Product Specification

MODEL NO.:JFC4K9UXB2B

Product version: V0

Customer: Common Model

APPROVED BY SIGNATURE

Note

1. Be aware of product version.
2. Please contact with JFC when you need any parameters unavailable in this manual

Approved By	Checked By	Prepared By
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Product Description：

JFC4K9UXB2B.V0 is a drive solution ,which can support the signal input & output of 4K X 2K

（ QFHD/3840x2160@60HZ ）LCD display panel .It can support Single/Dual/Four Channels ， V-By-One 60HZ single Channel panel（120HZ Dual Channels need use with *JFC6T12V7B.V0* convert board to drive）.

Support signal resolution up to 4096 x 2160@60HZ。

✧ Video support : (HDMI of DP is 2.0 terminal,Up3840x2160@60HZ signal input ， VGA input can u to UXGA@75Hz, Part terminal can compatible with **MHL2.0**)

1.Display Port (DP) signal input **X 1**;

2.HDMI signal input **X 3**;

3.VGA signal input **X 1**;

✧ Audio support ：PC audio input **X 1**； HDMI / DP audio input

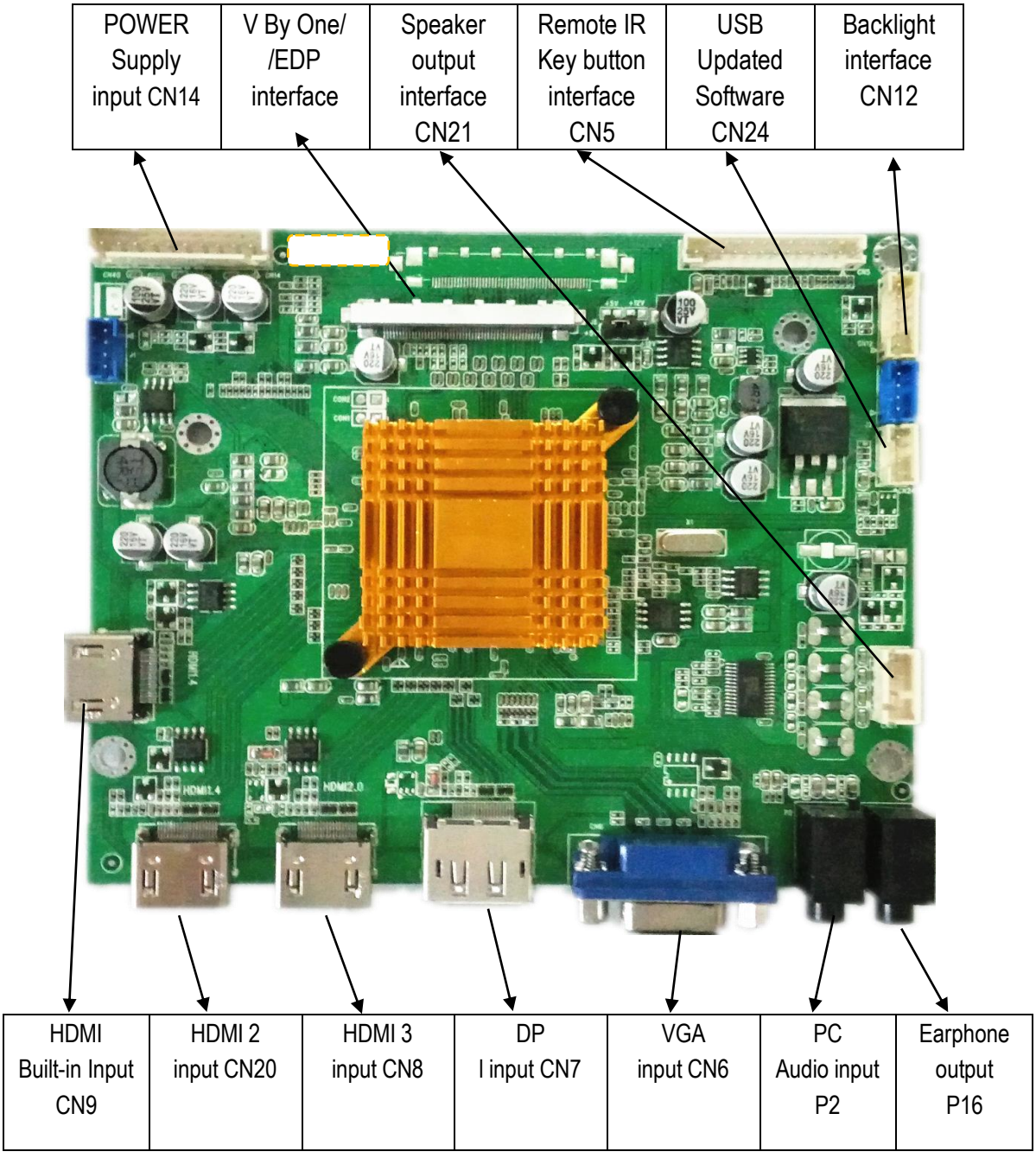
Match with digital power amplifier ， Speaker power output: (8Ωx10W) **X 2**

✧ Display model： Support any 4 sources input for **PIP/POP** window

Function Description：

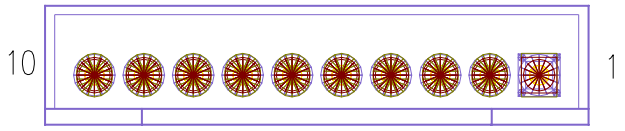
OSD Language	Chinese, English etc. (Option)		
Panel	Category	LCD/LED	
	Interface	v-by-one 60HZ	
	Resolution	Up to3840x2160@60HZ	
Input source	DisplayPort(DP)	Up to3840x2160@60Hz	
	HDMI (1.4)	Up to3840x2160@30Hz	
	HDMI (2.0)	Up to 3840x2160@60Hz	
	VGA	UP to 1920x1200@75Hz	
Audio input	PC-RGB	Earphone interface input 0.2 – 2.0V RMS	
Terminals	PC/RGB Video input	1* D-SUB 15Pin terminal（Blue）	
	PC/RGB Audio input	1*Earphone interface （Black）	
	HDMI1、HDMI2、HDMI3	3* HDMI terminals	
	DisplayPort (DP)	1*DP interface	
	Earphone output	1*Earphone interface （Black）	
Power supply	Working Voltage	DC +12V ； +5V ； +5Vstb； (+/- 0.2V)	
	VLCD	DC 5V or 12V (Option)	
	Power supply mode	Support lower power consumption mode； Standby mode	
	Standby	≤0.5W (Actual Standby power consumption related with the power supply)	
Dressing filter	3D		
Dynamic compensation	3D		
Reducing noise	Support		
Key button function	Power on/off、Menu、Volume +、Volume -、 Up↑、Down↓、Input channel select、		
Others	Support multi-screen PIP/POP mode display, it can be up to support 4 screen with 4 lanes signal at a time.		

View Drawing:

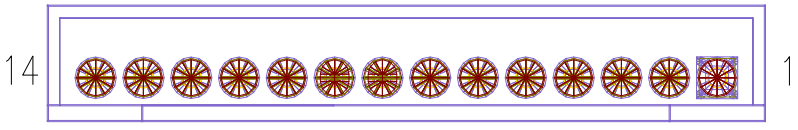


Interface definition:

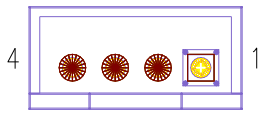
CN14 (10 pin /2.54) Power supply input		
Pin	Definition	Description
1	12V	12V Power supply (+/- 0.2V)
2	12V	12V Power Supply (+/- 0.2V)
3	GND	GND
4	GND	GND
5	5V	5V power supply (+/- 0.2V)
6	5V	5V Power supply (+/- 0.2V)
7	5VSTB	5V Standby power supply (+/- 0.2V)
8	GND	GND
9	GND	GND
10	ON/OFF	ON/Off control



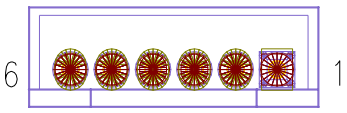
CN5 (13pin /2.0)： Remote key button input		
Pin	Definition	Description
13	5V	Power supply +5V
12	IR	IR reception interface
11	GND	GND
10	K0	Key button interface 0
9	LED-Red	Red indicating light
8	LED-Green	Green indicating light
7	GND	GND
6	K1	MENU
5	K2	UP
4	K3	DOWN
3	K4	VOL+
2	K5	VOL-
1	K6	INPUT



CN21 (4pin /2.5)： Speaker output interface		
Pin	Definition	Description
1	SR+	AMP_R Channel output +
2	SR-	AMP_R Channel output -
3	SL-	AMP_L Channel output -
4	SL+	AMP_L Channel output +



CN12 (6 pin /2.0)： High voltage input interface		
Pin	Definition	Description
1	GND	GND
2	GND	地
3	ADJ	Brightness adjust
4	ON	Switch control （High level available）
5	+12V	12V power supply output
6	+12V	12V power supply output



J2 (4 pin /2.0)： DEBUG interface (Blue)		
Pin	Definition	Description
1	5Vs	5V Power supply
2	GND	GND
3	RX1	Receiving data
4	TX1	Accepting data

CN24 (4 pin /2.0)： Bulit-in USB interface (For updating)		
Pin	Definition	Description
1	5vS	5V power supply
2	D-	Data-
3	D+	Data+
4	GND	GND

J6 (51pin /2.0)： V BY ONE interface		
Pin	Definition	Description
1	VLCD	Power supply
2	VLCD	Power supply
3	VLCD	Power supply
4	VLCD	Power supply
5	VLCD	Power supply
6	VLCD	Power supply
7	VLCD	Power supply
8	VLCD	Power supply
9	NC	No connect
10	GND	GND
11	GND	GND
12	NC	No connect
13	NC	No connect
14	NC	No connect
15	G-SY	3D glasses Synchronize
16	LRSY	Left&Right Synchronize
17	3DEN	3D Switch
18	SCL	I2C Interface Time Colck
19	SDA	I2C Interface data
20	NC	No connect
21	LMOD	BIT Select
22	LD-E	DIM Select
23	AUX-	eDP function
24	AUX+	eDP function
25	HTODN	Hot plug
26	LOCKN	LOCK Detection
27	GND	GND
28	OP	0 Data+
29	ON	0 Data-
30	GND	GND
31	1P	1 Data+
32	1N	1 Data-
33	GND	GND
34	2P	2 Data+
35	2N	2 Data-
36	GND	GND
37	3P	3 Data+

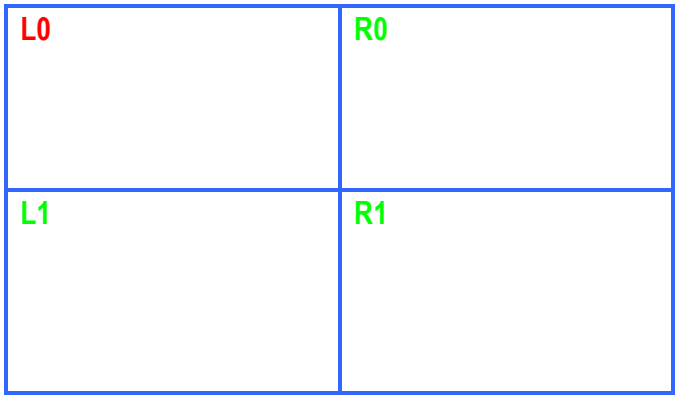
38	3N	3 Data-
39	GND	GND
40	4P	4 Data+
41	4N	4 Data-
42	GND	GND
43	5P	5 Data+
44	5N	5 Data-
45	GND	GND
46	6P	6 Data+
47	6N	6 Data-
48	GND	GND
49	7P	7 Data+
50	7N	7 Data-
51	GND	GND

Tips for User.

1. Relative humidity ≤ 80%
2. Storage temperature: -10℃ ~ +60℃; Operating temperature：**0**℃ ~ +**40**℃
3. Storage temperature: -10℃ ~ +60℃; Operating temperature：0℃ ~ +40℃
4. Anti-static treatment required during assembling and transporting.
5. No distortion &Press of the board when assembling, it can be bottom installed or side installed.
6. All terminal hole is not too small, specially for HDMI terminal. In case that the terminal be pressed by board deformation when installing
7. Do not use the screws on the RGB socket to secure it to your structural bezel
8. It will affect the performance and image quality if the connecting cable too long for this board and other board
9. This board and package have RoHS logo,which is accord with the RoHs standard

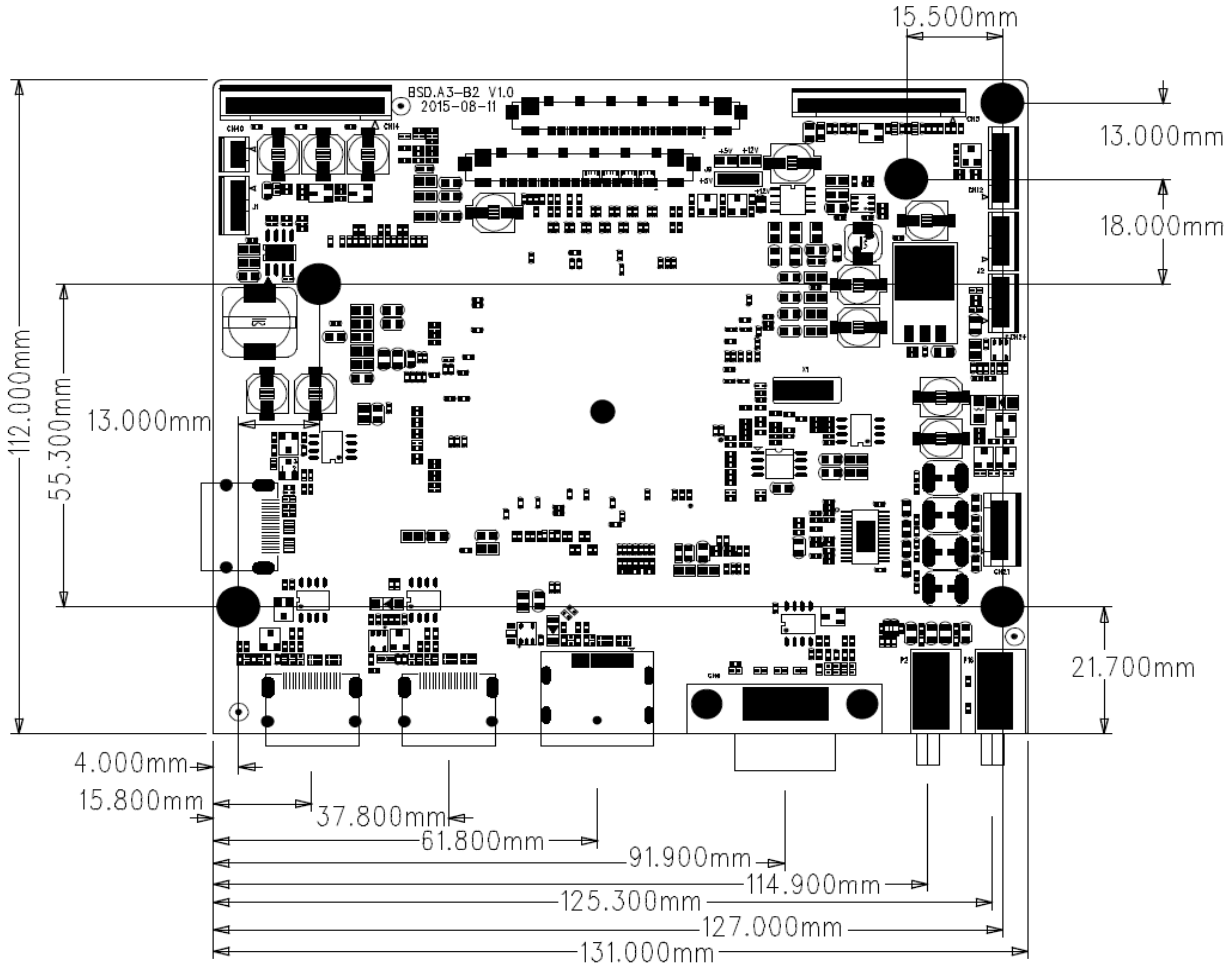
POP/PIP Description：

1.Support four different window screens(L0/L1/R0/R1) in one panel. each screen bandwidth up to 300M and
(Single window can be up to 3840*2160@30HZ)
2 .It can be converted to any 6 lanes signal input(（DV1\HDMI\DP\VGA)of four different windows
3. It can be reversed 90/180/270 degree independently display of the four windows
4. It need two windows to display if the window crosses the neutral position,
5. It can choose to close the window. but **L0** window is can't be closed



PCB Construction Drawing

- PCB Thickness + the highest of components= 15.0mm
- PCB Length = 186.0mm
- PCB Width =137.0mm
- **Screw hole** dimension: Hole diameter 3.5mm



Appendix (Schematic diagram for key & Remote)

