



# Product Specification

Part NO./产品型号: GX\_H2MIPI0506911\_TP\_V2.0

Product Code/产品编码: A00605

制定	审核	核准
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## 1.General Description/概述

GX\_H2MIPI0506911\_TP\_V2.0 is a high performance HDMI-to-MIPI video converter. It integrates an HDMI 1.4 receiver and a single-port MIPI CSI/DSI transmitter with MIPI D-PHY, and a USB capacitive touch, and a 3W dual channel amplifier(default NC).

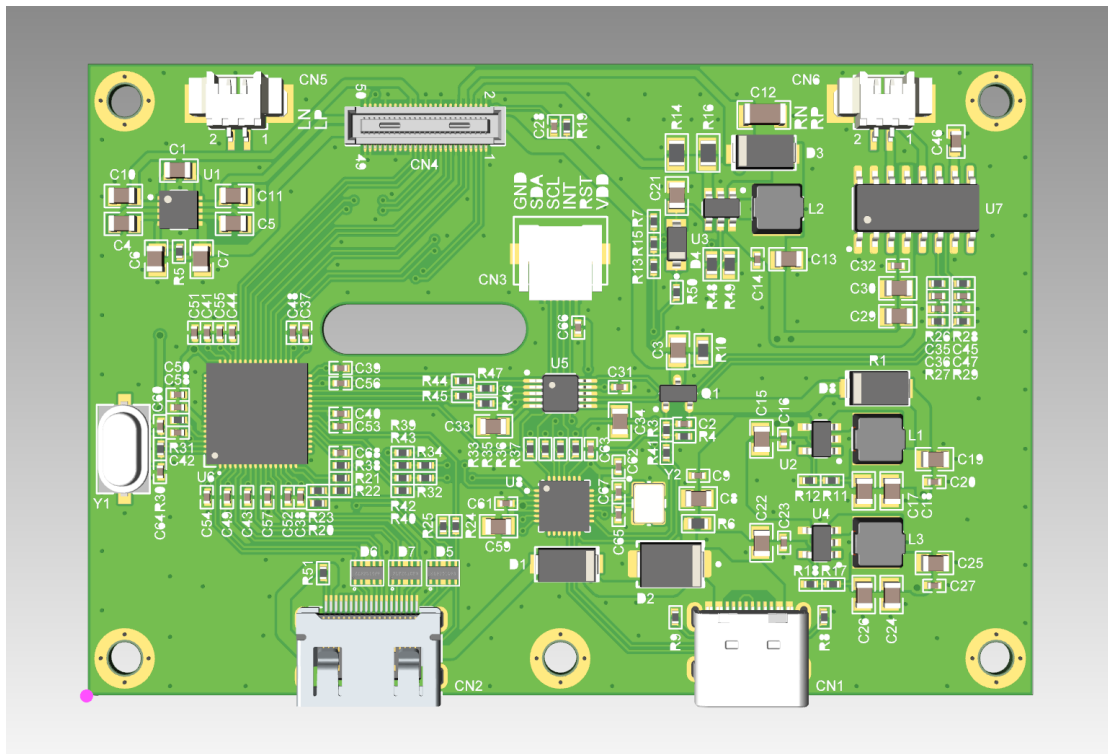
LRX\_H2MIPI30P\_TP\_V1.0 是一款高性能 HDMI 转 MIPI 视频转接板，集成一个 HDMI1.4 输入，MIPI CSI/DSI 输出，USB 电容触摸，3W 双通道音频功放（默认没有音频功放）。

## 2.Features/特性

Function/功能	Description/描述
Signal Input/信号输入	HDMI 1.4 (mini HDMI)
Signal Output/信号输出	4 lane MIPI CSI/DSI (1.5Gb/s/lane)
Power Supply/电源	5V DC, 待机时 0.1W, 单板工作时 0.7W (不接屏幕)
Backlight/背光	20mA Max/最大 20mA
Speaker	2x3W

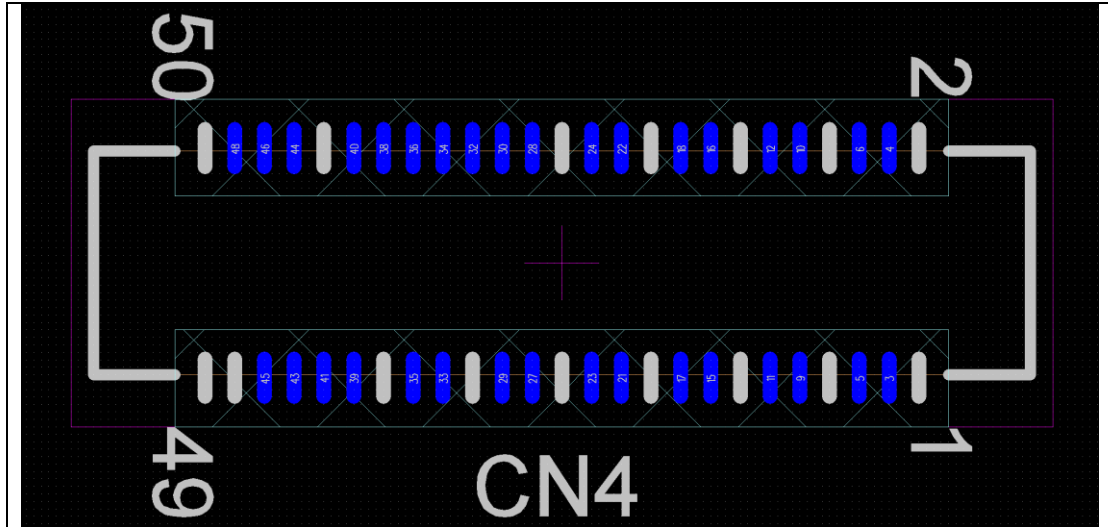
### 3.Interface Function/接口功能

Connector No./位号	Descriptions/描述
CN1	Power & Touch Input/Type-C 电源和触摸接口
CN2	mini HDMI Input/mini HDMI 输入
CN4	MIPI output/MIPI 输出
CN3	Touch Interface/触摸接口
CN5/CN6	Speaker Interface/喇叭接口



## 4.Interface Descriptions/接口定义

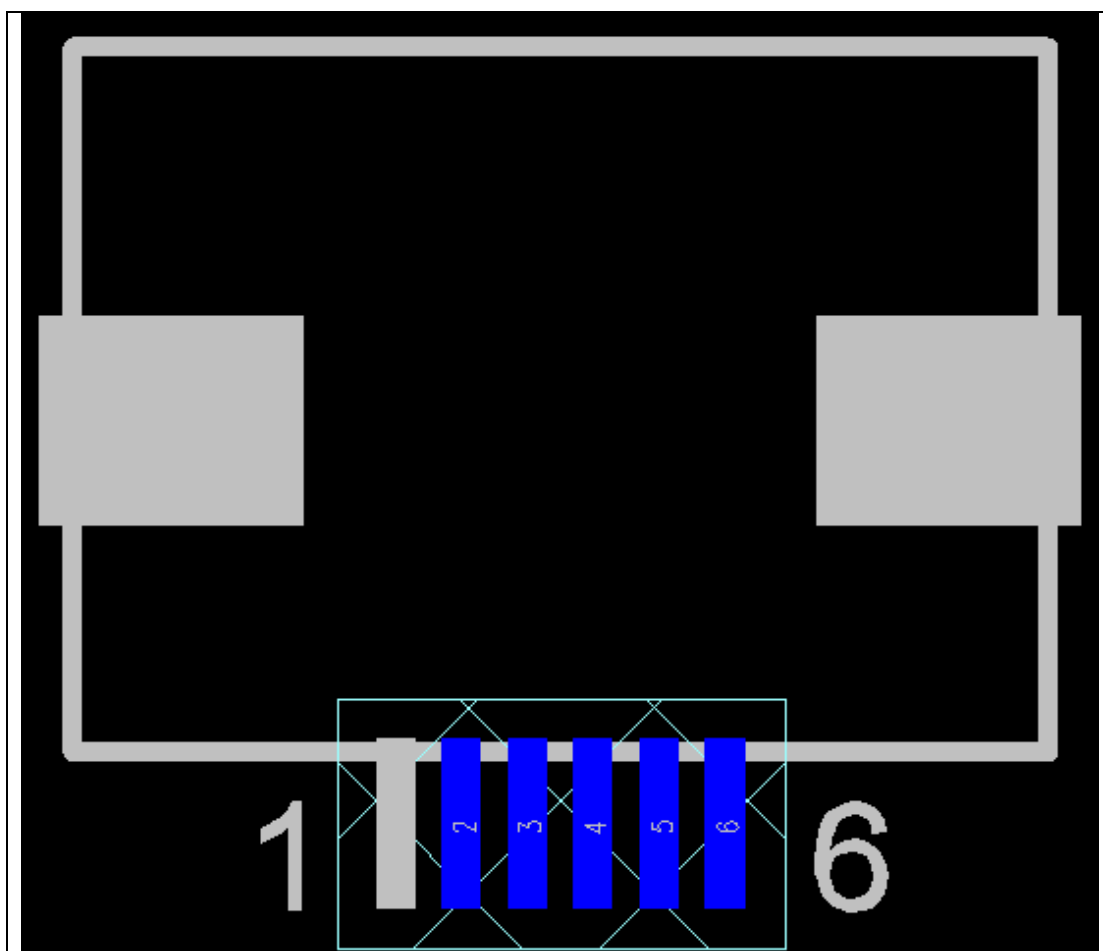
### 4.1 CN4: MIPI Output (DF40C-50DS-0.4V)



Pin NO./编号	Symbol/定义	Description/功能描述
1-2	GND	Ground
3	MIPI_D2P	MIPI Data Lane 2 Positive Output Pin
4	LEDK	Backlight Cathode
5	MIPI_D2N	MIPI Data Lane 2 Negative Output Pin
6	LEDK	Backlight Cathode
7-8	GND	Ground
9	MIPI_D1P	MIPI Data Lane 1 Positive Output Pin
10	LEDA	Backlight Anode
11	MIPI_D1N	MIPI Data Lane 1 Negative Output Pin
12	LEDA	Backlight Anode
13-14	GND	Ground
15	MIPI_CLKP	MIPI Clock Lane Positive Output Pin
16	NC	NC
17	MIPI_CLKN	MIPI Clock Lane Negative Output Pin
18	NC	NC
19-20	GND	Ground
21	MIPI_D0P	MIPI Data Lane 0 Positive Output Pin
22	VDD	Power Supply For System (3.3V)

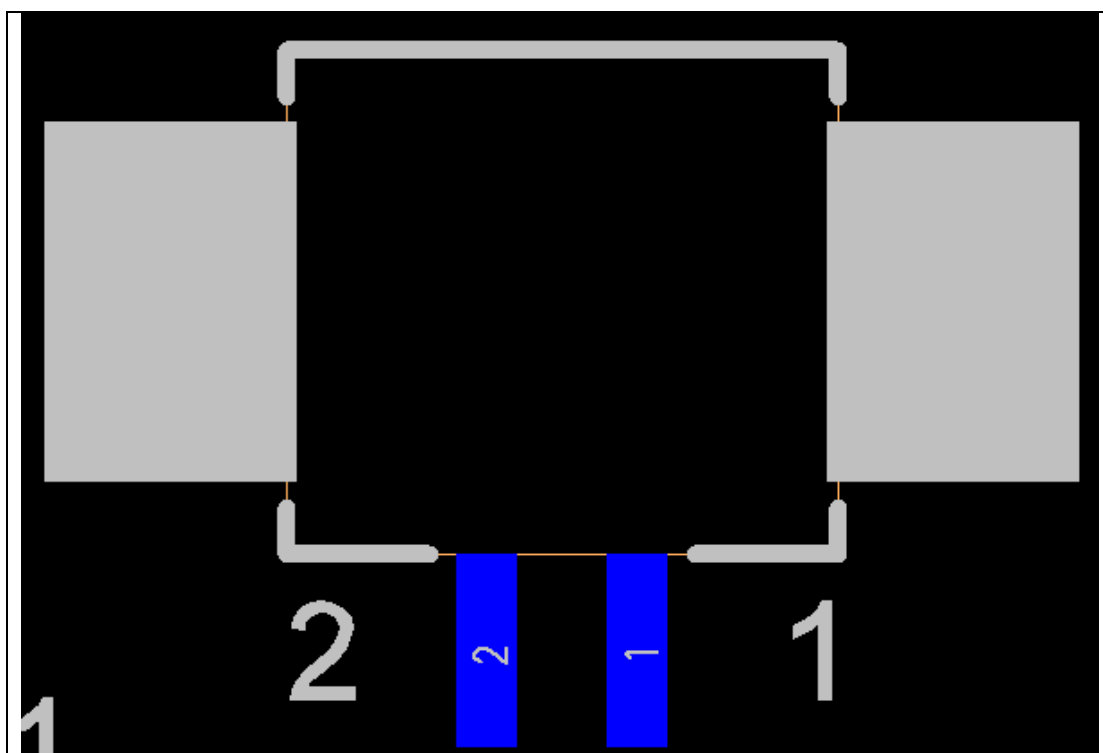
23	MIPI_D0N	MIPI Data Lane 0 Negative Output Pin
24	VDD	Power Supply For System (3.3V)
25-26	GND	Ground
27	MIPI_D3P	MIPI Data Lane 3 Positive Output Pin
28	NC	NC
29	MIPI_D3N	MIPI Data Lane 3 Negative Output Pin
30	VSN	Analog Supply Negative Voltage
31	GND	Ground
32	VSN	Analog Supply Negative Voltage
33-35	NC	NC
36	VSP	Analog Supply Positive Voltage
37	GND	Ground
38	VSP	Analog Supply Positive Voltage
39-41	NC	NC
42	GND	Ground
43-46	NC	NC
47	GND	Ground
48	Reset	System Reset Pin
49-50	GND	Ground

## 4.2 CN3: Touch Interface (0.5mm)



Pin NO./编号	Symbol/定义	Description/功能描述
1	GND	Ground
2	SDA	SDA
3	SCL	SCL
4	INT	INT
5	RST	RST
6	VDD	VDD(3.3V)

#### 4.3 CN5/CN6: Speaker Interface (1.25mm)



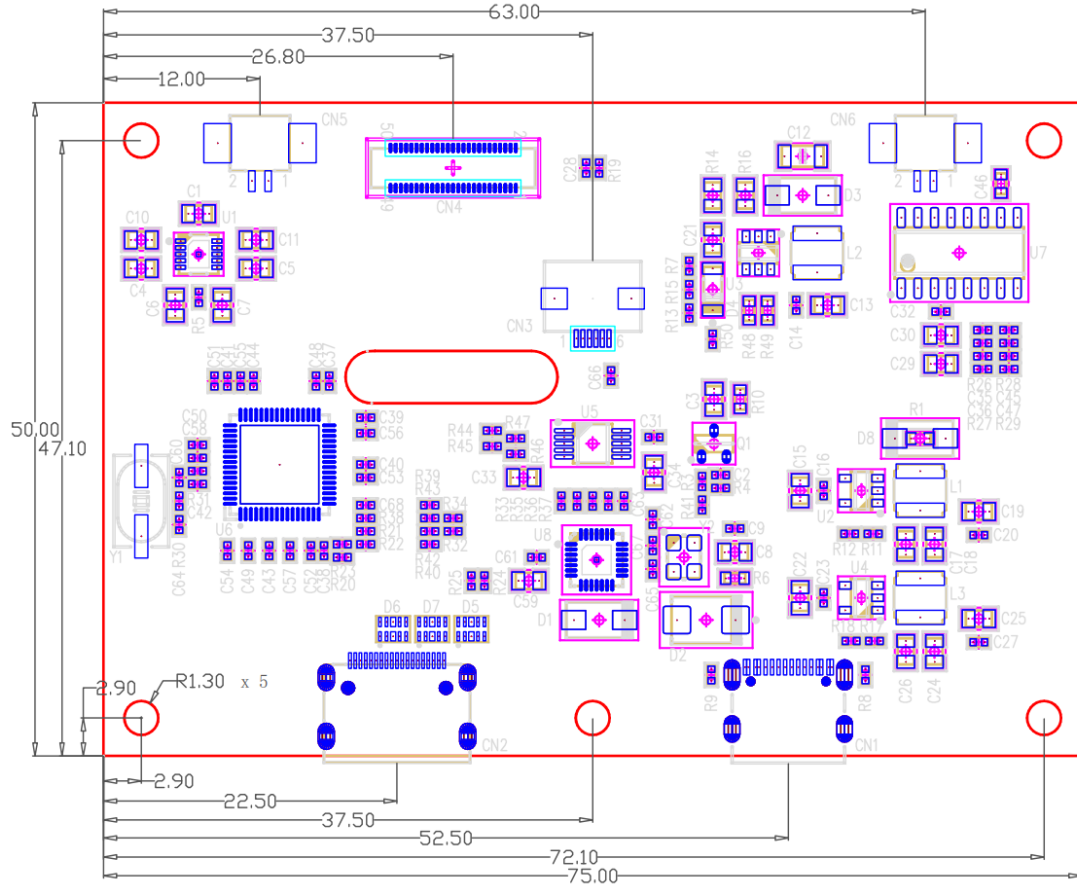
Pin NO./编号	Symbol/定义	Description/功能描述
1	LP/RP	LP/RP
2	LN/RN	LN/RN



## 5. Mechanical Specifications/结构尺寸

Controlling Dimension: Millimeter(mm)

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



## 6. Operating & Storage Range/工作存储条件

- Relative humidity:  $\leq 80\%$
- Temperature Storage Range:  $-20^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ; 相对湿度 5-85%
- Temperature Operating Range:  $0^{\circ}\text{C} \sim +70^{\circ}\text{C}$ ; 相对湿度 20-80%

## 7. Notes/注意事项

- 保持电路板远离强静电。
- 注意检测连接线的方向及屏电压是否正确后再通电，否则会损坏 LCD 模块。
- 在电路板工作时，避免金属掉落在电路板中。
- 请勿在电路板工作时推拉连接器。
- 请勿拆解模块。
- 如果主板表面很脏，请用软布（非湿布）清洁。

## 8.Revision History/修改记录

Revision No.	Date	Description
V2.0	2024-04-10	Initial Release