Product Specification

Monitor Solution Board

Model: JLS-D2513-01

1. General Description

JLS-D2513-01 is a multi-function display driver board combines 1 HDMI1.4 and 1 VGA input interface, supports 2 port LVDS output up to 186MHz, supports headphone input(output compliant) and 3 watts dual channel audio amplifier output. The driver board is integrated with backlight driver and can support up to 15 watts output(optional).

2. Features

In the following table you will find the detailed features

Power input	12V
HDMI input	HDMI 1.4
VGA input	VGA
LVDS output	2 port LVDS 186MHz Max
Audio output	3.5mm headphone & 3W speaker/
Keypad	Power/Menu/Right/Left/Exit/Down/Up/IR, 5 key
Other	I^2C

3. Interface Function Description

NO.	Description
CN1/CN2	Power input
CN4	VGA input/VGA
CN3	HDMI input/HDMI
CN7	LVDS output/LVDS
CN11	3W speaker output/3
CN8	Backlight control interface
CN9/CN10	Backlight output
CN13	I^2C interface/I^2C
CN6	Panel power interface
CN12	3.5mm headphone output/3.5mm
CN5	Keypad interface

4. General Precautions

- Keep the board away from strong electrostatic.
- Disconnect main power if power of panel is incorrect, otherwise you would destroyed the LCD module.
- Avoid dropping metal in the board while it is working.
- Do not push or pull the connector while the board is working.
- Do not disassemble the module.

5. Operation Requirements

- Relative humidity: ≤ 80%
- Storage temperature: -20 ~ +70℃
- Operation temperature: 0 ~ +50℃

6. Interface Descriptions

1. CN5: Keypad interface

Pin NO.	Pin Name	Description
1	POWER	Power key
2	LED_R	Red LED
3	LED_G	Green LED
4	GND	Ground
5	LEFT	Left key
6	RIGHT	Right key
7	AUTO	Exit/Auto key
8	MENU	Menu key
9	UP	Up key (optional)
10	DOWN	Down key (optional)

2. CN11: 3W speaker output

Pin NO.	Pin Name	Description
1	L-	Left channel output negative
2	L+	Left channel output positive
3	R+	Right channel output positive
4	R-	Right channel output negative

3. CN7: LVDS output

Pin NO.	Pin Name	Description
1	VCC	Panel Power Supply (Voltage 3.3V/5V/12V Optional)

2	VCC	Panel Power Supply (Voltage 3.3V/5V/12V Optional)
3	VCC	Panel Power Supply (Voltage 3.3V/5V/12V Optional)
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	TXE0-	Even Path LVDS Differential Data Signal Outpu0--
8	TXE0+	Even Path LVDS Differential Data Signal Output0+
9	TXE1-	Even Path LVDS Differential Data Signal Output1-
10	TXE1+	Even Path LVDS Differential Data Signal Output1+
11	TXE2-	Even Path LVDS Differential Data Signal Output2-
12	TXE2+	Even Path LVDS Differential Data Signal Output2+
13	GND	Ground
14	GND	Ground
15	TXEC-	Even Path LVDS Differential Clock Signal Output-
16	TXEC+	Even Path LVDS Differential Clock Signal Output+
17	TXE3-	Even Path LVDS Differential Data Signal Output3-
18	TXE3+	Even Path LVDS Differential Data Signal Output3+
19	TXO0-	Odd Path LVDS Differential Data Signal Output0-
20	TXO0+	Odd Path LVDS Differential Data Signal Output0+
21	TXO1-	Odd Path LVDS Differential Data Signal Output1-
22	TXO1+	Odd Path LVDS Differential Data Signal Output1+
23	TXO2-	Odd Path LVDS Differential Data Signal Output2-
24	TXO2+	Odd Path LVDS Differential Data Signal Output2+
25	GND	Ground
26	GND	Ground
27	TXEC-	Even Path LVDS Differential Clock Signal Output-
28	TXEC+	Even Path LVDS Differential Clock Signal Output+
29	TCO3-	Odd Path LVDS Differential Data Signal Output3-
30	TXO3+	Odd Path LVDS Differential Data Signal Output3+

4. CN13: I^2C interface

Pin NO.	Pin Name	Description
1	GND	Ground
2	SDA	I2C SDA
3	SCL	I2C SCL
4	5V	5V

5. CN9: Backlight output

Pin NO.	Pin Name	Description
1	LED-	LED Output Cathode
2	LED-	LED Output Cathode
3	LED+	LED Output Anode
4	LED+	LED Output Anode

6. CN10: Backlight output

Pin NO.	Pin Name	Description
1	LED-	LED Output Cathode
2	LED+	LED Output Anode

7. CN8: Backlight control interface

Pin NO.	Pin Name	Description
1	VCC	Backlight Power
2	VCC	Backlight Power
3	BLO	Backlight Enable
4	ADJ	Brightness Adjust
5	GND	Ground
6	GND	Ground

8. CN2: Power input

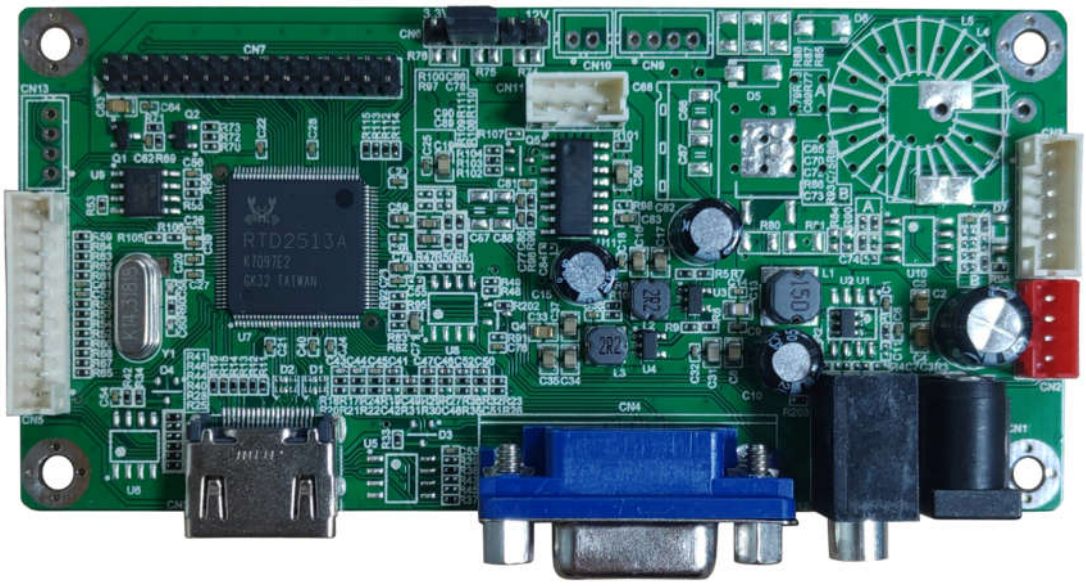
Pin NO.	Pin Name	Description
1	VCC	Power Input
2	VCC	Power Input
3	GND	Ground
4	GND	Ground

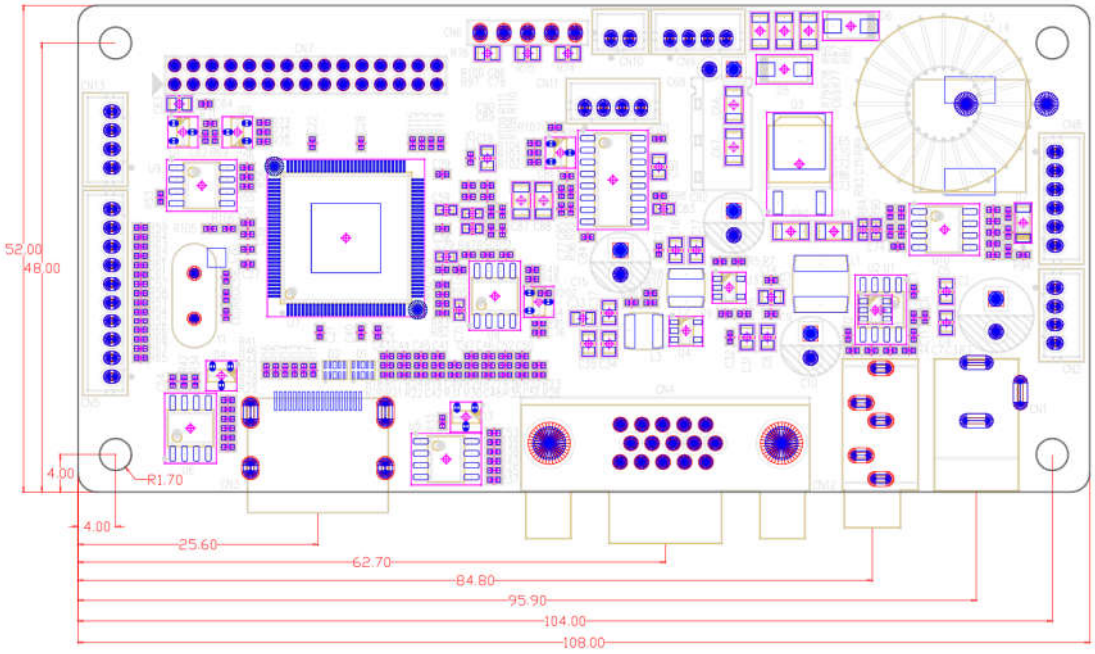
7. Structure and Dimension

PCB Mechanical Dimension

Unit：mm

Tolerance：±0.3mm

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4.00
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