



JX-RK55TDP-V1.0 Spec.规格书

(LCD /LED机芯板 Display driver board)

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版本记录 Version record

版本 version	日期 data	页码 page	描述 description
V1.0	2018.03.29	A5	初版 first edition

注意：本规格书仅提供参看；如与产品有差异以实物为准

Note: This specification is for reference only; if there is any difference with the product, the actual product shall prevail



一、性能简介 Performance Introduction

本产品采用 Realtek 显示芯片处理 IC, 具有画质好, 系统成熟等特点, 支持 32" 及以下尺寸 LVDS 和 EDP 屏设计, 分辨率支持横屏/条形屏: 1920*1080px/1920*540px 60Hz 等分辨率

This product adopts Realtek display chip processing IC, which has the characteristics of good image quality and mature system. It supports LVDS and EDP screen designs of 32 "and below in size, and resolution supports landscape/bar screen: 1920 * 1080px/1920 * 540px 60Hz isotropic resolution

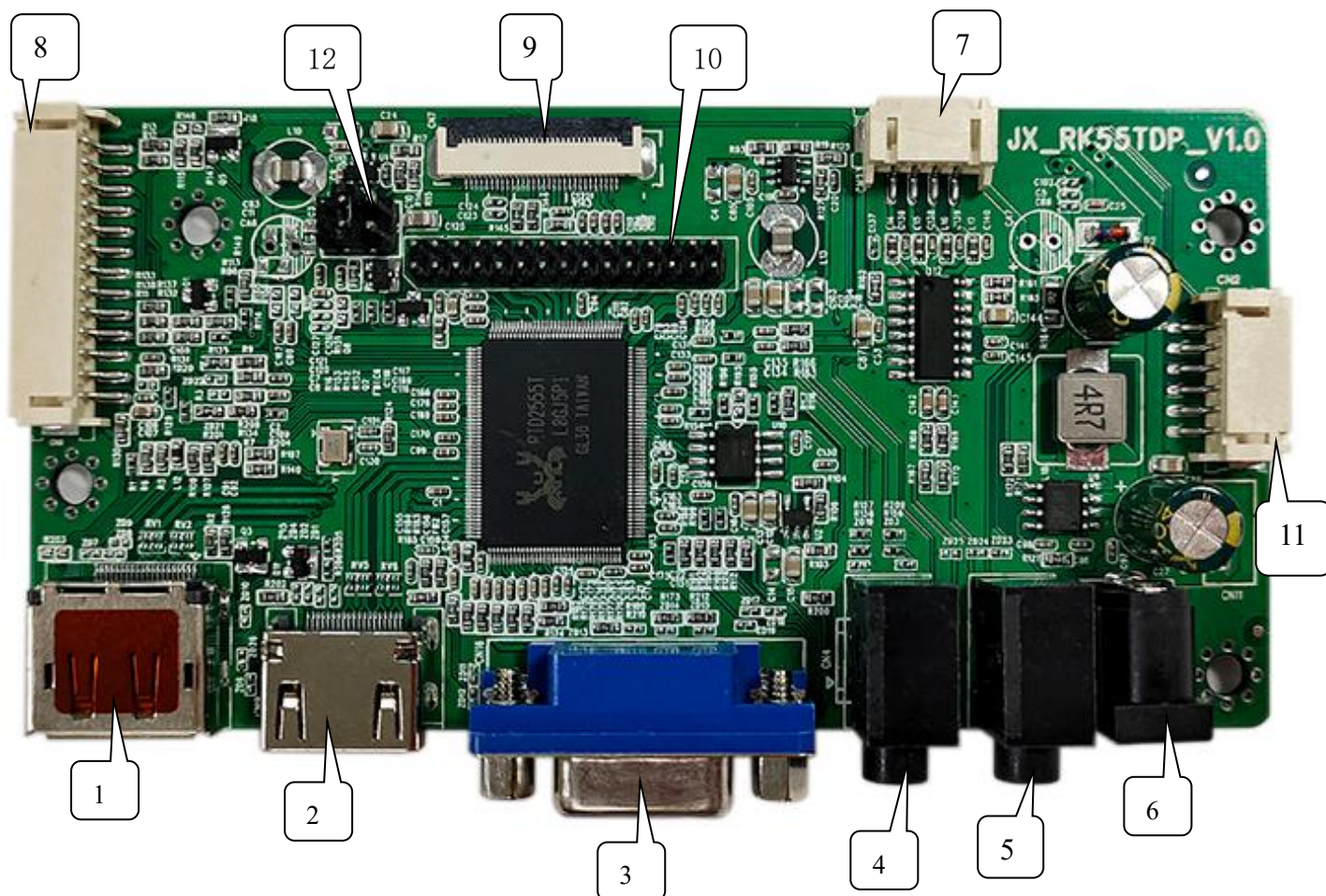
- 模拟音频功放: 最大输出功率 2X2.5W (4 欧)
Analog audio amplifier: maximum output power 2X3W (4 ohms).
- 输入信号: VGAX1、HDMI(1.3), DPx1
Input signal: VGAX1, HDMI(1.3), DPx1.
- 支持屏分辨率 1920*1080px, LVDS/EDP 信号输出
Support screen resolution 1080P, LVDS/EDP signal output.
- 多国 OSD 菜单语言
Multiple OSD menu languages



二、主要技术参数 The main technical parameters

视频输入 video input	电脑 computer	分辨率 Resolution	最高 MAX: 1920*1080
		行频 line frequency	30~90KHz
		场频 Field frequency	56~75Hz
	HDMI	480i 、 480p 、 576i 、 576p 、 720p 、 1080i 、 1080p	
	DP	480i 、 480p 、 576i 、 576p 、 720p 、 1080i 、 1080p	
	音频频率响应 audio frequency response		±3dB
声音 sound	左右声道分离度 Left and right channel separation		70dB
	失真 Distortion (THD)		1.5 ~ 2%
	信噪比 Signal to Noise Ratio (S/N)		80 dB
功放 Amplifier	2 *3W (4Ω)		
电源 power supply	输入电压 Input voltage		12V
	待机电流 stand-by current		10MA
OSD 语言 OSD language	中文 英语 德语 法语 俄语 意大利语 西班牙语 阿拉伯语 波斯语等可选语言 Chinese English German French Russian Italian Spanish Arabic Persian and other optional languages		
低功耗 待机功耗 Low power consumption, standby power consumption:<1W			
按键功能 Key Function		POWER/MENU/SOURCE/ LEFT/RIGHT	

三、外观图片

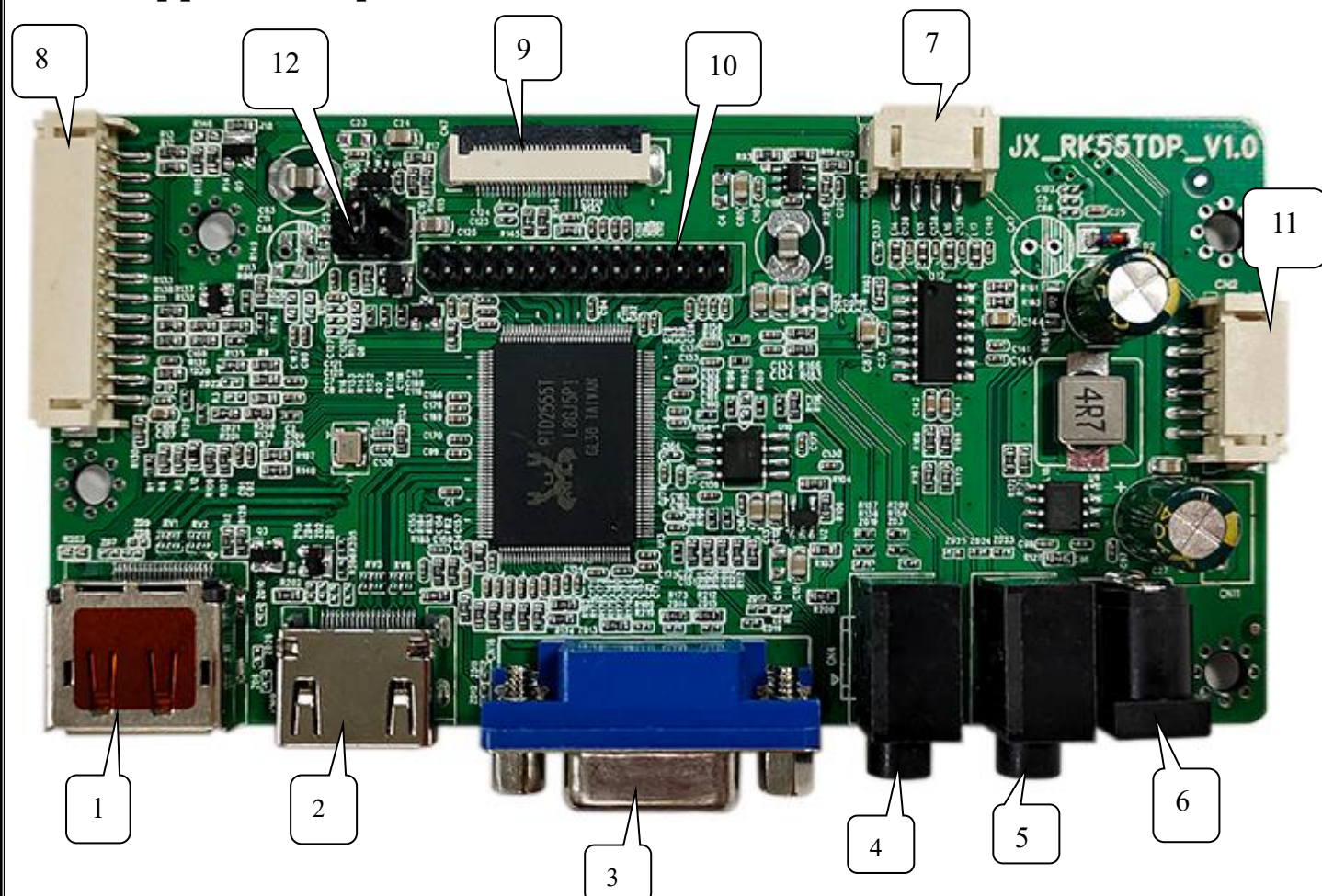


四、主要接口定义说明

序号	描述	序号	描述
1	DP 输入接口	2	HDMI 输入接口
3	VGA 输入接口	4	VGA 音频输入接口
5	耳机输出接口	6	电源输入接口
7	喇叭接口	8	按键接口
9	EDP 点屏	10	LVDS 点屏
11	背光接口	12	屏电压选择跳帽: 12V 5V 3.3V

说明: EDP 和 LVDS 点屏接口是二选一, 不可同时连接

三、Appearance picture



四、Main interface definition description

NO	describe	NO	describe
1	DP input interface	2	HDMI input interface
3	VGA input interface	4	VGA audio input interface
5	headphone jack	6	Power input interface
7	Speaker interface	8	key interface
9	EDP interface	10	LVDS interface
11	Backlight interface	12	Screen voltage selection jump cap: 12V 5V 3.3V

Explanation: EDP and LVDS cannot be connected to point screens at the same time

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7、喇叭声音输出接口 Speaker sound output interface

位号 Bit number: J2(SMD PH2.0/2.0MM*4PIN)

管脚定义说明 Pin Definition Description:

脚位号 pin number	名称 Name	说明 illustrate
1	ROUT+	右声道输出+ Right channel output+
2	ROUT-	右声道输出- Right channel output -
3	LOUT-	左声道输出- Left channel output -
4	LOUT+	左声道输出+ Left channel output +

8、指示灯、按键接口 Indicator light,key interface

位号 Bit number: CN3 (SMD PH2.0MM*13PIN)

管脚定义说明 Pin Definition Description:

脚位号 pin number	名称 Name	说明 illustrate
1	VCC	5V 电源 power supply(遥控供电 remote control power supply)
2	GND	地 land
3	POWER	开关 POWER switch
4	LED-R	红色指示灯/待机时亮 Red indicator light/on when standby
5	LED-G	绿色指示灯/正常工作时亮 Green indicator light/on during normal operation
6	GND	地 land
7	VOL+	音量 volume +
8	VOL-	音量 volume -
9	SOURCE/EXIT	信源/退出 source/exit
10	MENU	菜单 menu



9、EDP 输出接口 EDP output interface

位号 Bit number: CN7 FPC0.5MM*30PIN

管脚定义说明 Pin Definition Description:

脚位号 pin number	名称 Name	说明 illustrate
1	NC	不使用 Do not use
2	GND	地 land
3	Lane1_N	EDP LANE1 信号- EDP LANE1 Signal-
4	Lane1_P	EDP LANE1 信号+ EDP LANE1 Signal+
5	GND	地 land
6	Lane0_N	EDP LANE0 信号- EDP LANE1 Signal-
7	Lane0_P	EDP LANE0 信号+ EDP LANE1 Signal+
8	GND	地 land
9	AUX_CH_P	辅助信号+ Auxiliary signal+
10	AUX_CH_N	辅助信号- Auxiliary signal-
11	GND	地 land
12	VCC	屏逻辑板_3.3V Screen logic board_3.3V
13	VCC	屏逻辑板_3.3V Screen logic board_3.3V
14	NC	不使用 Do not use
15	GND	地 land
16	GND	地 land
17	HPD	热拔插识别信号 Hot plug identification signal
18	GND	地 land
19	GND	地 land
20	GND	地 land
21	GND	地 land
22	EN	背光开关 Backlight switch
23	PWM	背光 PWM 亮度调节 Backlight PWM brightness adjustment
24	NC/SDA	不使用 Do not use
25	NC/SCL	不使用 Do not use
26	VLED	12V 背光电源 12V backlight power supply
27	VLED	12V 背光电源 12V backlight power supply
28	VLED	12V 背光电源 12V backlight power supply
29	VLED	12V 背光电源 12V backlight power supply
30	NC/GND	不使用 Do not use



10、8/10 位 LVDS 输出接口 8/10-bit LVDS output interface

位号 Bit number: CON12 SIP2.0MM*30PIN

管脚定义说明 Pin Definition Description:

脚位号 pin number	名称 Name	说明 illustrate
1	VCC	供电电源 Power supply for the screen
2	VCC	供电电源 Power supply for the screen
3	VCC	供电电源 Power supply for the screen
4	GND	地 land
5	GND	地 land
6	GND	地 land
7	LVA0-	LVDS 偶线对 0 负端 LVDS even pair 0 negative terminal
8	LVA0+	LVDS 偶线对 0 正端 LVDS even pair 0 positive terminal
9	LVA1-	LVDS 偶线对 1 负端 LVDS even pair 1 negative terminal
10	LVA1+	LVDS 偶线对 1 正端 LVDS even pair 1 positive terminal
11	LVA2-	LVDS 偶线对 2 负端 LVDS even pair 2 negative terminal
12	LVA2+	LVDS 偶线对 2 正端 LVDS even pair 2 positive terminal
13	GND	地 land
14	GND	地 land
15	LVACK-	LVDS 偶线对时钟 负端 LVDS even pair clock Negative terminal
16	LVACK+	LVDS 偶线对时钟 正端 LVDS even pair clock positive terminal
17	LVA3-	LVDS 偶线对 3 负端 LVDS even pair 3 negative terminal
18	LVA3+	LVDS 偶线对 3 正端 LVDS even pair 3 positive terminal
19	LVB0-	LVDS 奇线对 0 负端 LVDS odd pair 0 negative terminal
20	LVB0+	LVDS 奇线对 0 正端 LVDS odd pair 0 positive terminal
21	LVB1-	LVDS 奇线对 1 负端 LVDS odd pair 1 negative terminal
22	LVB1+	LVDS 奇线对 1 正端 LVDS odd pair 1 positive terminal
23	LVB2-	LVDS 奇线对 2 负端 LVDS odd pair 2 negative terminal
24	LVB2+	LVDS 奇线对 2 正端 LVDS odd pair 2 positive terminal
25	GND	地 land
26	GND	地 land
27	LVBCK-	LVDS 奇线对时钟 负端 LVDS Odd Pair Clock Negative
28	LVBCK+	LVDS 奇线对时钟 正端 LVDS Odd Pair Clock Positive
29	LVB3-	LVDS 奇线对 3 负端 LVDS odd pair 3 negative terminal
30	LVB3+	LVDS 奇线对 3 正端 LVDS odd pair 3 positive terminal

11、背光接口 Backlight interface

位号 Bit number: CN10 (SMD PH2.0MM*6PIN)

管脚定义说明 Pin Definition Description:

脚位号 pin number	名称 Name	说明 illustrate
1	GND	5V 电源地 5V power ground
2	GND	背光开关 Backlight switch
3	ADJ	背光调光 Backlight dimming
4	ON/OFF	POWER 开关 POWER switch
5	VCC	12V 电源 12V power supply
6	VCC	12V 电源 12V power supply

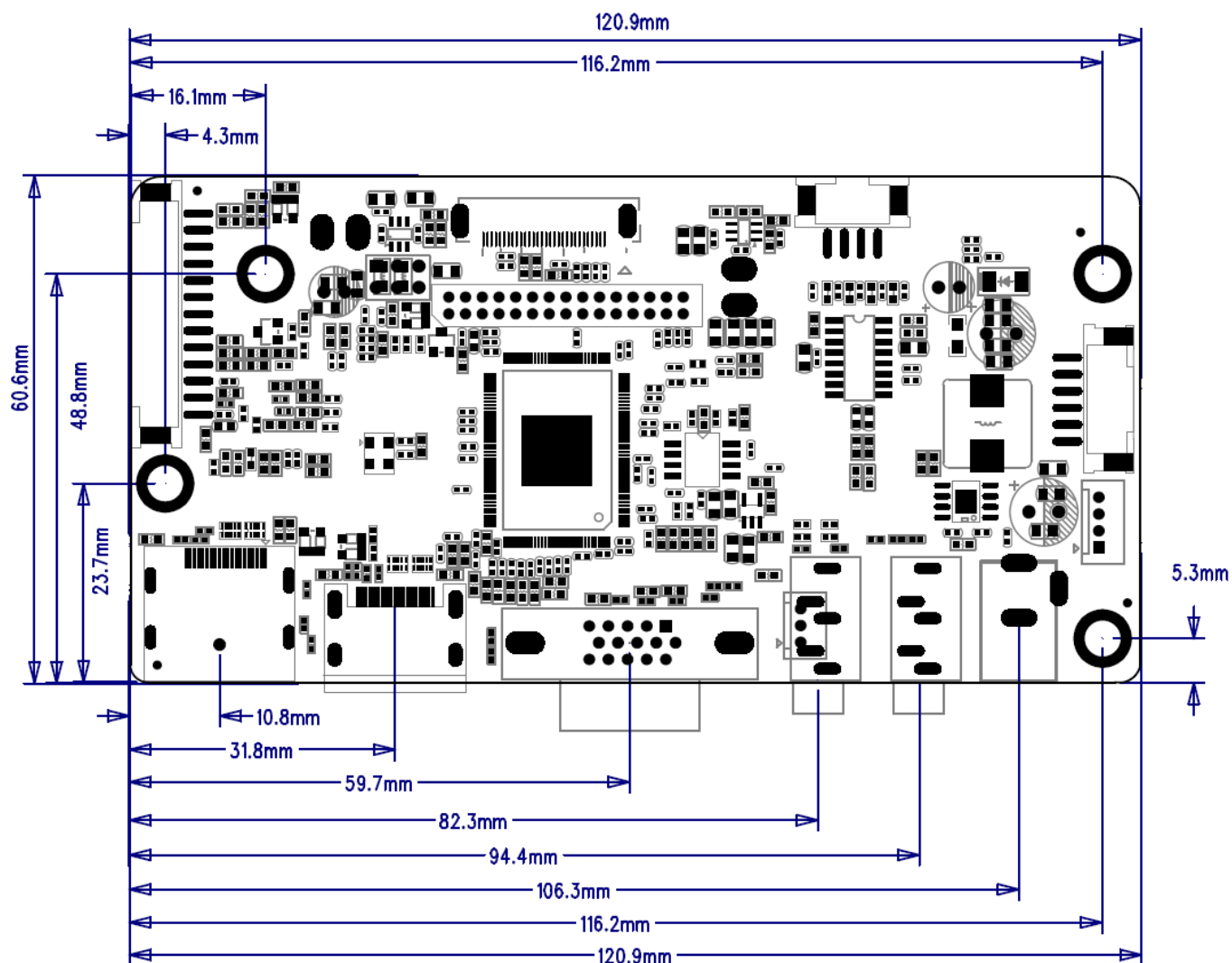
12、供电电压可选接口 Optional interface for screen supply voltage

位号 Bit number: CON1 SIP2.54MM*2/3PIN

管脚定义说明 Pin Definition Description:

脚位号 pin number	名称 Name	说明 illustrate
1 脚	3.3V	3.3V 供电接口 3.3V power supply interface
2 脚	5V	5V 供电接口 5V power supply interface
3 脚	12V	12V 供电接口 3.3V power supply interface
4 脚	屏供电 screen power supply	屏供电输入接口 Screen power input interface
5 脚	屏供电 screen power supply	屏供电输入接口 Screen power input interface
6 脚	屏供电 screen power supply	屏供电输入接口 Screen power input interface

五，结构尺寸 Structure size





六、电气性能 Electrical properties

参数 parameter	最小 (MIN)	标准 (TYP)	最大 (MAX)	单位 Unit
工作电压 Operating Voltage	11.25	12	13.25	V
待机电流 stand-by current	10	30	40	MA
工作温度 Operating temperature	-12		75	℃
仓储温度 Storage temperature	-20		85	℃
工作湿度 Working humidity	40		95	%
仓储湿度 Storage humidity	40		95	%

七、注意事项 Precautions

1、在电源上电前一定先检查电源线是否正确连接，显示屏供电电压是否正确，否则会损坏主板，电源和显示屏

Before powering on the power supply, be sure to check whether the power cord is properly connected and the power supply voltage of the display is correct, otherwise it will damage the motherboard, power supply and display

2、在仓储和装机时一定注意防静电和漏电防护措施，否则会损坏主板和元器件

Be sure to pay attention to anti-static and leakage protection measures during storage and installation, otherwise it will damage the motherboard and components

3、客户在装机前首先确认主板功能是否与要求相符，不要等装好后才发现为时以晚，造成严重的后果

Before installing the machine, the customer first confirms whether the mainboard function meets the requirements. Don't wait for the installation to find out that it is too late, causing serious consequences

4、驱动板工作时请不要随意活动主板和拔插电源接口，以免接触到导电物体，将其损坏

When the drive board is working, please do not move the main board and plug in or out the power interface at will, so as not to touch conductive objects and damage it.

5、在装机时发现不良产品请装好防静电袋整起摆放，退还我司将起修复，不要乱扔乱丢

When you find defective products when installing the machine, please install the anti-static bag and put it up. Return it to our company for repair. Don't throw it away.



6、如果板卡表面有污迹，请断电后使用干软布清理

If there are stains on the surface of the board, please use a dry soft cloth to clean it after power off.

7、请勿受重压，弯折，雨淋将起损坏

Please don't put under heavy pressure, bend, rain will cause damage.

备注 Remarks :

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