承　认　书

SPECIFICATION FOR APPROVAL

CUSTOMER（客户）：重庆惠科

Model Number （型号）：AY180DA-ZF190947M

Part Description（元件描述）：switching power supply

Part No. of Customer（客户编号）：

Date of Approval（确认日期）：2024-8-4

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Reported By	Checked By	Approved By

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Document History

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Table of Content（目录）

1. Electrical Specification/电气特性

1.1 General Scope/概述

The specification defines the performance characteristics of a 180 W Switching Power supply. All products including samples delivered will meet all the requirements as outlined in the document. The basic requirements of the design features are listed below:

这是一份详细描述总功率为 180 瓦的开关电源的规格承认书。所有提供的产品包括样品将满足本文件所描述的产品规格。其设计基本要求如下:

1.2 Product Description/产品描述

☐SMPS Adaptor(Wall mount)插墙式适配器　　☑SMPS Adaptor(Desk-top)桌面型适配器

☐SMPS Unit(With Case)带铁壳型电源　　☐Li-ion battery charger 锂电池充电器

☐Open Frame/开放式结构电源　　☐Others 其他型电源

2. Input Characteristics/输入特性

2.1 Input Voltage And Frequency/输入电压与频率

Rated input voltage 额定输入电压	100Vac to 240Vac
Limited working Range 极限工作范围	90 Vac to 264 Vac
Frequency range 频率范围	50Hz/60Hz±5%
Power Factor 功率因数	90% min at rate load and 100V~240Vac condition
Leakage Current 泄漏电流	Less Than 0.25mA 264Vac input

2.2 Input AC Current/输入交流电流

2.5Arms Max at 100 Vac input and full load.在 100Vac 输入和满载条件下最大 2.5A.

2.3 Inrush Current/浪涌电流

No damage at cold or hot start.冷热机条件下开机不可出现损坏。

2.4 Input Fuse/输入保险丝

Input voltage 264Vac to 0Vac,The input fuse shall not blow up at full load.输出满载条件下，输入电压从 264Vac 降至 0Vac 时输入保险丝不可爆裂。

2.5 Efficiency/效率

88% min. At nominal input rated voltage and measured at end of DC cable

在额定输入电压和满载情况下,DC 线端的效率为 88%最小。

2.6 No Load Power Consumption/空载功耗

Input voltage 115Vac or 230Vac and the output is no load conditions,the input power loss must be less than 0.21W.

输入电压 115Vac 或 230Vac,输入空载功率小于 0.21W.

3. Output Characteristics/输出特性

3.1 Output voltage regulation/输出电压调整率

Output Voltage 输出电压	Load(A)负载		Regulation(V)调整率	
	Min 最小负载	Max 最大负载	Load regulation 负载调整率	Line regulation 线性调整率
19V	0.1	9.47	18.0-20.0	18.0-20.0

1.The Peak current or power should be test at pulse width within 100ms

峰值电流或功率的测试且脉宽小于 100 毫秒。

2.Line regulation is measured from 90Vac to 264Vac 线性调整率的测试条件是 90Vac 到 264Vac

3.Load regulation is measured all output from min load to max load at 115Vac or 230Vac input voltage

负载调整率的测试条件是在 115Vac/230Vac 输入情况下，最小载到最大载之间变化。

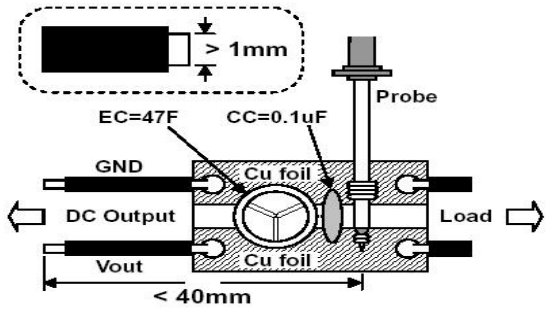
3.2 Ripple and noise/纹波&噪声

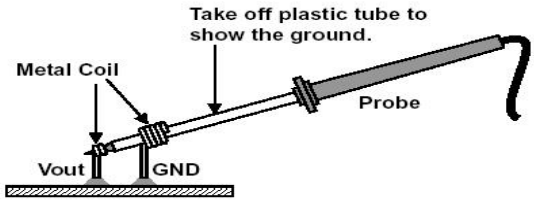
Output Channel	Ripple/Noise(mVp-p)阻性负载	Ripple/Noise(mVp-p)整机负载
19V	≤200 @25℃	≤300 @25℃

1.The ripple is measured from peak to peak with bandwidth limit of 20MHz.纹波是使用示波器带宽为 20MHz 测量峰峰值得到的。

2.Input voltage at 90~264Vac and full load, a 0.1uF ceramic disk capacitor & 10uF electrolytic(low ESR) capacitor should be put across the output terminals during ripple & noise measure as fig below.

在输入 90~264Vac,输出满载的情况下,测试纹波和噪声需要在输出端并联一个 0.1uF 的瓷片电容和一个 10uF 低内阻的电解电容,如下图。





3.3 Turn on delay time/开机延迟时间

The turn on delay time is 3 seconds Max. at100Vac input and output full load.

当输入 100Vac,输出满载时,开机延迟时间最大为 3 S.

3.4 Rise time/上升时间

The output rise time is 100 mS Max，at 220Vac input and output is Max load.

当输入 220Vac,输出最大负载时最大上升时间 100 mS。

3.5 Hold up time/保持时间

10mS Min. at 230Vac input and output full load.

当输入 230Vac,输出最大负载时最小保持时间为 10 mS.

3.6 Output Overshoot/输出过冲

Under the condition of input voltage 100~240Vac, the output impulse voltage is less than ± 10%.

在输入电压 100~240Vac，额定负载输出条件下,开机或关机时输出过冲电压小于额定电压的±10%.

3.7 Dynamic Load/动态负载

The output voltage will remain within the regulation after applying following load changes . The measurement shall be done at DC connector.

Under the condition of input voltage 100~240Vac

在以下负载条件变化情况下,输出端子两端电压测试,输出电压应在 18.0-22.0V 范围内。

在输入电压 100~240Vac,

Voltage tolerance limit	Duty	Slew Rate	Load Change	Transient frequency
17.0-21.0V	50%	0.5A/US	Min load ~ 50%	1KHz
17.0-21.0V	50%	0.5A/US	50% ~ 100%	1KHz

4. Protection requirements/保护功能

4.1 Short circuit protection/短路保护

Power adapter shall have self-limiting protection to protect against short circuit or overload conditions.

No damage to the power adapter shall result from a continuous or intermittent short circuit condition. It will be auto-recovered when the failure is removed.

电源适配器有自我限制保护功能来防止短路或过载条件,在连续或断续的短路条件下电源将不会有任何损坏。短路故障排除后,电源将会自动恢复正常工作。

The short circuit protection should be test at an Rated load and input is 90Vac~264Vac 短路保护测试是在额定负载时测试,输入在 90Vac ~ 264Vac。

4.2 Over current protection/过流保护

The maximum OCP current is 16A ,After output current of power supply reach OCP current,the over current protection shall operate, the power supply will be auto- recovered when over current faults remove.电源最大输出过流保护点为 16A。发生过流后,保护将会动作,过流故障排除后,电源将自动恢复正常工作。

Under the condition of input voltage 100~240Vac, 在输入电压 100~240Vac

4.3 Peak current/峰值电流

Output Channel	Peak current(A)	Comments
19V	≤10.8	100mS Max

The peak current should be test at an Rated load off other output and input is 90Vac~264Vac 峰值电流测试是在其他组额定负载时测试,输入在 90Vac ~ 264Vac。

4.4 Over Voltage protection/过压保护

The maximum OVP voltage is 28V，After output Voltage of power supply reach OVP voltage.The over Voltage protection shall operate, the power supply will be auto- recovered when over Voltage faults remove.

电源最大输出电压保护点为 28V。发生过压后,保护将会动作。过压故障排除后,电源将自动恢复正常工作。

5. Environmental requirements/环境要求

5.1 Temperature/温度

Operating temperature:-10℃ to +40℃.正常工作温度为-10℃至+40℃。

Storage temperature:-40℃ to +85℃.存储温度为-40℃至+85℃。

5.2 Humidity/湿度

Operating humidity:10% to 90%(non-condensing).正常工作湿度为 10%至 90%(无冰凝结条件下）。

Storage humidity:5% to 95%(non-condensing).存储湿度为 5%至 95%(无冰凝结条件下）。

5.3 Operating Altitude/海拔高度

≦5000m Elevation.最大海拔高度小于或等于 5000 米。

5.4 Cooling/冷却方式

Cooling shall be with natural convection cooling.空气自然对流冷却。

5.5 Weather conditions/气候条件

Conform to the tropical climate.适用于热带地区

6. Reliability requirements/可靠性要求

6.1 MTBF qualification/平均间隔故障时间估算

The MTBF shall be at least 50000hours at 25℃,full load and input voltage 230Vac conditions，calculated using the Telcordia SR-332 issue2.平均间隔故障时间至少 50000 小时，在 25℃环境及满载输出，输入电压为 230Vac 条件下，计算使用标准 Telcordia SR-332。

6.2 E-cap Lifetime/电解电容寿命

The life estimation of aluminum capacitor shall be at least 26280 hours at 30℃, 85%load and input voltage 230Vac conditions.铝电解电容寿命计算至少 26280 小时，在 30℃环境及 85%负载输出，输入电压为 230Vac 条件下。

6.3 Low temperature storage test/低温贮存试验

Shutdown state,(-40℃±3℃) low temperature storage 48 h, normal temperature recovery 2 h after inspection. After testing, the basic functions, appearance and assembly inspection should be able to meet the corresponding requirements 关机状态，(-40℃±3℃）低温存储 48h，常温恢复 2h 后检查.测试后进行基本功能、外观及装配检测，应能符合相应的要求.

6.4 Low temperature operating test/低温运行试验

The charger is electrified and full load,(-10℃±3℃) low temperature test 16h; normal temperature recovery 2 h after inspection. The basic function, appearance and assembly inspection should meet the requirements after normal temperature recovery.

将充电器通电满载工作，(-10℃±3℃）低温试验 16h；常温恢复 2h 后检查.常温恢复后基本功能、外观及装配检测应符合要求。

6.5 High temperature storage test/高温贮存试验

Shutdown state ,(85℃±3℃) high temperature storage 48 h, normal temperature recovery 2 h after inspection. After testing, the basic function, appearance and assembly inspection should be able to meet the corresponding requirements.

关机状态，(85℃±3℃）高温存储 48h，常温恢复 2h 后检查.测试后进行基本功能、外观及装配检测，应能符合相应的要求。

6.6 High temperature operation test/高温运行试验

The charger is electrified and full load ,(45℃±3℃) high temperature test 16h; normal temperature recovery 2 h after inspection. The basic function, appearance and assembly inspection should meet the corresponding requirements after normal temperature recovery.

将充电器通电满载工作，(45℃±3℃）高温试验 16h；常温恢复 2h 后检查.常温回复后基本功能、外观及装配检测应能符合相应的要求。

6.7 Temperature Impact Test/温度冲击试验

Shutdown state ,(-40℃±3℃)/(85℃±3)30 minutes each temperature impact 16 cycles, starting from low temperature, high and low temperature switching time requirements less than 3 min, normal temperature recovery 2 h after the inspection function, appearance and assembly inspection should meet the requirements.

关机状态，（-40℃±3℃）/（+85℃±3℃）各 30 分钟的温度冲击 16 个循环，由低温开始，高低温切换时间要求小于 3min，常温恢复 2h 后检查功能、外观及装配检测应符合要求。

6.8 Constant damp heat test/恒定湿热试验

Water for humidification: distilled or deionized water with PH values between 6.0~7.2 at 23℃. Water.

加湿用水：蒸馏水或去离子水，该水在 23℃时，PH 值 6.0~7.2 之间.

Power charger full load (50℃±2℃), relative humidity 93%±3%,48 hours.

将充电器通电满载工作（50℃±2℃）,相对湿度 93%±3%，48 小时.

The temperature and humidity of the test box shall be restored to standard atmospheric conditions for testing and testing within 1 h~4 h after the test,

Once the cooling stage is over, the DUT should enter the recovery procedure, and the inspection function, appearance and assembly inspection should be normal after 2 h of recovery.

试验结束后，应在 1h~4h 内将试验箱的温度和湿度恢复到检测和试验用的标准大气条件，

降温阶段一结束，DUT 就应进入恢复程序，恢复 2h 后检查功能、外观及装配检测应正常.

6.9 Salt spray test/盐雾试验

Two spray cycles ,2 hours each, followed by a 22 hour period of damp-heat storage, with a temperature (15-35)℃ and a concentration of (5±1)% sodium chloride solution; storage conditions (40±2℃), with a relative humidity of 90%~95%; after the experiment was completed, the appearance, function and mechanical structure of the DUT were tested after 24 h in normal,

normal and atmospheric environment.（ Note: if the DUT need to be cleaned, the temperature ﹤35℃ distilled water or deionized water after cleaning and drying）

2 个喷雾周期，每个 2 小时，每个喷雾周期后有一个为期 22 小时的湿热存储周期，喷雾条件为温度(15-35)℃，浓度为（5±1）%的氯化钠溶液；储存条件为（40±2℃），相对湿度达到 90%～95%；实验完成后在常温、常湿、常压环境中放置 24h 后对 DUT 进行外观、功能及机械结构检测，应正常，金属部分不能腐蚀.

（注：如需清洗的 DUT 需用温度﹤35℃蒸馏水或者去离子水清洗干燥后检测）

6.10 Noise testing/噪音测试

When rated load and no load,noise from the adapter should be heard less than 26dB.30 cm from the adapter(Environment :<20 dB)

额定负载和空载时,在离适配器 30cm 的地方,听到来自适配器的噪音应低于 26dB.

（环境：＜20dB）

6.11 Drop of monomer/单体跌落

Height 1 m,free to fall on the cement floor,six sides (in the order of minimum /middle/maximum order drop)for a round of 1 rounds, a total of 6 times. The components should not be loosened after falling, and the shape of the shell should not change.

高度 1 米,自由跌落在水泥地板上,六面(按最小面/中面/最大面顺序跌落)为一轮；1 轮,共 6 次.跌落后元器件不应该松动，外壳形状不应发生变化.

6.12 Vibration test/振动测试

Test 7~50 HZ adopt fixed amplitude 0.8 mm,50~200 HZ fixed acceleration 4g.

X,Y,Z axis 1 hour.

测试 7~50HZ 采用定幅 0.8mm，50~200HZ 定加速度 4g，X,Y,Z 轴各 1 小时.

DUT internal should be silent or obvious parts loose, all functions,performance normal. DUT 内部应无声响或明显部件松动,各项功能、性能正常.

6.13 Wire Swing Test/线材摇摆测试

Cable swing test condition, lifting weight 300 g, swing Angle ± 60 degrees, swing frequency 30 times / minute, reciprocation, SR swing 3000 times, DC head swing 5000 times, test wire appearance is not broken, and normal charging function.线材摇摆测试条件，吊重 300 克，摇摆角度±60 度，摇摆频率 30 次/分钟，往复算一次，SR 摇摆 3000 次，DC 头摇摆 5000 次，试验后线材外观无破损断裂，充电功能正常.

6.14 Test of tensile strength of wire/线材抗拉力测试

The end of the wire is suspended from top to bottom with a weight of 3 kg for 1 min. After the wire appearance is not damaged and broken, the charging function is normal.将线数据线线材末端处自上而下悬挂一个重量为 3kg 的砝码持续 1min 后线材外观无破损断裂，充电功能正常.

6.15 Burn-In test/老化测试

Burn-In temperature 40℃,220ac input, rated load 80-100% continuous work 168h.The electrical performance of the test sample should be normal after the test. 老化温度 40℃，220ac 输入，额定负载 80%-100%持续工作 168h,试验样品在试验后电气性能需正常.

6.16 AC on/off testing/输入开关机测试

The AC on/off is input voltage 200/240Vac, output full load ,5 S on /5 S off once, test 3000 times.200/240Vac 输入，输出满载，5S 开/5S 关为 1 次，测试 3000 次.

Power supply should not be damaged after testing.测试完后电源不能损坏.

6.17 Ball pressure test/球压测试

Predict test ,sample temperature between 15℃~35℃, relative humidity between 45~75 placed at least 24 h.

预测前，将试验样品温度在 15℃～35℃之间，相对湿度在 45～75 之间至少放置 24h.

Place the sample in an oven of 125℃, the surface of which should be horizontal, press the spherical part of the 20 N device to the surface, place it in cold water for 1 hour, cool it to room temperature within 10 s, then measure the diameter of the ball mark not more than 2 mm.

将试样品放入在 125℃的烤箱内，其表面需水平，用 20N 装置的球状部分压到此表面，放置 1 小时后取出浸入冷水中，使其在 10s 内冷却到室温，然后测量球痕直径不超过 2mm.

7. Safety and EMI requirements/安全及 EMI 要求

7.1 Hi-pot test/高压测试

Hi-pot test shall meet with the following table test requirements, 100% production test must be performed for each test item and be maintained at that level for a minimum of 5seconds without failure.

高压测试满足下表的要求,100％在线间品执行此项测试,并每一项目至少保持 1min 时间无任何故障。

ITEM	SPECIFICATION	REMARK
Primary to Secondary 输入 - 输出	3000Vac 或 4242Vdc/10mA/1min	No arcing No broken/无飞狐无击穿
Primary to P.G/输入 - 地	1500Vac/3.5mA/1min	No arcing No broken/无飞狐无击穿
Note:Factory test criteria for mass production shall be 3.6KVac ,3S,5mA		

7.2 Insulation resistance/绝缘阻抗

ITEM	SPECIFICATION	REMARK
Primary to Secondary 输入 - 输出	>100MΩ;DC500V	No arcing No broken/无飞狐无击穿

7.3 Safety standards/安规标准

safety:accord with(安全：符合标准)

Certificate	Country/国家	Standards/标准
☐ CCC	China/中国	GB8898-2011
☐ CCC	China/中国	GB4943-2011
☐ CCC	China/中国	GB4943.1-2022
☐ CQC	China/中国	GB4706
☐ CQC	China/中国	GB9706
☐ UL/CUL	USA/美国	UL62368

☐ UL/CUL	USA/美国	UL1310
☐ UL/CUL	USA/美国	UL60601-1
☐CB	/	IEC62368
☐CB	/	IEC60335
☐CB	/	IEC61558
☐CB	/	IEC60601-1
☐ GS	Europe/欧洲	EN62368
☐ GS	Europe/欧洲	EN 60335
☐ GS	Europe/欧洲	EN 61558
☐ GS	Europe/欧洲	EN 60601-1
☐ CE	Europe/欧洲	EN62368
☐ CE	Europe/欧洲	EN 60335
☐ CE	Europe/欧洲	EN 61558
☐ CE	Europe/欧洲	EN 60601-1
☐ UKCA	England/英国	BS EN62368
☐ UKCA	England/英国	BS EN 60335
☐ UKCA	England/英国	BS EN 61558
☐ UKCA	England/英国	BS EN 60601-1
☐ RCM	Australia/澳洲	AS/NZS 62368
☐ RCM	Australia/澳洲	AS/NZS 60335
☐ RCM	Australia/澳洲	AS/NZS 61558
☐ RCM	Australia/澳洲	AS/NZS 60601-1
☐PSE	Japan/日本	J62368
☐PSE	Japan/日本	J60335
☐PSE	Japan/日本	J61558
☐PSE	Japan/日本	J60601-1
☐KC	Korea/韩国	K62368
☐KC	Korea/韩国	K60335
☐KC	Korea/韩国	K61558
☐KC	Korea/韩国	K60601-1
☐EAC	Russia/俄罗斯	EN 62368
☐EAC	Russia/俄罗斯	EN 60335
☐EAC	Russia/俄罗斯	EN 61558
☐EAC	Russia/俄罗斯	EN 60601-1

7.4 EMI/电磁干扰

EMI:accord with(EMI：符合标准)

□EN55032 □J55032 □K32	Electromagnetic compatibility of multimedia equipment — Emission requirements 多媒体设备的电磁兼容性.发射要求
□GB9254.1-2022	Information technology equipment, multimedia equipment and receivers—Electromagnetic compatibility—Part 1: Emission requirements 信息技术设备、多媒体设备和接收机电磁兼容第 1 部分:发射要求
□GB4343.1 □EN55014-1 □J55014-1 □K55014-1	Electromagnetic compatibility Requirements for household appliances, electric tools and similar apparatus Part 1:Emission 电磁兼容 家用电器，电动工具和类似器具的要求 第 1 部分：发射
□ FCC Part 15 B	FCC CFR 47 Part 15 subpart B 美国联邦通信法规第 47 卷 15 章内无意式的辐射器材的相关规定
□ICES-003:Issue 7	Electromagnetic compatibility of Information Technology Equipment（including Digital Apparatus) Emission requirements for Canada 加拿大信息技术设备(包含数字设备）电磁兼容.发射要求

7.5 EMS/电磁抗扰度

EMS:accord with/EMS：符合标准

□EN55035 □K35	Information technology equipment ,Sound and television broadcast receivers —Immunity characteristic limits and methods of measurement 信息技术设备、声音和电视广播接收机抗扰度测量限值和方法	
EN61000-4-2 GB/T17626.2	Electrostatic discharge immunity test 静电放电抗扰度测试	CON:±8KV; AIR:±15KV; 10 charge/point for Con; 10 charge/point for Air Meet criteria: B
EN61000-4-4 GB/T17626.4	Electrical fast transient/burst immunity test 电快速瞬变脉冲群抗扰度测试	AC port:±1KV Meet criteria: B
EN61000-4-5 GB/T17626.5	Surge immunity test 浪涌抗扰度测试	AC port: L-N:±1KV L-PE/N-PE:±2KV 1.2/50uS-8/20uS phase position： 0，90，180，270 Meet criteria: B

8. Mechanical requirements/结构参数

8.1 Enclosure/外壳

The power supply size/外壳尺寸:133.5*68.5*26mm

Black appearance/外观为黑色

8.2 Input connector/输入插脚

C6 three pins Socket/3pins 梅花插座

8.3 Out connector/输出线材及插头

DC cord/输出线:UL1185 弯头

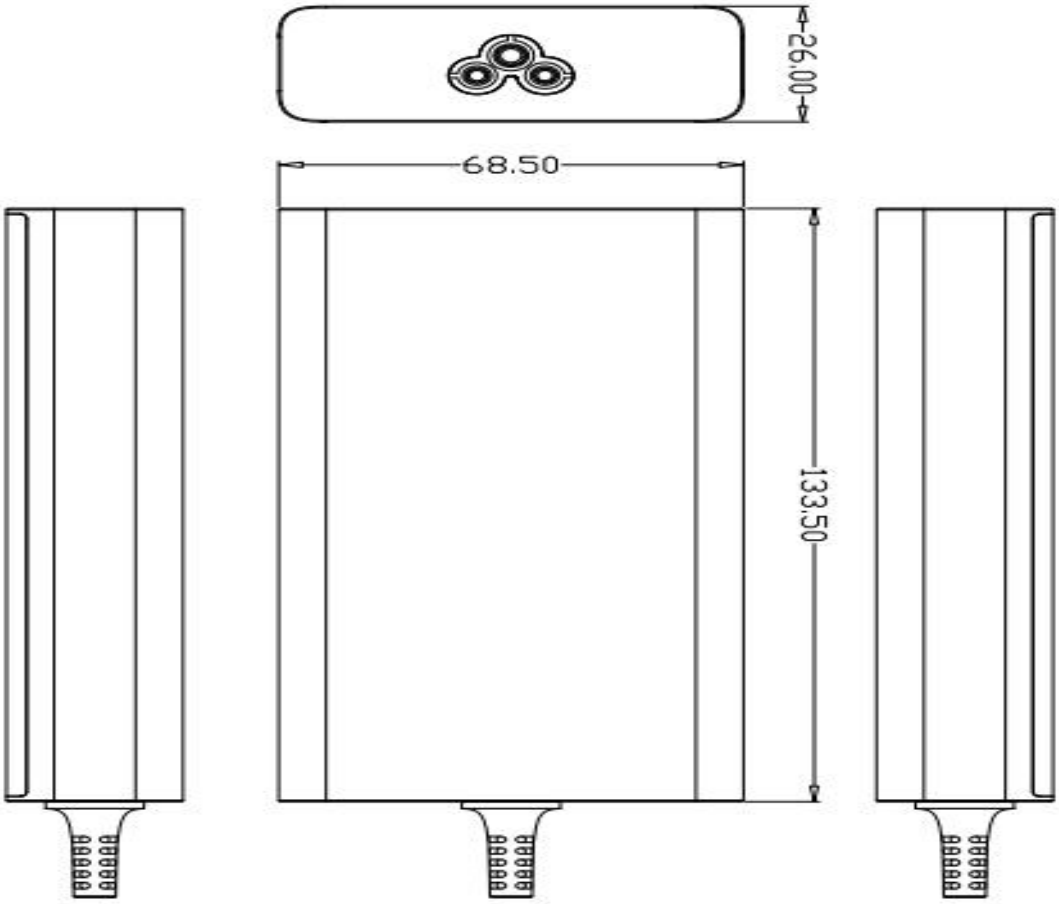
Length/总长:1500mm

DC plug/DC 头尺寸:5.5*2.5*11.0mm.

DC head insert end insert force specification range：3000 times, insert force 0.3-3kg/f.

DC 头插端插拔力规格范围：3000 次，插拔力 0.3-3kg/f.

8.4 Outline dimensions/机构图(unit: mm)



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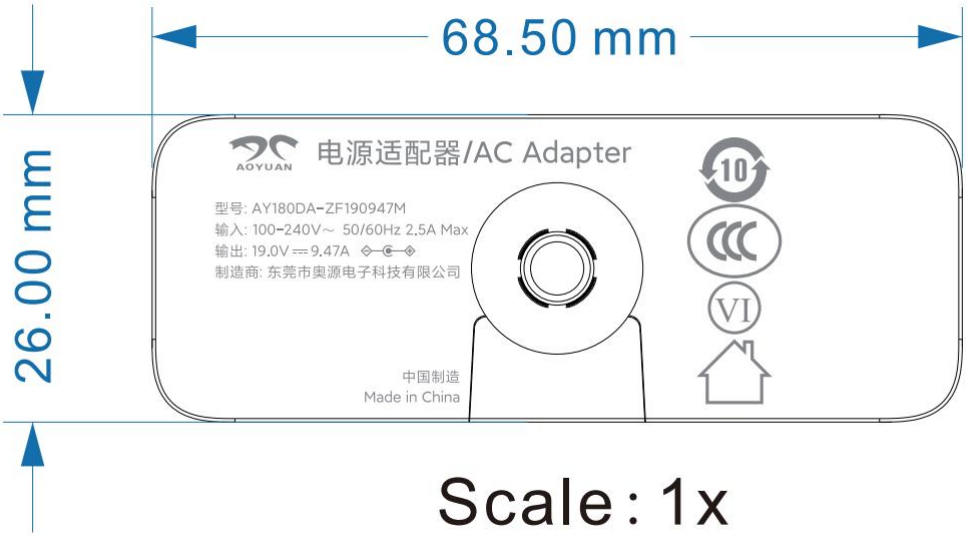
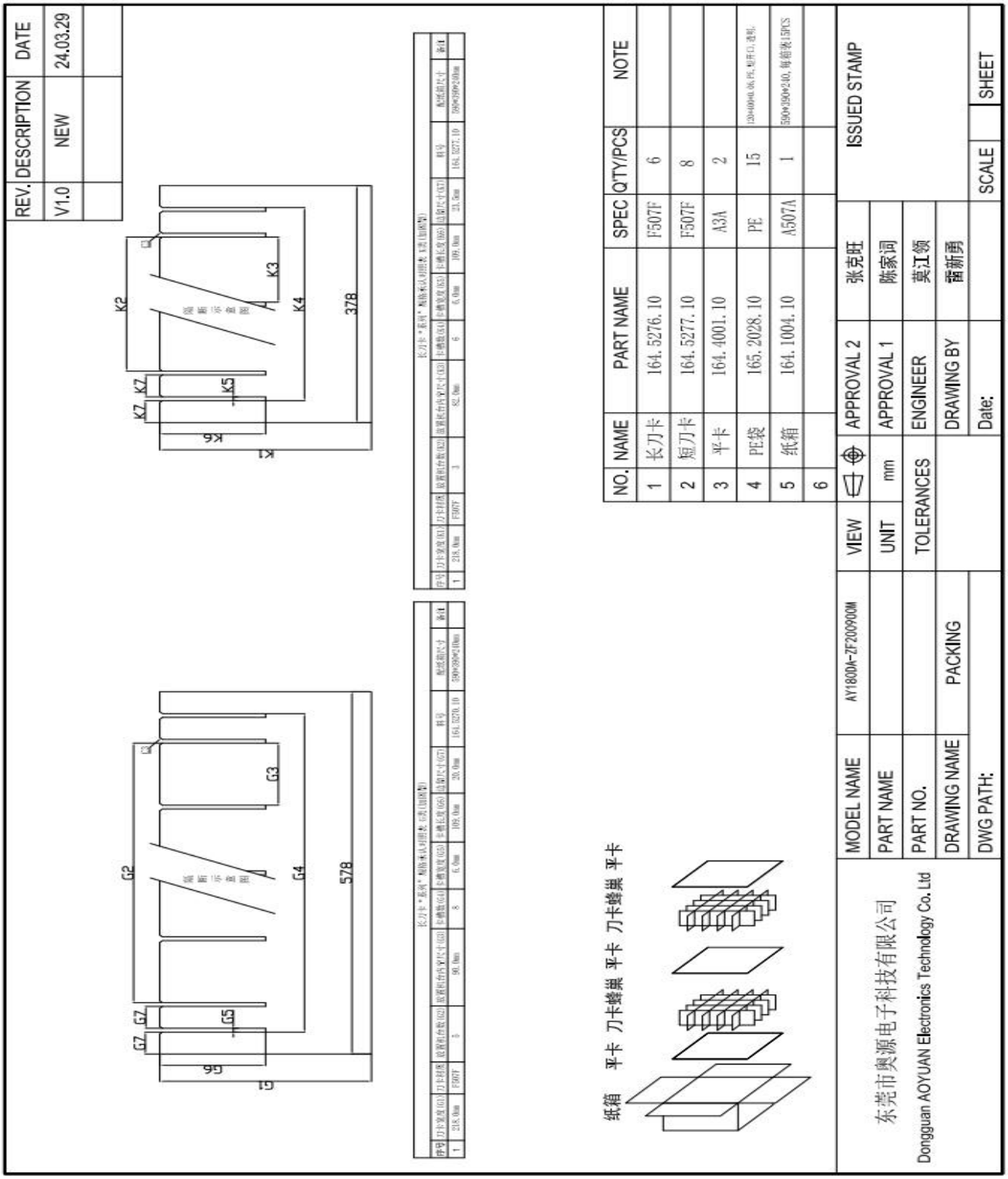
8.5 Label/铭牌镭雕图



8.6 Package/包装

This package is for reference only/此包装图仅供参考，最终包装方式以客户要求或公司内部确认后为准.

包装方式一：使用蜂巢式包材，每箱装 15 台.



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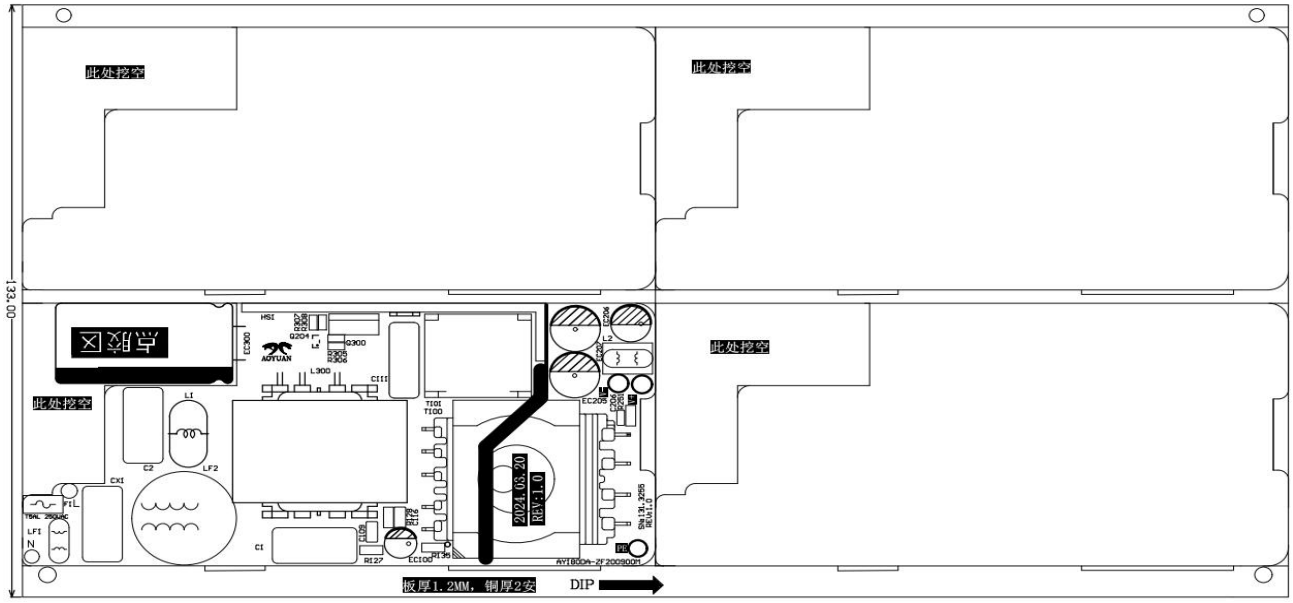
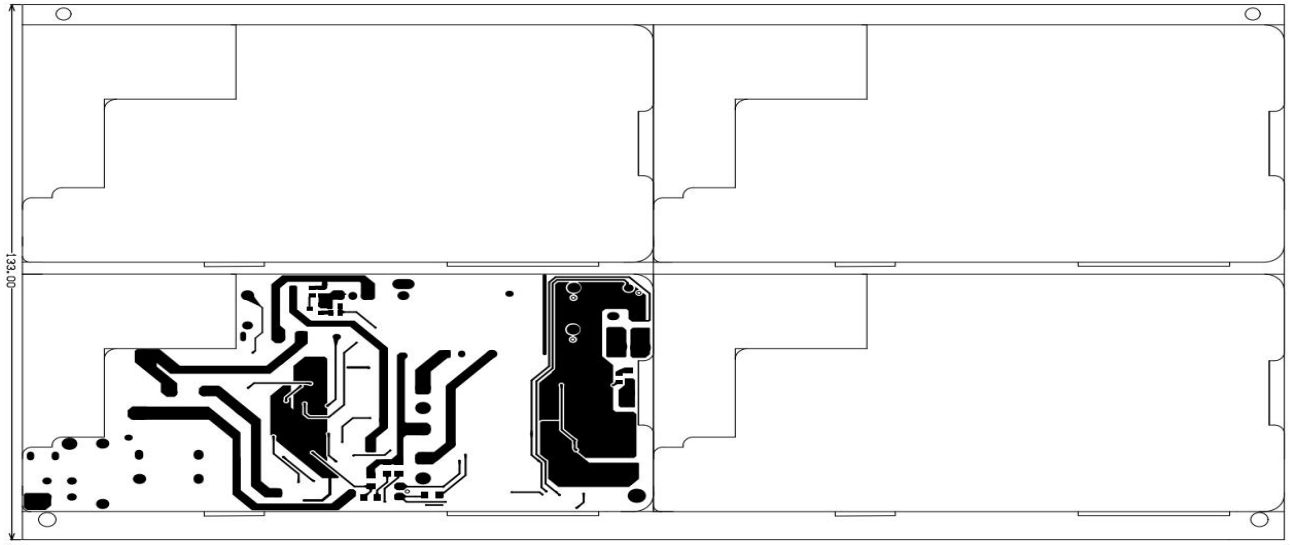
8.7 PCB Drawing/PCB 绘图





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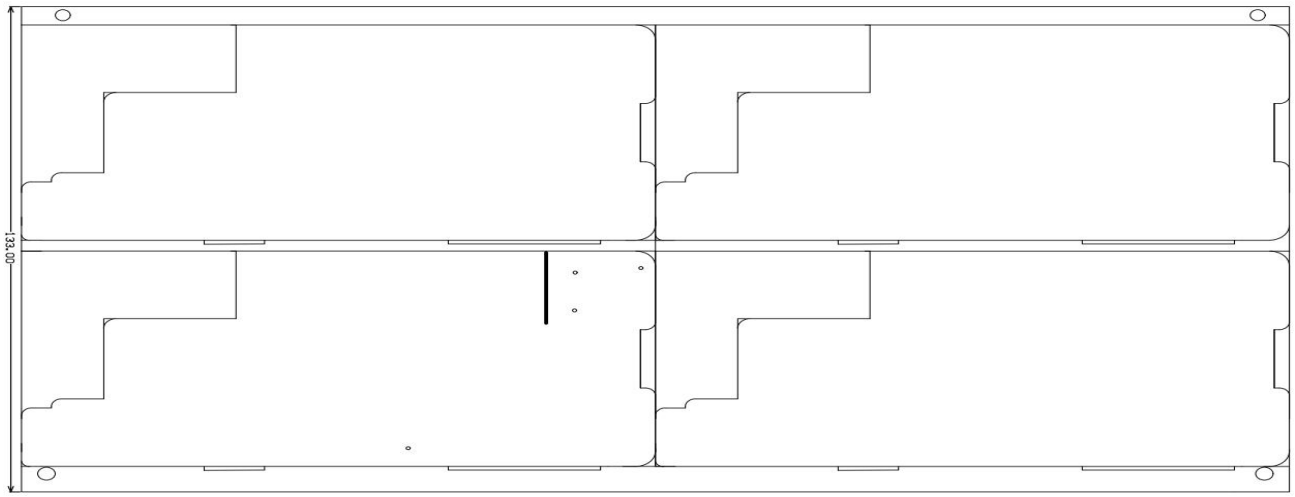

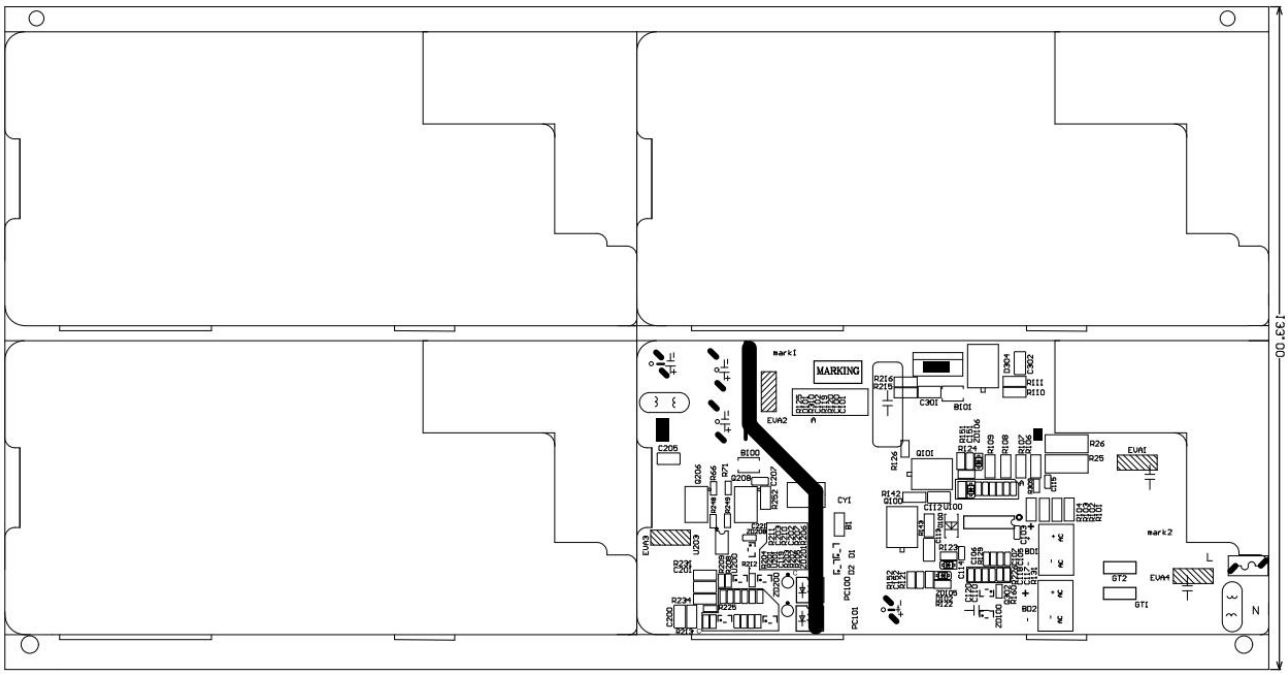

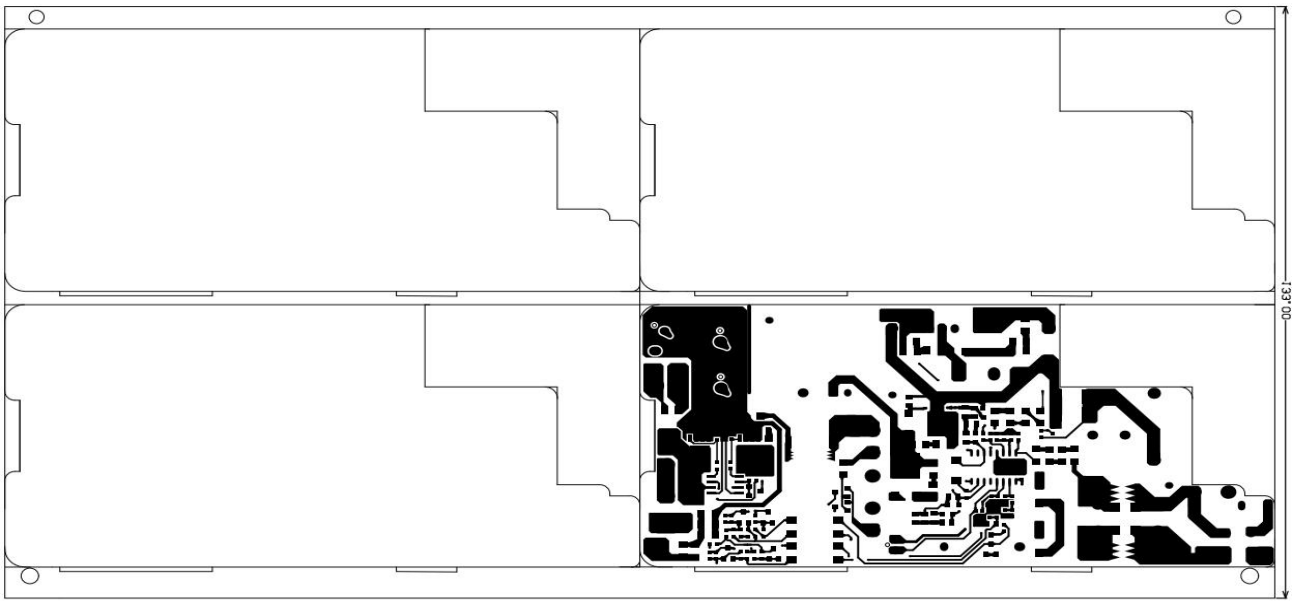

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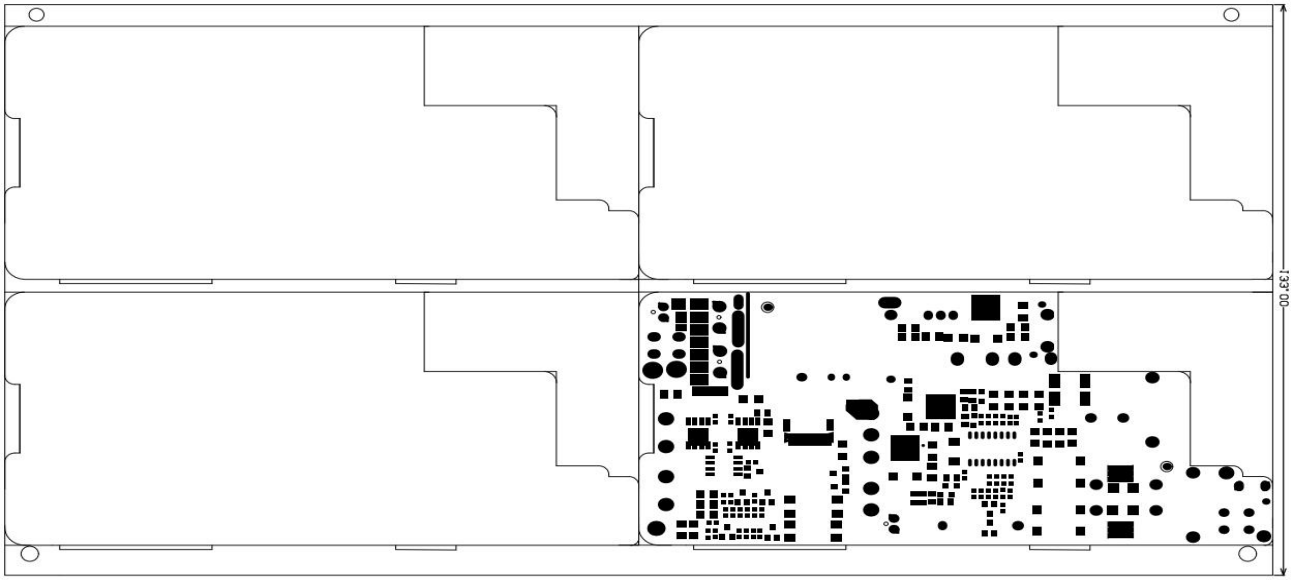

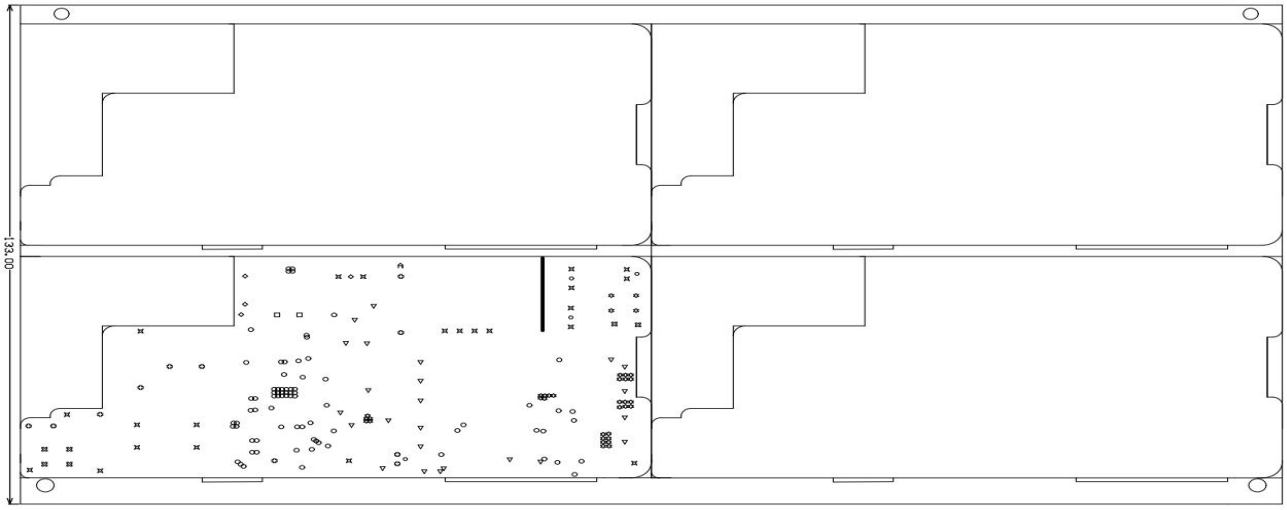

8.8 Bill of materials/材料清单

主件规格	主替关系	组成用量	元件品名	元件规格	品牌
AY180DA-ZF190947M	主	1	LLC IC	TEA8918BAT, SMD, SOP-16	NXP
AY180DA-ZF190947M	主	1	SYNC IC	TEA1995T, SMD, SOP-8	NXP
AY180DA-ZF190947M	主	2	低压二极管	0.2A, 75V, SWITCH DIODE, SMD, SOD-323, IN4148WS	Galaxy
AY180DA-ZF190947M	替	2	低压二极管	0.15A, 75V, SWITCH DIODE, SMD, SOD-323, LMDL914T1G	LRC
AY180DA-ZF190947M	主	1	低压二极管	0.2A, 70V, SWITCH DIODE, SMD, SOT-23, BAV70	Galaxy
AY180DA-ZF190947M	替	1	低压二极管	0.2A, 70V, SWITCH DIODE, SMD, SOT-23, LBAV70LT1G-X	LRC
AY180DA-ZF190947M	主	1	低压二极管	0.15A, 75V, SWITCH DIODE, SMD, SOT-23, BAW56	Galaxy
AY180DA-ZF190947M	替	1	低压二极管	0.2A, 70V, SWITCH DIODE, SMD, SOT-23, BAW56	LRC
AY180DA-ZF190947M	主	1	快速二极管	1A, 600V, FAST DIODE, SMD, SMA, GPP, ES1JGR	PingWei
AY180DA-ZF190947M	替	1	快速二极管	1A, 600V, FAST DIODE, SMD, SMA, GPP, ES1J	Galaxy
AY180DA-ZF190947M	备	1	快速二极管	1A, 600V, FAST DIODE, SMD, SMA, GPP, ES1J	GOOD-ARK
AY180DA-ZF190947M	主	1	快速二极管	8A, 600V, FAST DIODE, SMD, TO-252, LTTH806RDW	LITE-ON
AY180DA-ZF190947M	替	1	快速二极管	8A, 600V, FAST DIODE, SMD, TO-252, USF860XDS	Galaxy
AY180DA-ZF190947M	主	1	PNP 三极管	-0.6A, -60V, TR, SMD, PNP, SOT-23, MMBT2907A	Galaxy
AY180DA-ZF190947M	替	1	PNP 三极管	-0.6A, -60V, TR, SMD, PNP, SOT-23, LMBT2907ALT1G-X	LRC
AY180DA-ZF190947M	备	1	PNP 三极管	-0.6A, -60V, TR, SMD, PNP, SOT-23, MMBT2907A	CJ
AY180DA-ZF190947M	主	1	L-NMOS	400mA, 60V, N-MOSFET, SMD, SOT-23, T2N7002BK,	TOSHIBA

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AY180DA-ZF190947M	替	1	L-NMOS	115mA, 60V, N-MOSFET, SMD, SOT-23, RK7002BMT116	Rohm
AY180DA-ZF190947M	主	2	QFN-L-NMOS	154A, 60V, N-MOSFET, SMD, DFN56, SLM150N06G	MAPLESEMI
AY180DA-ZF190947M	替	2	QFN-L-NMOS	154A, 60V, N-MOSFET, SMD, DFN56, JMSL0602AG-13	JIEJIE
AY180DA-ZF190947M	主	2	桥式整流管	10A, 1000V, BRIDGE, SMD, TT, TT10M	LITE-ON
AY180DA-ZF190947M	主	2	光耦	OPTO COUPLE, SMD, LTV-1009-TP1-G	LITE-ON
AY180DA-ZF190947M	替	2	光耦	OPTO COUPLE, SMD, EL1019	EVERLIGHT
AY180DA-ZF190947M	主	2	基准稳压器	0.4%, 36V, REG, SMD, SOT-23, LE4310CRPA	LITE-ON
AY180DA-ZF190947M	主	1	贴片 Y1 电容	222, 400VAC, M, Y5V, Y1-CAP, SMD	TRX
AY180DA-ZF190947M	主	2	GAN-MOS	20.5A, 700V, GaN-MOSFET, SMD, TO-252, INN700TK190B	Innoscience
AY180DA-ZF190947M	主	1	固态电解	680uF, 25V, 2000Hrs, E-CAP, 8*16	HuaWei
AY180DA-ZF190947M	主	2	固态电解	470uF, 25V, 2000Hrs, E-CAP, 10*13	ChengX
AY180DA-ZF190947M	主	1	保险丝	5A, 250V, 932, Fuse	Bettel
AY180DA-ZF190947M	替	1	保险丝	5A, 250V, 2010, Fuse	Walter
AY180DA-ZF190947M	备	1	保险丝	5A, 250V, 5TE, Fuse	XC
AY180DA-ZF190947M	主	1	普通电解	100uF, 35V, 2000Hrs, E-CAP, 6.3*11	HuaWei
AY180DA-ZF190947M	主	1	COOL-NMOS	75A, 700V, N-COOL MOSFET, TO262, OSG65R125IF	ORIENTAL
AY180DA-ZF190947M	主	1	普通电解	120uF, 450V, 5000Hr, E-CAP, 18*35	HuaWei
AY180DA-ZF190947M	替	1	普通电解	120uF, 450V, 5000Hrs, E-CAP, 18*35	ChengX
AY180DA-ZF190947M	备	1	普通电解	120uF, 450V, 5000Hrs, E-CAP, 18*35.5	CAPXON
AY180DA-ZF190947M	主	1	谐振电容	333, 630V, PH15	NISTRONICS
AY180DA-ZF190947M	替	1	谐振电容	333, 630V, PH15	Faratronic
AY180DA-ZF190947M	主	1	环形电感	T18*10*10, L=10mH	AOYUAN
AY180DA-ZF190947M	主	1	环形电感	T13*7*5, L=100uH±15%	AOYUAN

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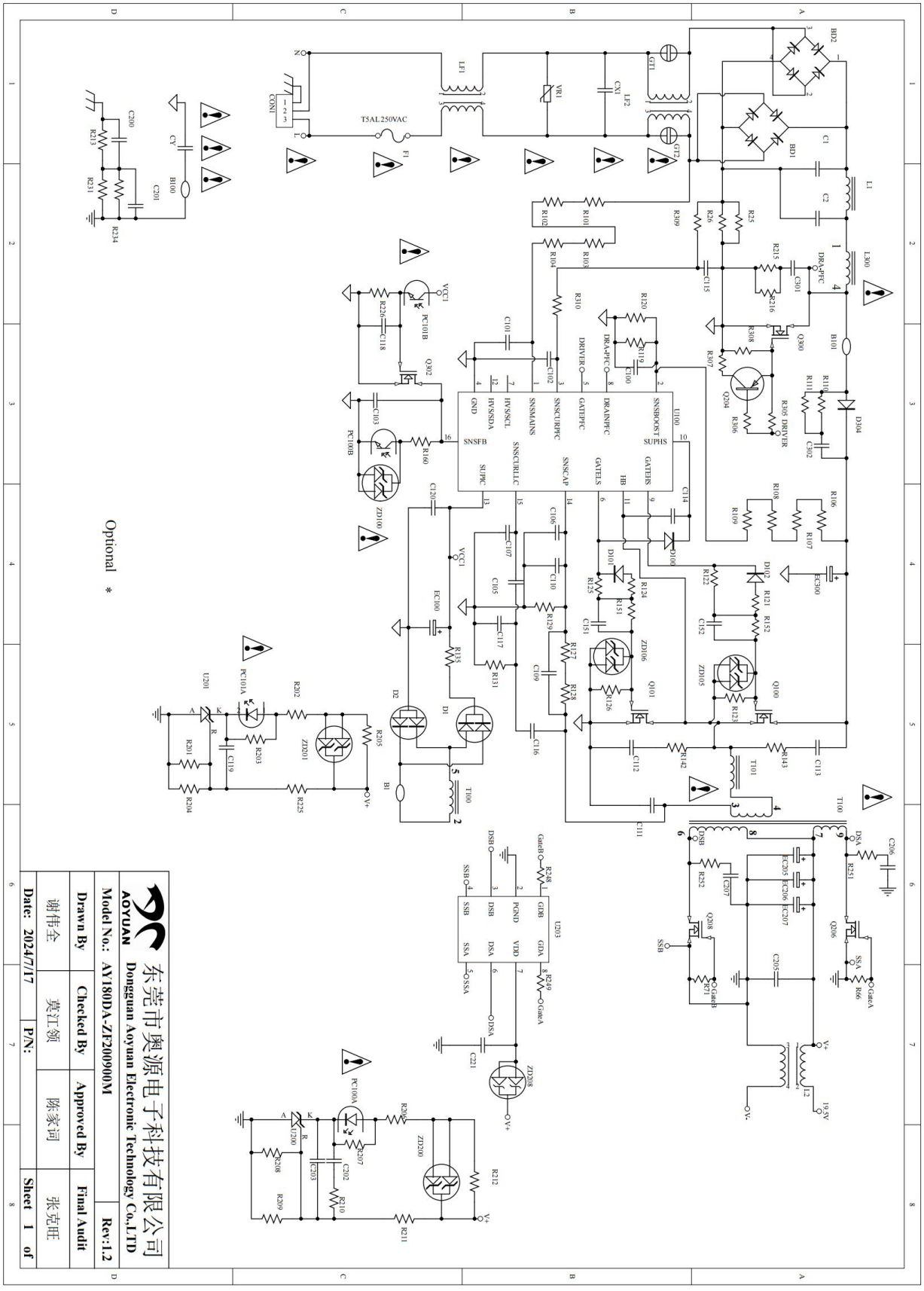
AY180DA-ZF190947M	主	1	环形电感	T9*5*3,L=4uH MIN,N=2	AOYUAN
AY180DA-ZF190947M	主	1	交流插座	3PIN,梅花型,AC-CN(带线,LN2*40*35,PE1*135),Black,DIP-(H),SK03	HCR
AY180DA-ZF190947M	主	1	手动电感	PQ2011,5+0,V,0.1*55C*18Ts,L=50uH,N=1,RevA,AY240DA-ZF200120M,!	AOYUAN
AY180DA-ZF190947M	主	1	手动 PFC 电感	EQ3315,L=150uH	AOYAUN
AY180DA-ZF190947M	主	1	手动变压器	EQ3314.6,L=400uH	AOYAUN
AY180DA-ZF190947M	主	2	薄膜电容	105,450V,PH15	Kingsonic
AY180DA-ZF190947M	替	2	薄膜电容	105,450V,PH15	NISTRONICS
AY180DA-ZF190947M	主	1	压敏电阻	420VAC,560VDC,VR,HEL10D681K	Hongzhi
AY180DA-ZF190947M	替	1	压敏电阻	420VAC,560VDC,VR,TVR10681KSY	TKS
AY180DA-ZF190947M	主	1	环形电感	T9*5*3,L=220uH MIN	AOYUAN
AY180DA-ZF190947M	主	1	X 电容	684,275VAC,PH10	WEIQING
AY180DA-ZF190947M	替	1	X 电容	684,275VAC,PH10	UTX

8.9 电路图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AOYUAN Dongguan Aoyuan Electronic Technology Co.,LTD
Model No.: AY180DA-ZF200900M
Rev:1.2
Drawn By 谢伟全
Checked By 莫江颖
Approved By 陈家词
Final Audit 张克旺
Date: 2024/7/17
P/N:
Sheet 1 of
Optional *