | | VER:V0 | | JONA | IAN |
| Customer No: | | | | | | |