

APPROVAL SHEET

Industrial Grade

Model number: JZ-VH68U V1.0



JZ_VH68U V1.0

Basic : 1 VGA / HDMI

Maximum support resolution : 1920x1200

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1 Version History

Revision No.	Revision Date	Revision	Description	Writer
1	Jan. 22	1.0	工业规格	hu

2. Product Overview

Thank you for purchasing our driver board product. Before connecting to the LCD screen, please confirm that all accessories are compatible. Pay special attention to the specifications of the LVDS cable for driving the screen.

This driver board is mainly used to support TFT LCD screens. The driver board is equipped with 1 VGA port and 1 HDMI port, and supports LVDS output. The main board uses an MTK signal processing chip with powerful processing capabilities, which can support various standard and non - standard signals. High - specification components are used, ensuring good performance.

Operating temperature range: -20 to 60° C.

Optional automatic light - sensing control.

Maximum supported resolution: 1920x1200.

Supports remote control function.

Basic resolutions are all supported up to 85Hz (if the LCD screen can work at 85Hz).

The power amplifier can support up to 2x10W.

3 Product Features

Display Output	Maximum Resolution:	Max: 1920x1200				
	Output Interface:	Single/Dual/ LVDS				
Supported Signals	Analog RGB:	Horizontal Freq		30—120KHz		
		Vertical Freq		50—75Hz		
		0.7Vp-p@75ohm				
	Separate / Composite / SOG sync support					
	Digital HDMI/DVI:	Horizontal Freq		30—120KHz		
		Vertical Freq		50—75Hz		
Buttons	Power, Menu, Exit, Plus, Minus					
Menu Type		Graphical menu				
Language Support		Support for 8 languages including Chinese and English				
Functional Operations	Picture	Mode/Brightness/Contrast				
	FUNCTION	Language/Reset/Color Temp.				
	PC	Clock	Phase	H position	V position	Auto configure
Power	Stand-by	<0.5W 12Vstb/200mA				
	Input	12V/dc				

Note1: The maximum power consumption should be tested according to the actual usage situation.

4 Performance Parameters

Item	Description	MIN	TYP	MAX	Unit	NOTE
Vin	Input Voltage	10	12	16	V(dc)	Note1)
Iin	Input Current		0.6		A	12V input (Board only)
I _r	Inrush Current			1.5	A	
V _{adj}	Backlight Board Adjustment Voltage	0	T	5V	V(dc)	
H _{st}	Storage Humidity	10		90	%RH	
H _{op}	Operating Humidity	10		90	%RH	
T _{st}	Storage Temperature	-20		60	°C	
Top	操作温度	-20		60	°C	

Note1) : Since the voltage of the backlight board is taken from the main board, please pay attention to the input voltage of the backlight board.

5 Operation Menu

5.1 OSD Menu Function Keys

POWER	Power On/Off Button
MENU	Menu / Confirm
MINUS	Move Down / Decrease / Auto - Adjust Image in VGA Mode
PLUS	Move Up / Increase
EXIT	Exit / Manually Switch Input Signals

5.2 OSD Menu Item Instructions

5.2.1 Shortcut Menu Operations

MINUS to enter the automatic image adjustment.

PLUS to enter the brightness adjustment.

EXIT to enter the signal switch.

6 Connection Terminal Definitions

6.1 Standard Power Input Terminal (CN100)

Pin No.	Function	Pin No.	Function
1	GND	2	12V

6.2 Row Socket Power Input Terminal (J100)

Pin No.	Function	Pin No.	Function
1	GND	2	GNG
3	12V	4	12V

6.3 LVDS Output Terminal (J300)

Pin No.	Function	Pin No.	Function
1	VCC	16	RXOC+
2	VCC	17	RXO3-
3	VCC	18	RXO3+
4	GND	19	RXE0-
5	GND	20	RXE0+
6	GND	21	RXE1-
7	RXO0-	22	RXE1+
8	RXO0+	23	RXE2-
9	RXO1-	24	RXE2+
10	RXO1+	25	GND
11	RXO2-	26	GND
12	RXO2+	27	RXEC-
13	GND	28	RXEC+
14	GND	29	RXE3-
15	RXOC-	30	RXE3+

Note: When connecting a single - channel LVDS screen, please connect the group of signals closest to the power pin.

6.4 Button Port (J201)

Pin No.	Function	Pin No.	Function
1	POWER	6	DOWN
2	LED_R	7	AUTO(LEFT)
3	LED_G	8	MENU
4	GND	9	E/S
5	UP	10	KEY1(RIGHT)

Note: The KEY1 button is generally not applicable. Please contact us if needed.

6.5 Backlight Board Port (J304)

Pin No.	Function	Pin No.	Function
1	12V	4	ADJ
2	12V	5	GND
3	ON/OFF	6	GND

6.6 Analog RGB Input Row Socket Port (J400)

Pin No.	Function	Pin No.	Function
1	GND	8	GND
2	VSIN0	9	BIN0
3	HSIN0	10	GND
4	GND	11	SDA
5	RIN0	12	SCL
6	GND		
7	GIN0		

6.7 Serial Port and Upgrade Port (J401)

Pin No.	Function	Pin No.	Function
1	+3.3V(可不接)	3	SCL
2	GND	4	SDA

6.8 Audio Input Row Socket (J600)

Pin No.	Function	Pin No.	Function
1	L	3	R
2	GND		

6.9 Speaker Output (J601)

Pin No.	Function	Pin No.	Function
1	L+	3	R-
2	L-	4	R+

6.10 3.3v/5v Screen Voltage (J302)

Pin No.	Function	Pin No.	Function
1	+5V	2	VPANEL_IN
3	+3.3V		

6.11 12v Screen Voltage (J301)

Pin No.	Function	Pin No.	Function
1	+12V	2	VPANEL_IN

6.12 External Screen Voltage (J303)

Pin No.	Function	Pin No.	Function
1	GND	2	EXITPOWER (VPANEL_IN)

Note: If the screen voltage is greater than 12V, the required voltage can be connected through this interface..

6.13 Digital HDMI Input Double Row Socket Port (J500)

Pin No.	Function	Pin No.	Function
1	GND	8	DCLK+
2	DAT2+	9	DCLK-
3	DAT2-	10	GND
4	DAT1+	11	SCL
5	DAT1-	12	SDA
6	DAT0+	13	5V
7	DAT0-	14	HPD

6.14 USB (J700)

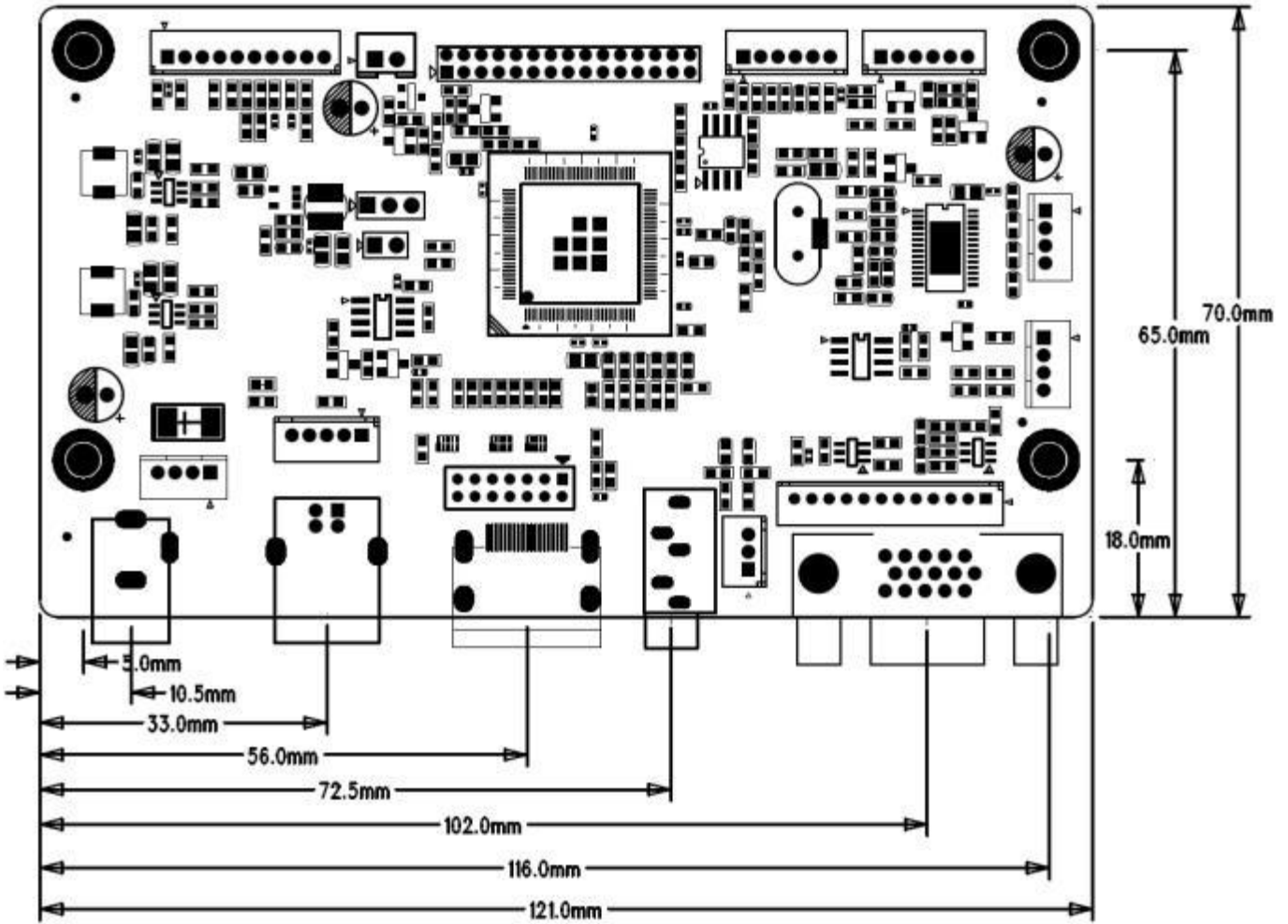
Pin No.	Function	Pin No.	Function
1	GND_USB	4	USBB-
2	GND_USB	5	+5V_USB
3	USBB+	6	

7 Product image



8 Size

PCB 板厚度 : 1.60 mm
总高度: 15.0 mm
尺寸大小: 121.0 x 70.0 mm



9 Supplementary matters

1. Press the '+' and '-' keys simultaneously to enter the factory menu and start the aging mode.
2. The pictures shown in the specification are for reference only. The actual shipped boards shall prevail.