Product Specifications

Part NO.: **XY_H2EDP_UHD95T_V3.1**

Product Code: **A00401**

Approved	Checked	Approved
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CONTENTS

1.General Description.

XY_H2EDP_UHD95_V3.1 is a multi-function display driver board combines 2 HDMI2.0 and 1 DP1.2 input interface, supports 4-lane eDP HBR2 output up to 4096x2160@60Hz, supports headphone output and 3 watts dual channel audio amplifier output.

2.Features.

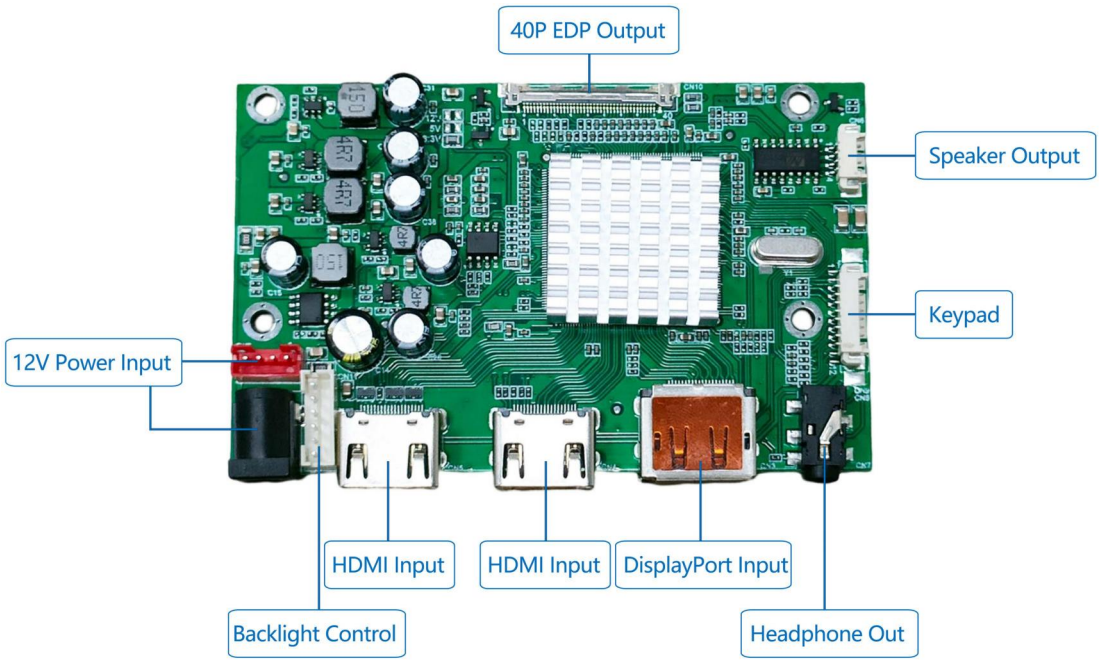
Function	Description
Power input	12V Input
Signal Input	2 HDMI Input
Signal Input	1 DP Input
Signal Output	1 eDP Input
Audio output	3.5mm headphone & 3W speaker
Keypad	Power/Menu/Right/Left/Exit, 5 key
Built-in LED Driver	up to 20W

3.Interface Function.

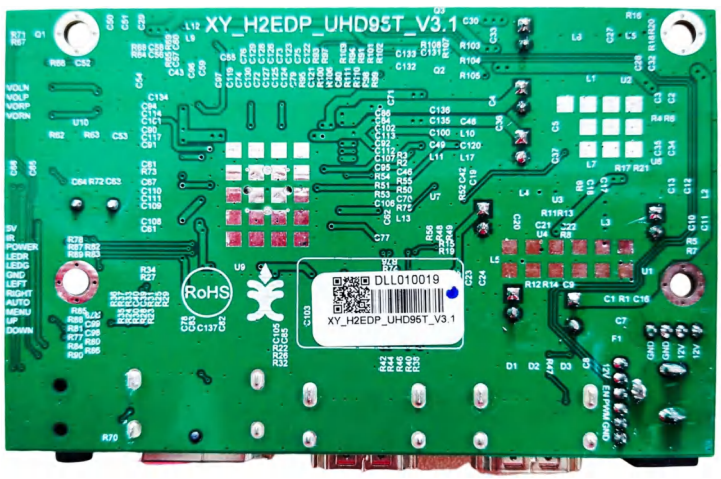
Connector No.	Descriptions
CN1	12V Power input
CN2	Built_in 12V Power_in
CN3	DisplayPort input
CN4/CN5	HDMI input
CN6	Speaker Output（2*3W）
CN7	Headphone output
CN9	Keypad
CN10	40P EDP output

CN11	Backlight control

Interface Description（Front）

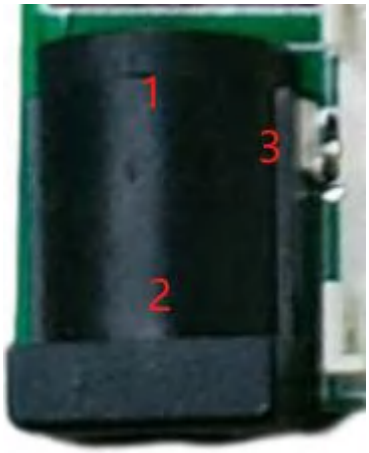


Physical picture（Back）



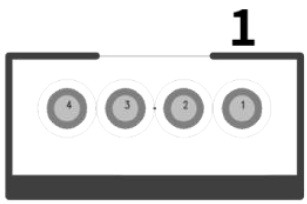
4.Interface Descriptions.

4.1 CN1：12V Power Input（DC-005-5.5*2.1）



Pin NO.	Pin Name	Description
1	VCC	12V Power Input
2	GND	Ground
3	GND	Ground

4.2 CN2：Built_in Power_in（PH2.0-4Pin）



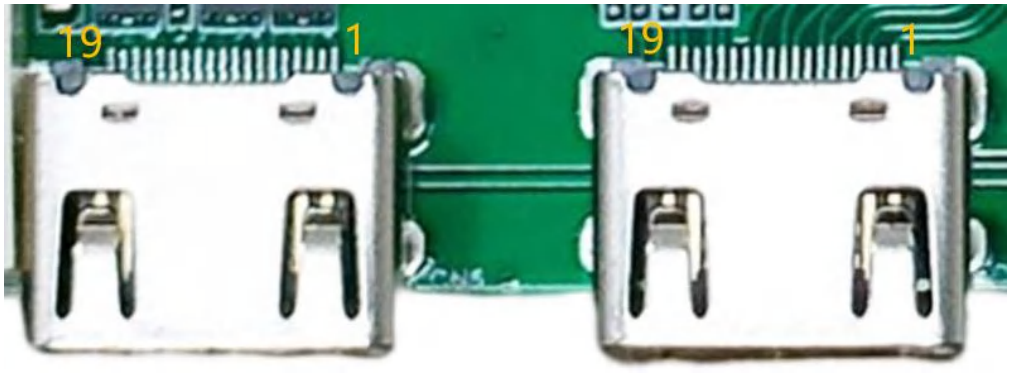
Pin NO.	Pin Name	Description
1	GND	Ground
2	GND	Ground
3	VCC	12V Power Input
4	VCC	12V Power Input

4.3 CN3：DisplayPort Input（HYC16-DP20-178）

Pin NO.	Pin Name	Description
1	ML_LANE3N	
2	GND	
3	ML_LANE3P	
4	ML_LANE2N	
5	GND	
6	ML_LANE2P	
7	ML_LANE1N	
8	GND	
9	ML_LANE1P	
10	ML_LANE0N	
11	GND	
12	ML_LANE0P	
13	GND	
14	GND	
15	AUX_CHP	
16	GND	
17	AUX_CHN	
18	HOT_PLUG	
19	RETURN	

20	DP_PWR	

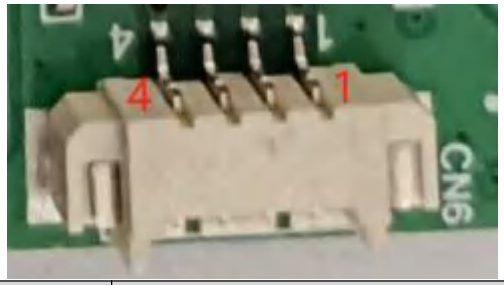
4.4 CN4/CN5：HDMI Input（HYC10-HDMIA19-600B）



Pin NO.	Pin Name	Description
1	DATA2+	HDMI Differential Signal Data Input 2+
2	DATA2 SHIELD	HDMI Differential Signal Data Input 2 Shield
3	DATA2-	HDMI Differential Signal Data Input 2-
4	DATA1+	HDMI Differential Signal Data Input 1+
5	DATA1 SHIELD	HDMI Differential Signal Data Input 1 Shield
6	DATA1-	HDMI Differential Signal Data Input 1-
7	DATA0+	HDMI Differential Signal Data Input 0+
8	DATA0 SHIELD	HDMI Differential Signal Data Input 0 Shield
9	DATA0-	HDMI Differential Signal Data Input 0-
10	CLK+	HDMI Differential Signal Clock+
11	CLK SHIELD	HDMI Differential Signal Clock Shield
12	CLK-	HDMI Differential Signal Clock-
13	CEC	CEC Control
14	NC	NO Connect
15	SCL	DDC Clock Line
16	SDA	DDC Data Line
17	GND	Ground
18	+5V POWER	+5V Power Line

19	HOT PLUG	Hot Plug Detect

4.5 CN6：2*3W Speaker Output（1.25-4PWB）



Pin NO.	Pin Name	Description
1	Lout_N	Speaker Left Channel -
2	Lout_P	Speaker Left Channel +
3	Rout_P	Speaker Right Channel +
4	Rout_N	Speaker Right Channel -

4.6 CN7：Headphone output（PJ-327F）

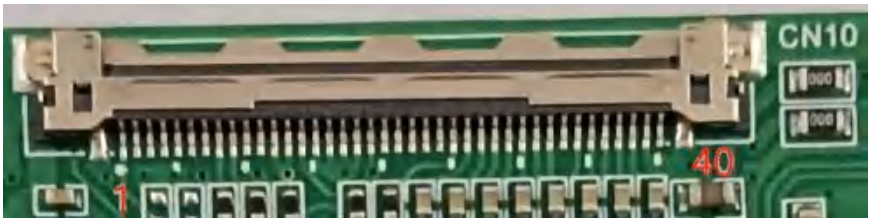
Pin NO.	Pin Name	Description
1	GND	Ground
2	AUDIO_HOUT_L	AUDIO_HOUT_L
3	AUDIO_HOUT_R	AUDIO_HOUT_R

4	GND	Ground
5	AUDIO_HDET	AUDIO_HDET

4.7 CN9：Keypad（1.25-8PWB）

Pin NO.	Pin Name	Description
1	POWER	Power Key
2	LEDR	LED Red
3	LEDG	LED Green
4	GND	Ground
5	LEFT	LEFT Key
6	RIGHT	RIGHT Key
7	AUTO	Signal Source Switching
8	MENU	Menu Key

4.8 CN10：40P EDP Output（ALC04-S40EIA-00）

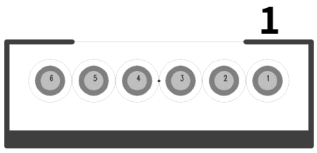


Pin NO.	Pin Name	Description
1	COLOR_E	COLOR_E
2	BL_PWR	Backlight Power
3	BL_PWR	Backlight Power

4	BL_PWR	Backlight Power
5	BL_PWR	Backlight Power
6	NC	NO Connect
7	NC	NO Connect
8	BL_PWM	Backlight Adjust PWM
9	BL_ENABLE	Backlight on/off
10	BL_GND	Backlight Ground
11	BL_GND	Backlight Ground
12	BL_GND	Backlight Ground
13	BL_GND	Backlight Ground
14	HPD	Hot Plug Detect
15	LCD_GND	LCD logic and driver ground
16	LCD_GND	LCD logic and driver ground
17	LCD_GND	LCD logic and driver ground
18	LCD_GND	LCD logic and driver ground
19	LCD_BIST	LCD_BIST
20	LCD_VCC	LCD logic and driver power(3.3V)
21	LCD_VCC	LCD logic and driver power(3.3V)
22	LCD_VCC	LCD logic and driver power(3.3V)
23	LCD_VCC	LCD logic and driver power(3.3V)
24	GND	Ground
25	AUX_CH_N	Complement Signal Auxiliary Channel
26	AUX_CH_P	True Signal Auxiliary Channel
27	GND	Ground
28	Lane0_P	Display Port Lane 0+ Output
29	Lane0_N	Display Port Lane 0- Output
30	GND	Ground
31	Lane1_P	Display Port Lane 1+ Output
32	Lane1_N	Display Port Lane 1- Output
33	GND	Ground
34	Lane2_P	Display Port Lane 2+ Output
35	Lane2_N	Display Port Lane 2- Output
36	GND	Ground

37	Lane3_P	Display Port Lane 3+ Output
38	Lane3_N	Display Port Lane 3- Output
39	GND	Ground
40	NC	NO Connect

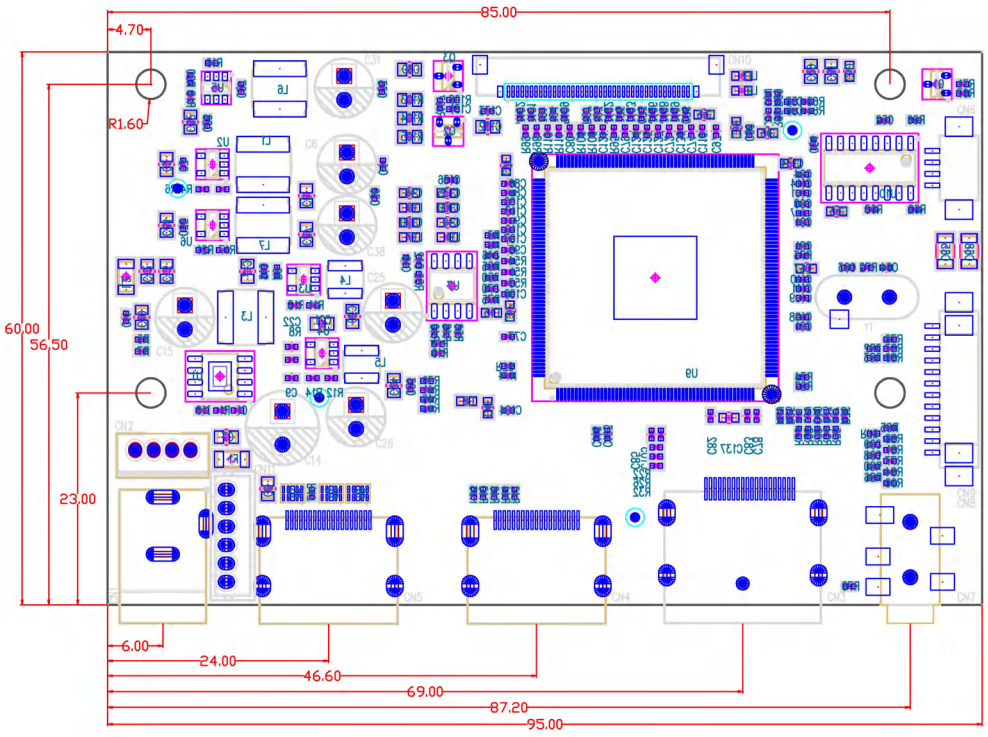
4.9 CN11：Backlight Control Interface（PH2.0-6PIN）



Pin NO.	Pin Name	Description
1	VCC	12V DC Power Supply
2	VCC	12V DC Power Supply
3	EN	Backlight Enable
4	PWM	Backlight Brightness Adjust
5	GND	Ground
6	GND	Ground

5.Mechanical Specifications.

Controlling Dimension: Millimeter(mm)
Tolerance： ±0.3mm



6.Operating & Storage Range.

- Relative humidity：⩽ 80%
- Temperature Storage Range：0℃~40℃
- Temperature Operating Range：0℃~40℃

7.Notes.

- Keep the board away from strong electrostatic.
- Pay attention to the supply voltage volt of the screen before power on.

  The supply voltage of the screen is optional.

- 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.

Revision No.	Date	Description
V1.0	2019-08-19	
V2.0	2019-12-10	
V3.0	2021-05-22	
V3.1	2022-03-23	
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