
Product Specification

Part NO.: **LRX_H2LVDS555_V1.0**

Product Code: **A00000**

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PREPARED	CHECKED	APPROVED
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CONTENTS

1.General Description..... 3

2.Features.....3

3.Interface Function Description Diagram..... 4

4. Interface Definition.....5

5.Structural Dimension Diagram..... 10

6.Operation Requirements..... 10

7.General Precautions..... 11

8.Revision History11

1.General Description

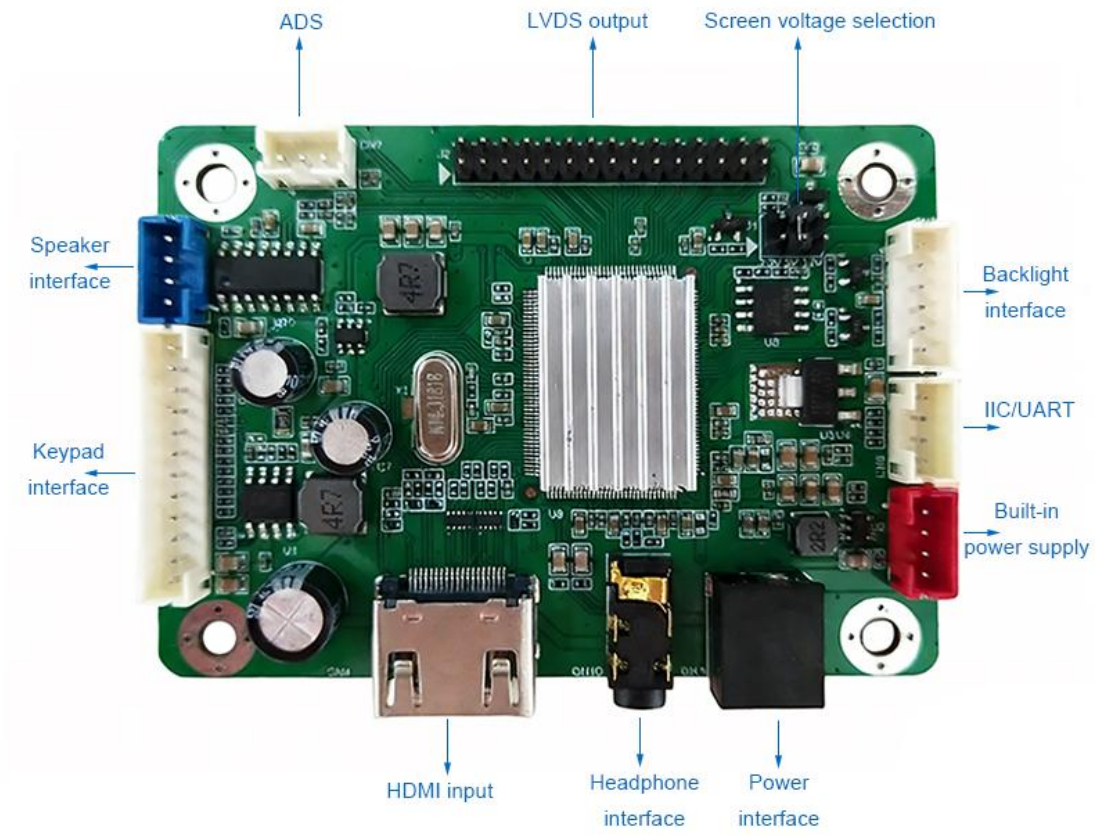
LRX_H2LVDS555_V1.0 is a multi-function display driver board combines 1 HDMI1.4 input interface, supports 2 port LVDS output up to 1920x1080@75Hz, supports headphone output and 3 watts dual channel audio amplifier output. It also supports I²C, UART and ADC if you need. This solution is widely used in driving unconventional panel such as 1920x720, 1920x540, 1920x360, 1280x480, etc.

2.Features

In the following table you will find the detailed features

Signal Input	1 HDMI input
Signal Output	2-port LVDS output
Power	12V input, standby power: <0.12W

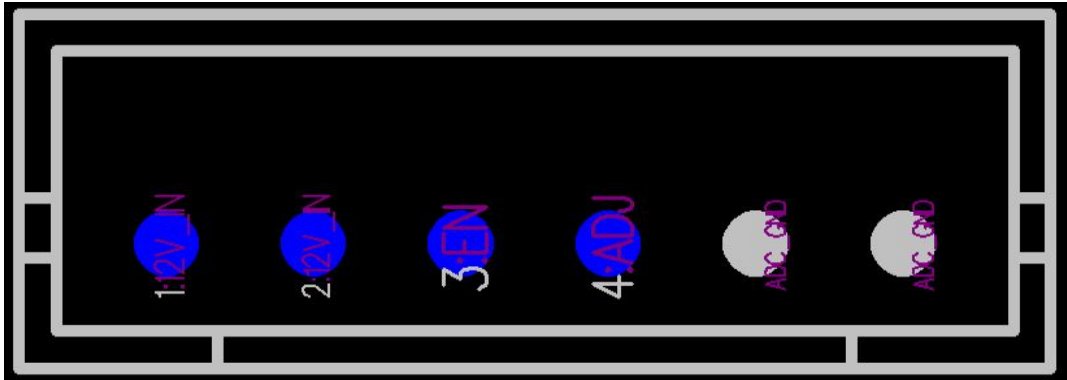
3.Interface Function Description Diagram



NO.	Description
CN1/CN2	Power input
CN4	HDMI input
J2	LVDS output
CN9	3W speaker output
CN3	Backlight control interface
CN6	I ² C/UART interface
J1	Panel power interface
CN10	3.5mm headphone output
CN4	Keypad interface
CN7	ADC interface

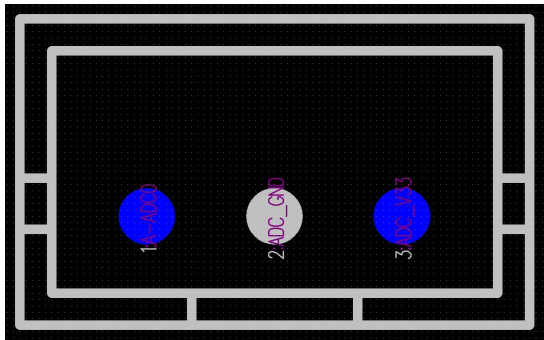
4. Interface Definition

CN3: Backlight Control Interface



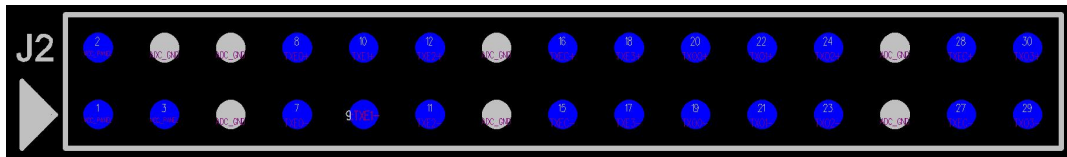
P/N	Symbol	Function
1	12V	12V DC Power Supply
2	12V	12V DC Power Supply
3	BLO	Backlight Enable(active high signal)
4	ADJ	Backlight Adjust
5	GND	Ground
6	GND	Ground

CN7: ADC/ADC



P/N	Symbol	Function
1	ADC	ADC
2	GND	GND
3	VCC	3.3V Power

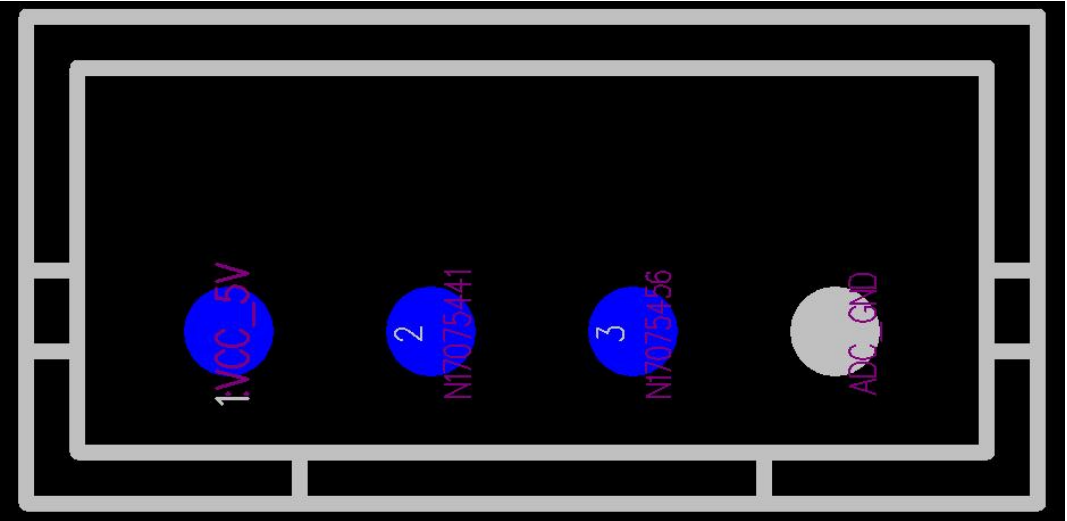
J2: LVDS output



Pin NO.	Pin Name	Description
1	VCC	Panel Power Supply (3.3V/5V/12V Optional)
2	VCC	Panel Power Supply (3.3V/5V/12V Optional)
3	VCC	Panel Power Supply (3.3V/5V/12V Optional)
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	TXE0-	Even Path LVDS Differential Data Signal Output0-
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+

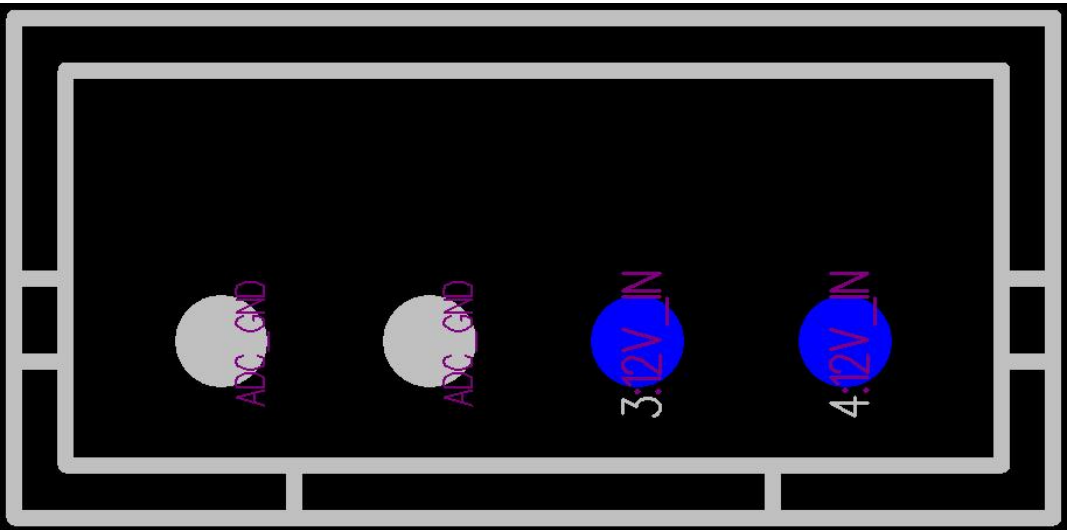
29	TCO3-	Odd Path LVDS Differential Data Signal Output3-
30	TXO3+	Odd Path LVDS Differential Data Signal Output3+

CN6: IIC/UART Interface



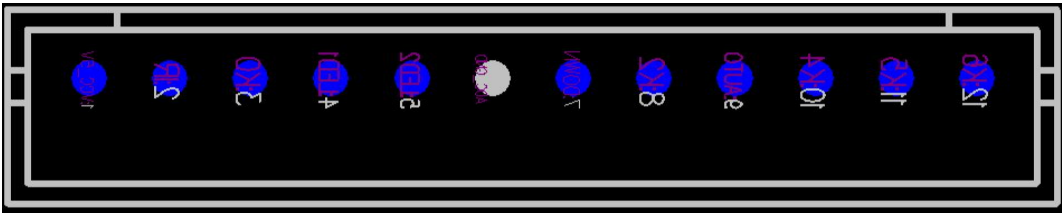
P/N	Symbol	Function
1	5V	5V Power
2	TXD	TXD
3	RXD	RXD
4	GND	Ground

CN2: Power input



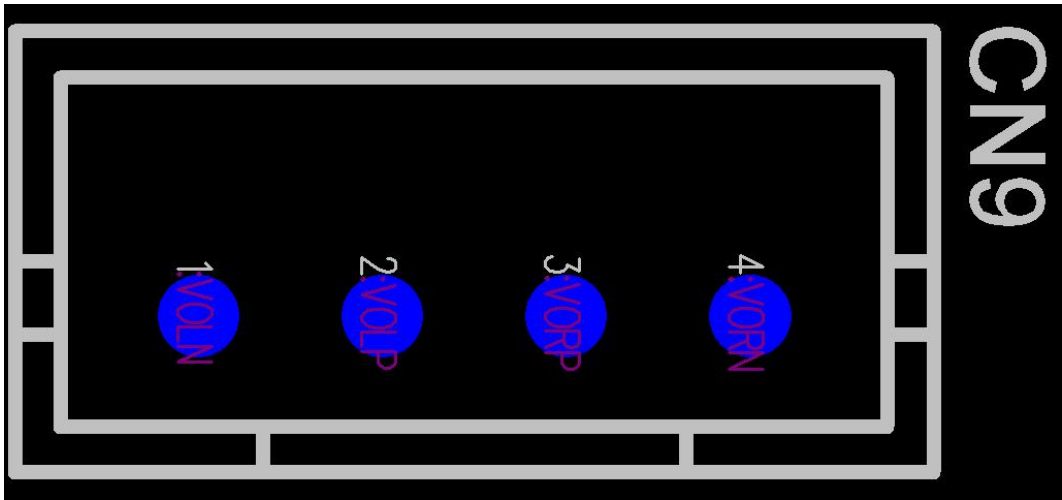
P/N	Symbol	Function
1	GND	Ground
2	GND	Ground
3	12V	12V Power input
4	12V	12V Power input

CN8: Keyboard Interface



P/N	Symbol	Function
1	5V	5V Power
2	IR	IR input
3	K0	Key0(Power)
4	LEDR	Red LED
5	LEDG	Green LED
6	GND	Ground
7	K1	Key1(Left)
8	K2	Key2(Right)
9	K3	Key3(Exit)
10	K4	Key4(Menu)
11	K5	Key5()
12	K6	Key6()

CN9: Speaker Output Interface



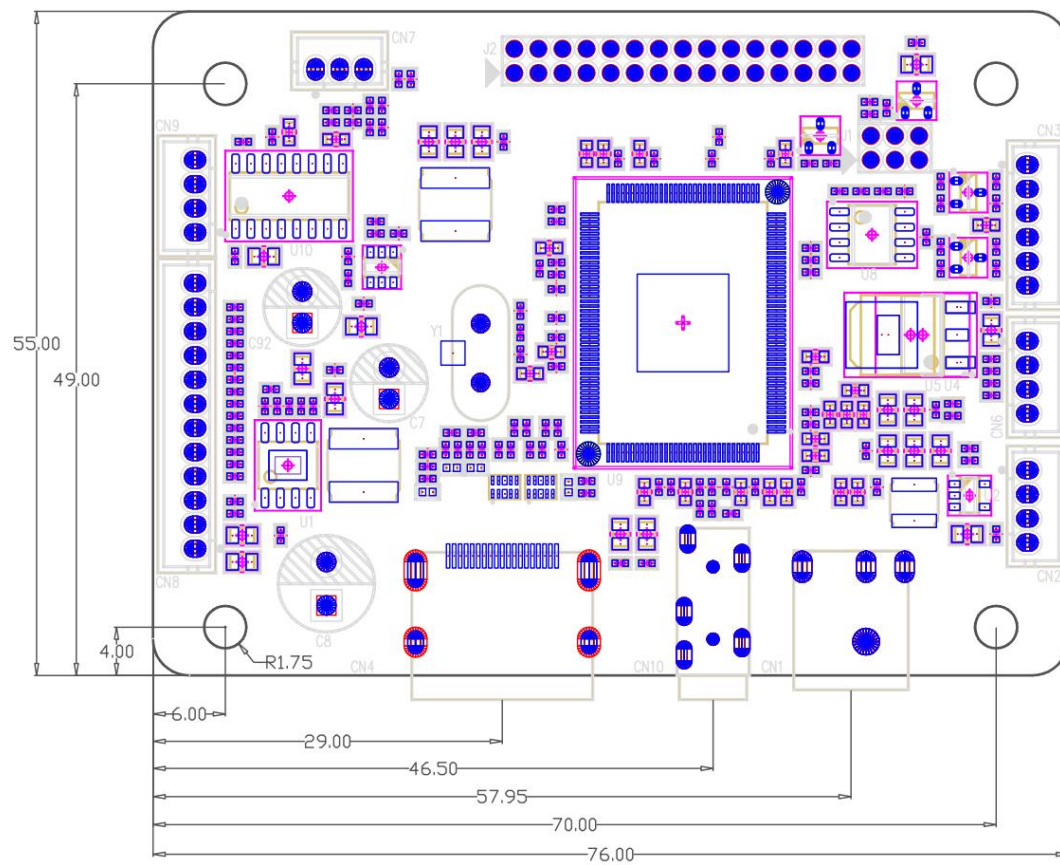
P/N	Symbol	Function
1	L-	negative output for left channel
2	L+	positive output for left channel
3	R+	positive output for right channel
4	R-	negative output for right channel

PCB Mechanical Dimension
Unit: mm
Tolerance: $\pm 0.3\text{mm}$

PCB Mechanical Dimension

Unit: mm

Tolerance: $\pm 0.3\text{mm}$



6.Operation Requirements

- Relative humidity: $\leq 80\%$
- Storage temperature: $0 \sim +40^{\circ}\text{C}$
- Operation temperature: $0 \sim +40^{\circ}\text{C}$

7.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.
- If the surface of the main board is dirty, clean it with soft (not wet) cloth.

8.Revision History

Rev.	Date	Note
V1.0	2023-08-08	