

APPROVAL SHEET

Industrial grade

Model: JZ-VDH68 V1.1



JZ-VDH68 V1.1

Basic : 1 VGA / 1 DVI / HDMI

Maximum support resolution : 1920x1200

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1 Version History

Revision No.	Revision Date	Revision	Description	Writer
1	Apr. 29	1.1	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, 1 DVI port, and 1 HDMI port, and supports LVDS output and eDP output interfaces. 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 65° 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).

Supports LVDS output and eDP output.

The power amplifier can support up to 2X10W.

Supports serial port protocol control.

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/Saturation/Sharpness/Hue				
	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:		

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		0.089		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		65	°C	
T _{op}	Operating Temperature	-20		65	°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.

Note2) : When testing the input current, the power amplifier is not included. The input current is 0.045A without a signal, 0.066A when a VGA signal is connected, 0.077A when a DVI or HDMI signal is connected, and 0.089A when all three signals are connected.

5 OSD Menu Function Keys

5.1 Five-Key Functions

5 键项	菜单	快捷键
POWER	电源开关按键	电源开关按键
MENU	确认	菜单
E/S	退出	切换信号源
UP	上移/增加	亮度增加
DOWN	下移/减少	亮度减小/VGA 下图像自动调整

5.2 Six-Key Functions

6 键项	菜单	快捷键
POWER	电源开关按键	电源开关按键
MENU	确认	菜单
E/S	退出	切换信号源
UP	上移/增加	亮度增加
DOWN	下移/减少	亮度减小
AUTO	无	VGA 下图像自动调整

5.3 Seven-Key Functions

7 键项	菜单	快捷键
POWER	电源开关按键	电源开关按键
MENU	确认	菜单
E/S	退出	切换信号源
UP	上移	亮度增加
DOWN	下移	亮度减小/VGA 下图像自动调整
AUTO	减少	对比度减小
KEY1	增加	对比度增加

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	3	12V
2	GND	4	12V

6.3 LVDS/eDP Dupont Output Terminal (J300)

Pin No.	Function	Pin No.	Function
1	VCC	16	RXOC+
2	VCC	17	RXO3-
3	VCC	18	RXO3+
4	AUX_CH_P	19	RXE0-
5	AUX_CH_N	20	RXE0+
6	GND	21	RXE1-
7	RXO0-	22	RXE1+
8	RXO0+/eDP_HPD	23	RXE2-
9	RXO1-/LANE0_N	24	RXE2+
10	RXO1+/LANE0_P	25	GND
11	RXO2-/LANE1_N	26	GND
12	RXO2+/LANE1_P	27	RXEC-
13	GND	28	RXEC+
14	GND	29	RXE3-
15	RXOC-	30	RXE3+

Notes: 1. When connecting a single-channel LVDS screen, please connect the channel closest to the power pin. 2. The red-marked ones are the definitions of the eDP screen board card side, not the standard eDP Dupont socket definitions of our company.

6.4 eDPFPC Output Terminal (CN300)

Pin No.	Function	Pin No.	Function
1	NC	16	GND
2	GND	17	eDP_HPDP
3	LANE1_N	18	GND
4	LANE1_P	19	GND
5	GND	20	GND
6	LANE0_N	21	GND
7	LANE0_P	22	EN
8	GND	23	ADJ
9	AUX_CH_P	24	NC
10	AUX_CH_N	25	NC
11	GND	26	+12V
12	VLCD	27	+12V
13	VLCD	28	+12V
14	NC	29	+12V
15	GND	30	NC

6.5 Button Port (J202)

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

6.6 Backlight Board Port (J301)

Pin No.	Function	Pin No.	Function
1	12V	4	ADJ
2	12V	5	GND
3	EN	6	GND

Note: ADJ supports both voltage and PWM methods for adjusting brightness. When connecting to a screen with a built-in backlight board constant current source, please connect this pin to the 'PWM' of the LCD screen, and then select our program with the PWM mark.

6.7 Analog RGB Input Row Socket Port (J400)

Pin No.	Function	Pin No.	Function
1	GND	7	G
2	VS	8	GND
3	HS	9	B
4	GND	10	GND
5	R	11	DAT(SDA)
6	GND	12	CLK(SCL)

6.8 Digital DVI 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 (DVI5V)
7	DAT0-	14	HPD

6.9 Digital HDMI Input Double Row Socket Port (J600)

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 (HDMI5V)
7	DAT0-	14	HPD

6.10 Light Sensor, Remote Control and Reserved Control Port (J200)

Pin No.	Function	Pin No.	Function
1	MSCL	4	ADC
2	MSDA	5	GND
3	IR	6	+5V

6.11 Serial Port and Upgrade Port (J401)

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

6.12 Audio input header (J801)

Pin No.	Function	Pin No.	Function
1	LINE_L	3	LINE_R
2	GND		

6.13 Speaker output (J800)

Pin No.	Function	Pin No.	Function
1	LP	3	RN
2	LN	4	RP

6.14 others (J203)

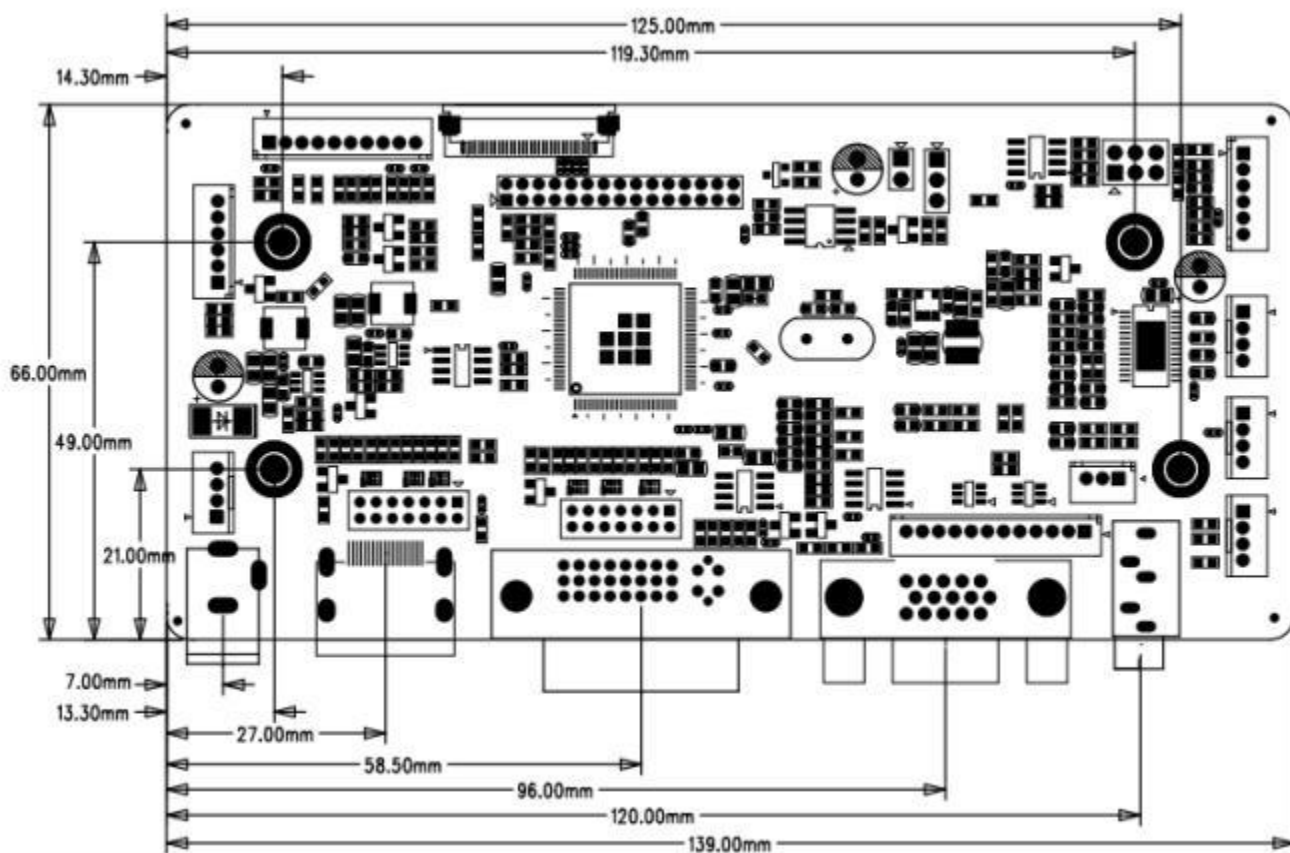
Pin No.	Function	Pin No.	Function
1	K1	4	GND
2	GND	5	K3
3	K2	6	GND

7 product image



8 size

PCB 板厚度 : 1.60 mm
总高度: 15.0 mm
尺寸大小: 139.0 x 66.0 mm



9 Our remote control style



If you need to pair with a customer remote control, please contact us.

10 Supplementary matters

Press the '+' and '-' keys simultaneously to enter the factory menu and start the aging mode.