

SPECIFICATION FOR **APPROVAL**

Product: JG2556D Main Board

JUGE Part No.	Customer Part No.	Description
JG2556D		

Ver 1.0	Issued By	Checked By	Approved By
巨戈科技			

深圳巨戈科技有限公司

Shenzhen JUGE Display Electronic Co.,Ltd.

地址：深圳市光明新区公明街道办楼村鲤鱼河工业区振兴路 37 号冠

城高新科技园 A 栋 4 楼

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1. Product Description

1.1 Function overview

This driver board is a FHD display driver board, EDP output interface, the maximum resolution is 1920*1080@60HZ.

*Support EDP screen interface signal output.

*Multiple OSD languages to choose from.

*Support VGA&HDMI video signal input.

*Support speaker output & headphone output.

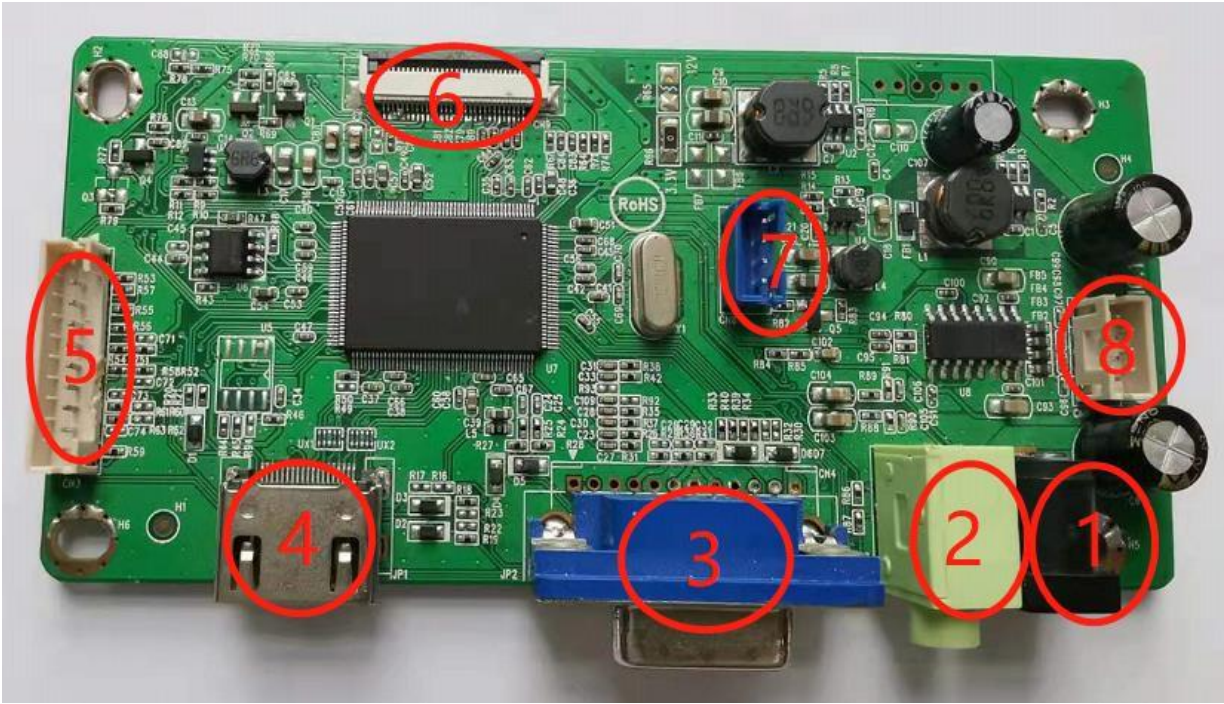
*Support HDMI1.4, HDCP1.4 version.

1.2 Board characteristics

Video input	VGA	1920*1080	
		D-SUB	
	HDMI	1920*1080	
		HDCP Version	1.4
Power supply	DC12V input		
Standby power consumption	< 0.3W		
PANEL	Screen type	TFT LCD	
	Screen interface	EDP	
	Maximum resolution	1920*1080@60HZ	
	Drive screen voltage	3.3//12V optional	
Headphone output	> 150mW(32 Ω /0dB)		
Speaker output	2*2W (4 Ω) THD+N < 10%1KHZ		

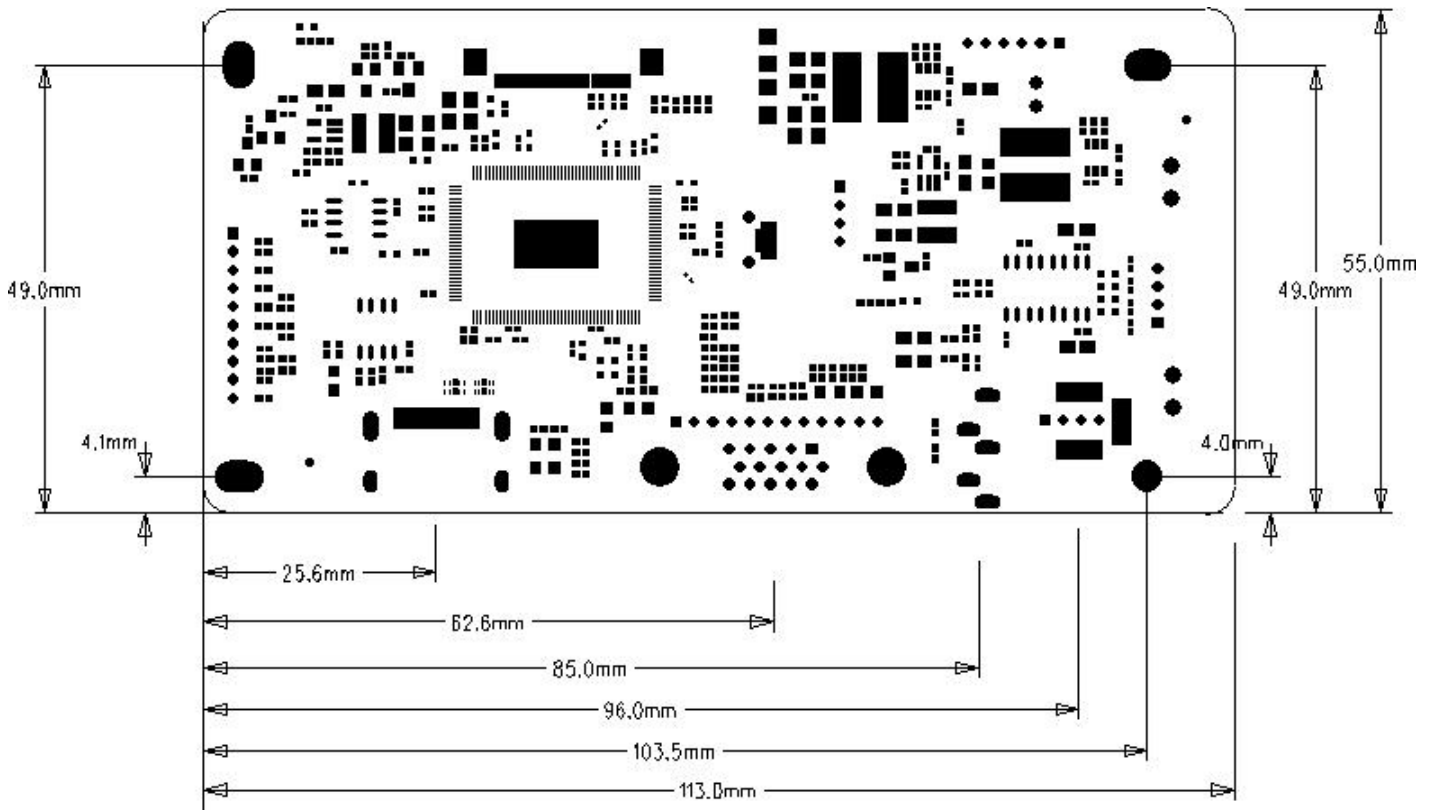
LED Driver	Dimming method	PWM
	Maximum output current	NC
	Maximum output voltage	NC
	Protection voltage	NC
	Maximum power	NC
button	POWER. LEFT.RIGHT.AUTO.MENU optional	
OSD language	Chinese/English/German/Korean/French/Spain/Japanese/Russian and other languages	

1.3 Appearance of the board



Remarks: The above pictures are for reference only, the actual product shall prevail

1.4 Board structure diagram



Remarks: PCB thickness + height of the highest part $\leq 14.5\text{mm}$

1.5 Interface function

Number	Tag	Function
1	CN1	DC12 input (core 2.0mm)
2	CN7	Headphone output socket (3.5mm)
3	JP2	D-SUB video signal input socket
4	JP1	HDMI signal input interface
5	CN3	Button socket interface
6	CN9	EDP screen driver socket interface
7	CN8	5V output socket interface
8	CN8	Speaker output interface

2. Interface definition

3. 2.1 CN9 30PIN 0.5mm lower contact EDP screen interface

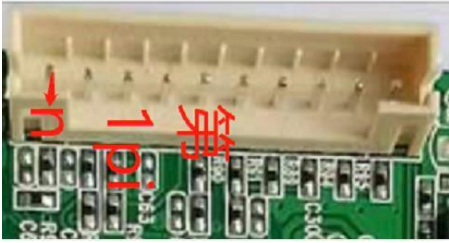


4.

1	NC	NC
2	GND	High Speed Ground
3	Lane1_N	Complement Signal link Lane1
4	Lane1_p	True Signal Link Lane1
5	GND	High Speed Ground
6	Lane0_N	Complement Signal link Lane0
7	Lane0_p	True Signal Link Lane0
8	GND	High Speed Ground
9	AUX_CH_P	True Signal Auxiliary Channel

10	AUX_CH_P	Complement Signal Auxiliary Channel
11	GND	High Speed Ground
12	PANEL_VCC	LCD logic and driver powewr(3.3v)
13	PANEL_VCC	LCD logic and driver powewr(3.3v)
14	NC	NC
15	GND	High Speed Ground
16	GND	High Speed Ground
17	HPD	HPD Signal pin
18	GND	High Speed Ground
19	GND	High Speed Ground
20	GND	High Speed Ground
21	GND	High Speed Ground
22	BL_EN	LED Backlight control on/off control
23	BL_PWM	System PWM signal input for dimming
24	NC	NC
25	NC	NC
26	VLED	LED Backlight power
27	VLED	LED Backlight power
28	VLED	LED Backlight power
29	VLED	LED Backlight power
30	NC	NC

2.2 CN3 PH2.0mm 10PIN Vertical key interface



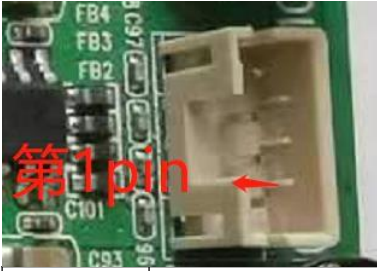
1	POWER	switch
2	LEDR	red light
3	LEDG	Green light
4	GND	Ground
5	LEFT	left
6	RIGFT	right
7	AUTO	auto-adjust
8	MENU	OSD meau
9	UP	上
10	DOWN	下

2.3 CN8 PH2.0mm 4PIN (Blue) vertical button interface



1	5V	/
2	5V	/
3	GND	/
4	GND	/

2.4 CN6 PH2.0mm 4PIN Vertical backlight interface



1	OUTR+	Speaker right channel+
2	OUTR-	Speaker right channel-
3	OUTL+	Speaker left channel+
4	OUTL-	Speaker left channel-

3. Transportation, storage, and use requirements

In order to ensure the normal use of this product and prevent accidents such as electric shock or fire, please read and understand all usage requirements and operating procedures before using this product. Strictly comply with the following requirements:

1. The DC power supply required for this product is generated by an AC/DC power adapter, and the AC/DC power adapter should be kept away from heat sources and placed in a well-ventilated place.
2. The AC power socket and AC power cord should be well grounded and able to withstand sufficient current demand.
3. The DC power supply required by this product is 12V input, the error is not more than $\pm 0.5V$, and the current depends on the selected LED screen and the power of the whole machine.
4. Pay attention to good ventilation and heat dissipation. Do not place it in a closed non-conducting shell or box; do not allow direct sunlight or other heat sources to bake.
5. Pay attention to avoid excessive humidity and excessive dust, so as to avoid circuit corrosion and malfunction.
6. When assembling, pay attention to reserve a certain space to provide air convection heat dissipation on the surface of the board, and to prevent contact and short circuit between the charged conductor and the board components.

7. When assembling, pay attention to prevent the drive board from bending and deforming due to extra pressure.
8. When assembling, pay attention to the correct electrical connection of the driver board, LED screen, key board, and other components, select the correct LED working voltage (too low will display abnormally, and too high may burn the LED screen), check the rear for correct Can be powered on.
9. The program on the driver board should match the corresponding LED screen.
10. When assembling the board, pay attention to electrostatic protection, and pay attention to avoid short circuit and damage to the board by static electricity on your hands.
11. All input and output interfaces need to be operated when power is off (pull and plug connectors).
12. This product is suitable for general commercial use and household use. The operating environment temperature: $-10\sim+40^{\circ}\text{C}$, relative humidity: $\leq 80\%$.
13. Please unplug the power when not in use for a long time.