# Specification

**(Product) : 8inch HD TFT LCD Module**

(Driver board): JDLD70V02B

( Version ): VER:1.00

( TFT LCD ): HL080IA-01E C35-HX

# Contents

# Version

| Date | Ver. | Modification |
|---|---|---|
| 2022-02-21 | R1.00 | First Version( official version ) |
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### 1. Profile:

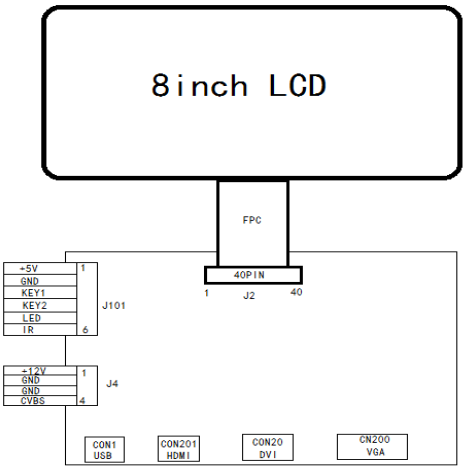
JDLD70V02B R:1.00-HL080IA-01E C35-HX color tft lcd module is composed by JDLD70V02B R:1.00 driver board and HL080IA-01E C35-HX panel . it can input 1 channel CVBS、1chnnel VGA、1 channel DVI、1channel HDMI signal; 1channel CVBS output , 2 channel Audio input and output . with PAL and NTSC system format (auto switch) . it’s menu can be adjusted by pushbutton, OSD display. The product is mainly used for video door phone or other display electronic equipments.

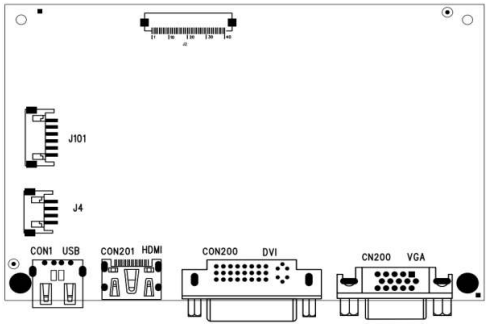
### 2. Specifications:

| No. | Item | Description | Note |
|---|---|---|---|
| 1 | LCD Display | 8inch | |
| 2 | Display Ratio | 4:3 | |
| 3 | Backlight | LED | |
| 4 | Brightness | 280-350 cd/$m^2$ | |
| 5 | Resolution | 1024×768( LVDS) | |
| 6 | View angle | (85 / 85 / 85 / 85) up/down/left/right | |
| 7 | LCD dimension | 174（W）×136（H）×2.75（D）mm | |
| 8 | Effect area | 162.05（W）×121.54（H）mm | |
| 9 | Driver board size | 128.8（W）×85.5（H）×15.78(D) mm | |
| 10 | Working Voltage (Wave<0.3VP-P) | Min:DC9V; Standard: DC12V; Max: DC18V; | |
| 11 | Working Current (DC 12V supply) | DC410mA±20mA | |
| 12 | Power Consumption | 4.92W（TYP） | |
| 13 | Start Time | ≤5s (Boot screen); ≤10s(Access channel screen) | |
| 14 | Working Temperature | -10℃~60℃ | |
| 15 | Storage Temperature | -20℃~70℃ | |
| 16 | ENV. Humidity | 5~90％RH | |

### 3. Product Picture:

### 4. Wiring Diagram:



## 5. Interface Definition:

### 5.1. J4 Interface Definition:（4PIN 2.0mm）

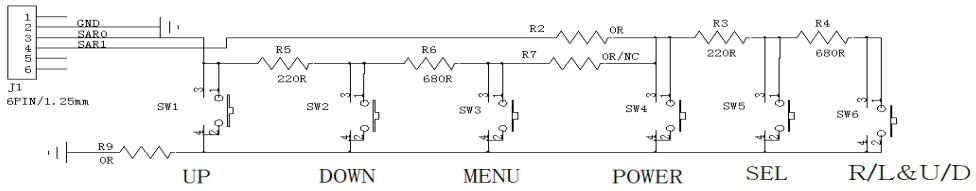
| PIN | Function | I/O/P | PIN Definition | Note |
|---|---|---|---|---|
| 1 | +12V IN | I | DC power input | 9V~15V |
| 2 | GND | P | GND | |
| 3 | GND | P | GND | |
| 4 | CVBS | I | Video Signal input | 0.5V~1.5VP-P |

### 5.2. J101 Interface Definition:（6PIN 2.0mm）

| PIN | Function | I/O | PIN Definition | Note |
|---|---|---|---|---|
| 1 | 5V | O | 5Vdirect-current output | |
| 2 | GND | P | Ground | |
| 3 | KEY1 | I | keypad input | |
| 4 | KEY2 | I | keypad input | |
| 5 | LED | O | Main board needs to be state indicator output | |
| 6 | IR | I | Infrared remote control signal input | |

#### 5.2.1. SJD-keypad

### 5.2.2. Wiring Diagram of keypad：




### 5.2.3. Keypad Description：

**SW1: Up key. (UP)** The key without any operation，The key is the menu option parameter increase key under the menu mode.

**SW2:Down key. (DOWN)** The key without any operation， The key is the menu option parameter decrease key under the menu mode。

**SW3：Menu key. (MENU)** Press the key to chose contrast、brightness、color、definition。

**SW4：Power key. (POWER)** Press the key to open/close the screen。

**SW5：Switch key. (SEL)** This key is Video channel switch button，Press this key to choose CVBS, VGA, DVI, HDMI channel.

### 5.3. VGA,DVI,HDMI connector Parameters

5.3.1.

Compatible with HDMI version：HDMI 1.3/1.4，compatible with HDCP 1.2. Supported formats are HDMI 3D input、HDMI 4Kx2K input、HDMI ARC

5.3.2.

Compatible with DVI version: DVI 1.0，Supported high resolution 1920×1080@60HZ and 1600 ×1200@60HZ.

5.3.3.

Supported computer RGB input, resolution at 800x600 60HZ, 1280x768 60HZ.

### 5.4． J302 Interface Definition：

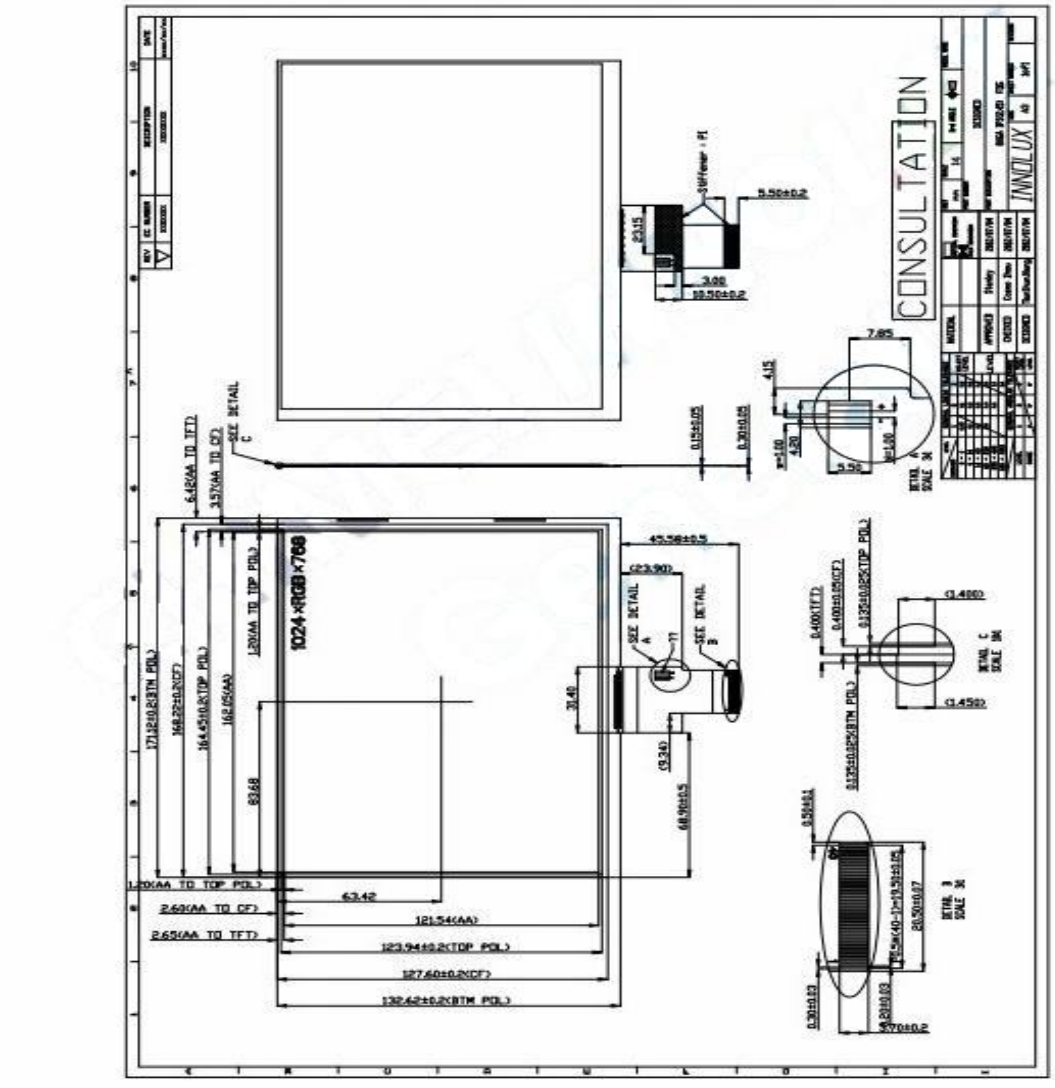
| Pin No. | Symbol | I/O | Function | Remark |
|---|---|---|---|---|
| 1 | VCOM | P | Common Voltage | |
| 2 | VDD | P | Power Voltage for digital circuit | |
| 3 | VDD | P | Power Voltage for digital circuit | |
| 4 | NC | -- | No connection | |
| 5 | Reset | O | Global reset pin | |
| 6 | STBYB | O | Standby mode, Normally pulled high STBYB = “1”, normal operation STBYB = “0”, timing controller, source driver will turn off, all output are High-Z | |
| 7 | GND | P | Ground | |
| 8 | RXIN0- | O | -LVDS differential data input | |
| 9 | RXIN0+ | O | + LVDS differential data input | |
| 10 | GND | P | Ground | |
| 11 | RXIN1- | O | -LVDS differential data input | |
| 12 | RXIN1+ | O | + LVDS differential data input | |
| 13 | GND | P | Ground | |
| 14 | RXIN2- | O | -LVDS differential data input | |
| 15 | RXIN2+ | O | + LVDS differential data input | |
| 16 | GND | P | Ground | |
| 17 | RXCLKIN- | O | -LVDS differential clock input | |
| 18 | RXCLKIN+ | O | + LVDS differential clock input | |
| 19 | GND | P | Ground | |
| 20 | RXIN3- | O | -LVDS differential data input | |

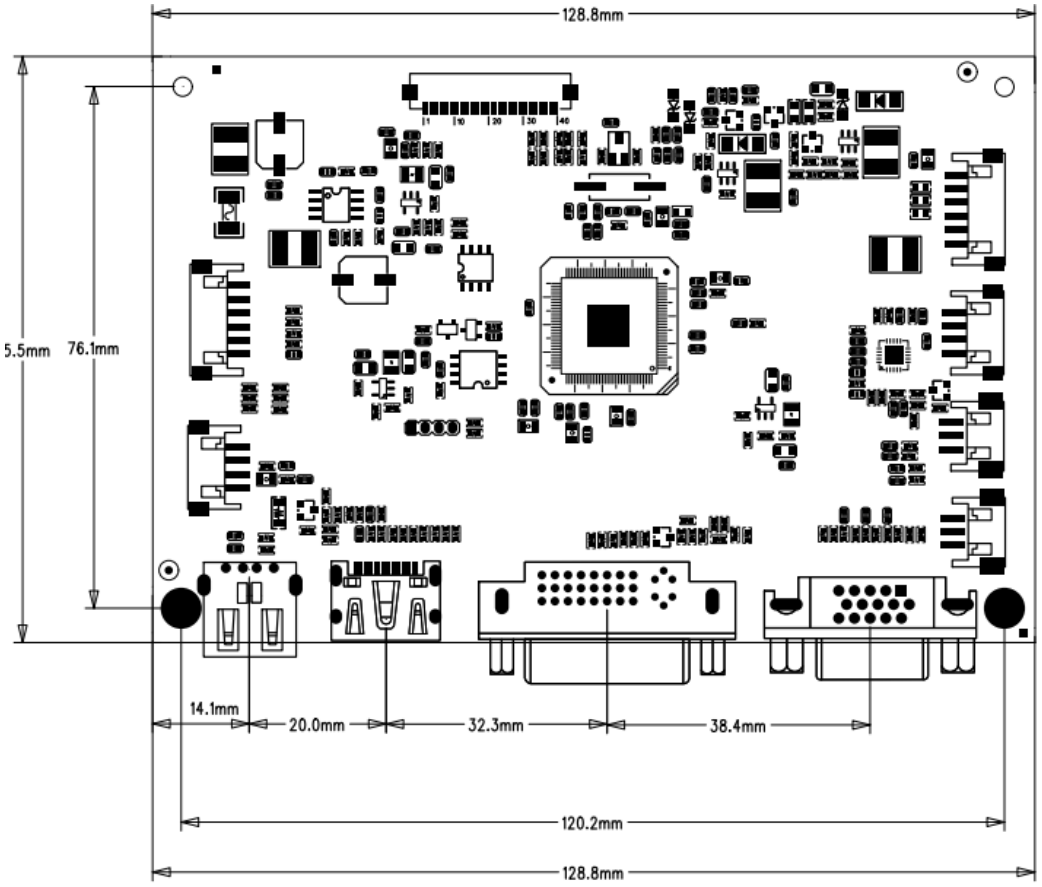
| | | | | |
|---|---|---|---|---|
| 21 | RXIN3+ | O | + LVDS differential data input | |
| 22 | GND | P | Ground | |
| 23 | NC | -- | No connection | |
| 24 | NC | -- | No connection | |
| 25 | GND | P | Ground | |
| 26 | NC | -- | No connection | |
| 27 | DIMO | O | Backlight CABC controller signal output | |
| 28 | SELB | O | 6bit/8bit mode select | |
| 29 | AVDD | P | Power for Analog Circuit | |
| 30 | GND | P | Ground | |
| 31 | LED- | P | LED Cathode | |
| 32 | LED- | P | LED Cathode | |
| 33 | L/R | O | Horizontal inversion | |
| 34 | U/D | O | Vertical inversion | |
| 35 | VGL | P | Gate OFF Voltage | |
| 36 | CABCEN1 | O | CABC H/W enable | |
| 37 | CABCEN0 | O | CABC H/W enable | |
| 38 | VGH | P | Gate ON Voltage | |
| 39 | LED+ | P | LED Anode | |
| 40 | LED+ | P | LED Anode | |

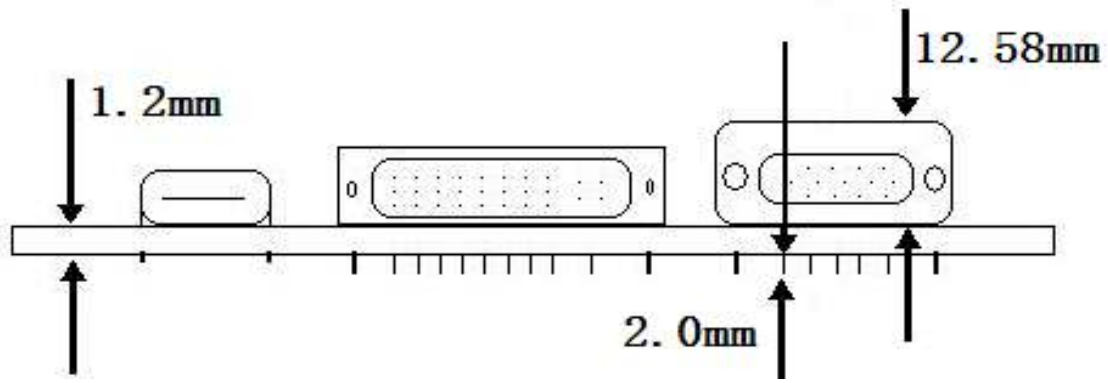
**I: input, O: output, P: Power**

### 6. Structure:

6.1. TFT LCD Panel:




128.8mm
5.5mm
76.1mm
14.1mm
20.0mm
32.3mm
38.4mm
120.2mm
128.8mm


1. 2mm
12. 58mm
2. 0mm

## 7. Product Label:

**HL080IA-01E C35-HX**

## 8. Packing Shipping

### 8.1. Packing

**TBD**

### 8.2. Shipping

Don’t hit and rain when transportation: Don’t storage with chemic goods and wet goods together.

## 9. JDLD70V02B Notes

9.1.

TFT have used by special instrument to adjust precision and aging, test before leave factory, no need adjust again.

9.2.

Please correctly connect power, video signal before you adjust, should be on/off power and video signal to check the image’s effect.

9.3.

Due to this product is electronic product, please notice prevent static.

9.4.

8.0”TFT-LCD Panel is a glasswork, place carefully ,broken for fear

9.5.

Don’t touch pushbutton’s pin feet when you adjust potentiometers, due to person have resistance, you will effect pushbutton’s function when touch it.

## 10. 8.0"TFT- LCD PANEL Judgment:

Aim: Make the panel standards to material purchasing, process inspecting and customer checking.

Ranges: apply to 8.0″TFT LCD modules

Determinant standard and method:

10.1.

Judgment standard and method:

10.1.1.

The method and determinant of inspecting the nick of panel of LCD:

Inspect vertically (or at 45°angle from left/right) under the light tube (the power is 20 W) in the distance of 30cm to the panel. If there is no nick, it determines “OK”, otherwise “NG”.

10.1.2.

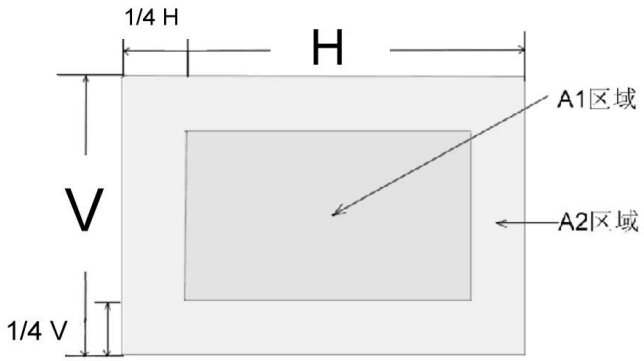
The method and determinative for black & white & color spots for the Panel of LCD:

1. Inspection Method:

Black spots： under the situation of “turn on the light”, set the MASK of black spot inspection near the black spot then compare the big and small by eyes.

White & Color spots: under situation of “turn on the light”, set the Mask of black spot inspection on the white spot (or color spot) then observe them by eyes if it can hide.

2. Division of LCD Panel：




Note:

A1 area: The center of the available area for the picture

A2 Area: The edge of the available area for the picture

10.2. Judgment:

| （mm） Spot Diameter | | Accept Range | |
|---|---|---|---|
| | | A1 area | A2 area |
| Black spot | d≤0.15 | Disregard | Disregard |
| | 0.15<d≤0.3 | 4 | 4 |
| | 0.3<d≤0.5 | 2 | 3 |
| | 0.5<d<0.8 | 0 | 2 |
| White spot or Color spot | d≤0.15 | Disregard | Disregard |
| | 0.15<d≤0.3 | 3 | 3 |
| | 0.3<d≤0.5 | 1 | 2 |
| | 0.5<d<0.8 | 0 | 1 |

Note：

1. Size: Average Diameter=（Max. Diameter + Min. Diameter）/2
2. Using information above as a standard in order to judge while the e spots are dense.
3. Black & White spot： To judge the obvious spots through the change of voltage by comparison.
4. Total quantity of Black & white & color spot: A1+A2≤4.