MEGMEET®

SPECIFICATION

产品规格书

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Model No.:　MP123-N

Description:　POWER SUPPLY SPECIFICATION

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Revision History

修订履历

Revision 版本/次	Change Item (修改项次)	Date (修改日期)
1. 0	Initial Release (初版发行)	2010-12-2
1.1	Add two items: 1.Mount Method 2.Package.（增加装配注意事项及包装两项。）	2011-2-16

Content 目录

PART Ⅰ

1. Electrical Specification 电气规格:

1.1 Table 1 Input Electrical Characteristics（输入特性）

Input voltage range 输入电压	90Vac to 264Vac
Normal voltage range 标称输入	100Vac to 240Vac
Frequency range 频率范围	50Hz/60Hz±5%
Max input ac current 最大输入电流	3.0Amax at full load condition
Inrush current (cold start) 浪涌电流	30Atyp peak, 120Vac; 60Atyp peak, 220Vac
Efficiency(full load) 效率	75%min at 110/230Vac input
Leakage Current 泄漏电流	Less Than 0.75mA, 240Vac input
Standby Power Consumption 待机功耗	≦0.5W 240Vac input ,5VSB Output current ≤20mA
Input Fuse 输入保险	T3.15AL/250Vac

1.2 Output Electrical Characteristics（输出特性）

1.2.1 Table 2 Output Voltage & Current Regulation（输出电压电流调整率）

Output Voltage 输出电压	Regulatin 调整率	Min.current 最小电流	Load current range 带载电流范围			Peak current or power 峰值电流或功率
+5VSB	4.75V~5.25V	0.01A	0.3A	0.5A	0.5A	≤85W
+5V	4.75V~5.25V	0.1A	0.5A	1A	1A	
+12V	10.8V~13.2V	0.1 A	0.3A	1A	0.5A	
+24V	20.0V~26.0V	0.1 A	2.3A	1.5A	2A	

Note:* The testing of peak current shall be performed under other dc output load rating and the peak current pulse width within 100ms conditions.峰值电流的测试条件是其它负载为额定负载，且脉宽小于 100 毫秒。

1.2.2 Table 3 DC Output Ripple & Noise. （输出纹波和噪声）

Output Voltage	Ripple & Noise (Max.)
+5VSB	60mVp-p@25℃; 200mVp-p@-10℃
+5V	60mVp-p@25℃; 200mVp-p@-10℃
+12V	150mVp-p@25℃; 300mVp-p@-10℃
+24V	240mVp-p@25℃; 450mVp-p@-10℃

Note: 1)Ripple & Noise test: Ripple & Noise bandwidth is set to 20MHz.
纹波和噪声测试：纹波和噪音带宽设置在 20 兆赫兹。
2)Use a 0.1uF ceramic capacitor in parallel with a 10uF electrolytic capacitor at output connector terminals for ripple & noise measurements.
输出端并联一个 0.1uF 的陶瓷电容和一个 10uF 的电解电容来测试纹波和噪声。

1.2.3 Output Transient Response. （输出动态响应）

Table 4. Test condition.测试条件

Voltage Tolerance Limit	Slew Rate	Load Change
5V/±5%	0.2A/uS	Min. to 50% load and 50% to Max load
12V±10%	0.2A/uS	Min. load to Max load
24V±10%	0.2A/uS	Min. load to Max load

Note: Load change repetition rate: 50Hz to 1000Hz . 跳变负载频率:50~1000Hz.

1.2.4 Table 5 Hold-Up Time（输出保持时间）

Output Voltage	120Vac input	220Vac input
+5VSB	≥5 mS	≥10mS
+5V	≥5 mS	≥10mS
+12V	≥5 mS	≥10mS
+24V	≥5 mS	≥10mS

Note: All of dc output at full load. 所有输出带满载。

1.2.5 Table 6 DC Output Overshoot During Turn-On & Turn-Off（输出超调）

Output Channel	Output(V)	Over shoot voltage(V)超调电压	
		Turn on 开机	Turn off 关机
+5VSB	+5VSB	10%	10%
+5V	+5V	10%	10%
+12V	+ 12V	10%	10%
+24V	+ 24V	10%	10%

Note: All of dc output current from Min. to Max. 测试时负载范围：最小到最大。

1.2.6 Table 7 DC output voltage rise time（输出上升时间）

Output Voltage	120Vac input &Full Load	220Vac input &Full Load
+5VSB	≤100 mS	≤100 mS
+5V	≤100 mS	≤100 mS
+12V	≤100 mS	≤100 mS
+24V	≤100 mS	≤100 mS

Note: The rise time measured is when the output voltages rise from10% to 90% of specified

output voltage Vout observed on the channel waveform.
上升时间为输出电压从 10%上升到 90%的时间。

1.3 Protection（保护功能）

1.3.1 Table 8 DC Output Over current Protection（输出过流保护）

Output Voltage	Over Current	Comments
+5VSB	≥1Atyp*	Hiccup 尝试重复启动
+5V	≥2.5Atyp*	Hiccup 尝试重复启动
+12V	≥2Atyp*	Hiccup 尝试重复启动
+24V	≥2.5Atyp*	Hiccup 尝试重复启动

N

Note:The over current protection should be tested at other load rating.
过流保护测试是在其它额定负载时测试。

1.3.2 Table 9 DC Output Short Circuit Protection（输出短路保护）

Output Voltage	Comments
+5VSB	Hiccup 尝试重复启动
+5V	Hiccup 尝试重复启动
+12V	Hiccup 尝试重复启动

Note: The Short Circuit protection should be tested at other load rating.
短路保护测试是在其它额定负载时测试。

1.3.3 Reset After Shutdown.（保护功能复位）

The power supply will restart after the fault removed.
故障去除后，电源即可恢复。

2. Isolation（绝缘性能）

2.1 Table 10 （绝缘阻抗）

Input To Output	DC500V 40MΩmin (at room temperature)

2.2 Table 11 （绝缘耐压）

Input To Output	3600Vac 50Hz 1minute ≤10mA

Note: Open FG and Output return. 交流地和输出负极要断开。

3. Safety （安全规格）

The power supply shall comply with the following criterion:
电源安全性满足下列标准:

1) UL60950/UL60065
2) EN60950/EN60065
3) GB4943-1995/GB8898-2001

4. EMC （电磁兼容性）

4.1 EMI （电磁干扰）

The power supply shall comply with the following criterion:
电源电磁干扰满足下列标准：

1) Conduction Emission : （传导干扰度）
*EN55013, CLASS B
*GB13837-2003, CLASS B
*CISPR13:2001

2) Radiated Emission : （辐射干扰度）
*EN55013, CLASS B
*GB13837-2003, CLASS B
*CISPR13:2001

Note：The power board should be assembled in customer product to test for passing the above criterion.需配合用户电路整机通过上述标准。

4.2 EMS （电磁抗扰）

The power supply shall comply with the following criterion:
电源电磁抗扰满足下列标准：

1) ESD （静电抗扰度）
*GB17626.2-1998/IEC61000-4-2 Level 3

2) EFT （脉冲群抗扰度）
*GB17626.4-1998/IEC61000-4-4 Level 3

3) SURGE （雷击浪涌）
*GB17626.5-1998/IEC61000-4-5 Level 3

4） DIP (电压跌落)
*GB17626.11-1998/IEC61000-4-11 Class B/C

5. Environmental Requirement （工作环境）

5.1 Temperature （环境温度）
* Operating 工作温度: -10℃ to +40℃.
* Storage 存储温度: -20℃ to +80℃.

5.2 Humidity （环境湿度）
* Operating 工作: From 10%to90% relative humidity (non-condensing).
* Storage 存储: From 5 to 95% relative humidity (non-condensing).

5.3 Altitude （海拔高度）
* Operating: to10,000 ft.

* Storage: to 20,000ft.

5.4 Cooling Method （冷却方式）

* Ventilation cooling . 风道自然冷却

5.5 Vibration （振动耐受）

* 10-55Hz, 19.6m/s²(2G), 20minutes each along X, Y and Z axis.

5.6 Shock（冲击耐受）

* 49m/s²(5G),11ms, once each X, Y and Z axis.

6. Dimension （物理尺寸）

* 180mm X 180mm X12mm (长 L *宽 W * 高 H).

7. Weight （重量） 260g

8. Pin Connection (连接器脚位定义)

Table 12 Pin-CON2 Connection And Function

NO.	Pin Connection	Function
1. 2. 9. 10. 11	GND	CURRENT RETURN
3. 4. 7. 8	+5V	CURRENT OUTPUT
5	PS-ON	POWER ON/OFF
6	+5VSB	STANDBY OUTPUT
12. 13	+12V	CURRENT OUTPUT

Note: CON2 -- VH CONNECTION, TYPE : pitch2.5mm
PIN5(PS-ON) VOLTAGE IS HIGH, >=1.5V, POWER ON; OTHERWISE,POWER OFF

Table 13 Pin-CON4 Connection And Function

NO.	Pin Connection	Function
1. 2. 3. 4	+24V	CURRENT OUTPUT
5. 6. 7. 8	GND	CURRENT RETURN

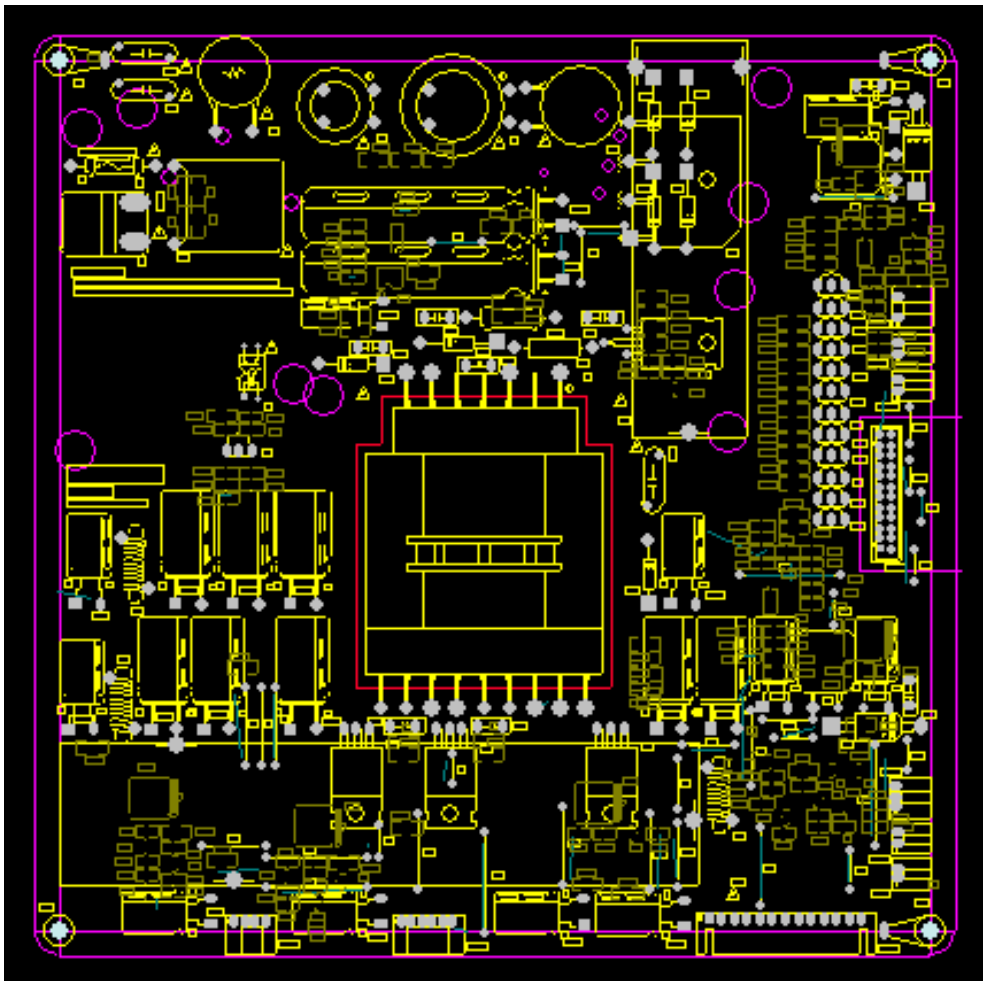
Note: CON4 -- VH CONNEETION, TYPE : pitch2.5mm

Table 14 Pin-CON1 Connection And Function

NO.	Pin Connection	Function
①	AC-L	AC INPUT LINE
②	NC	NC
③	AC-N	AC INPUT NUTURE

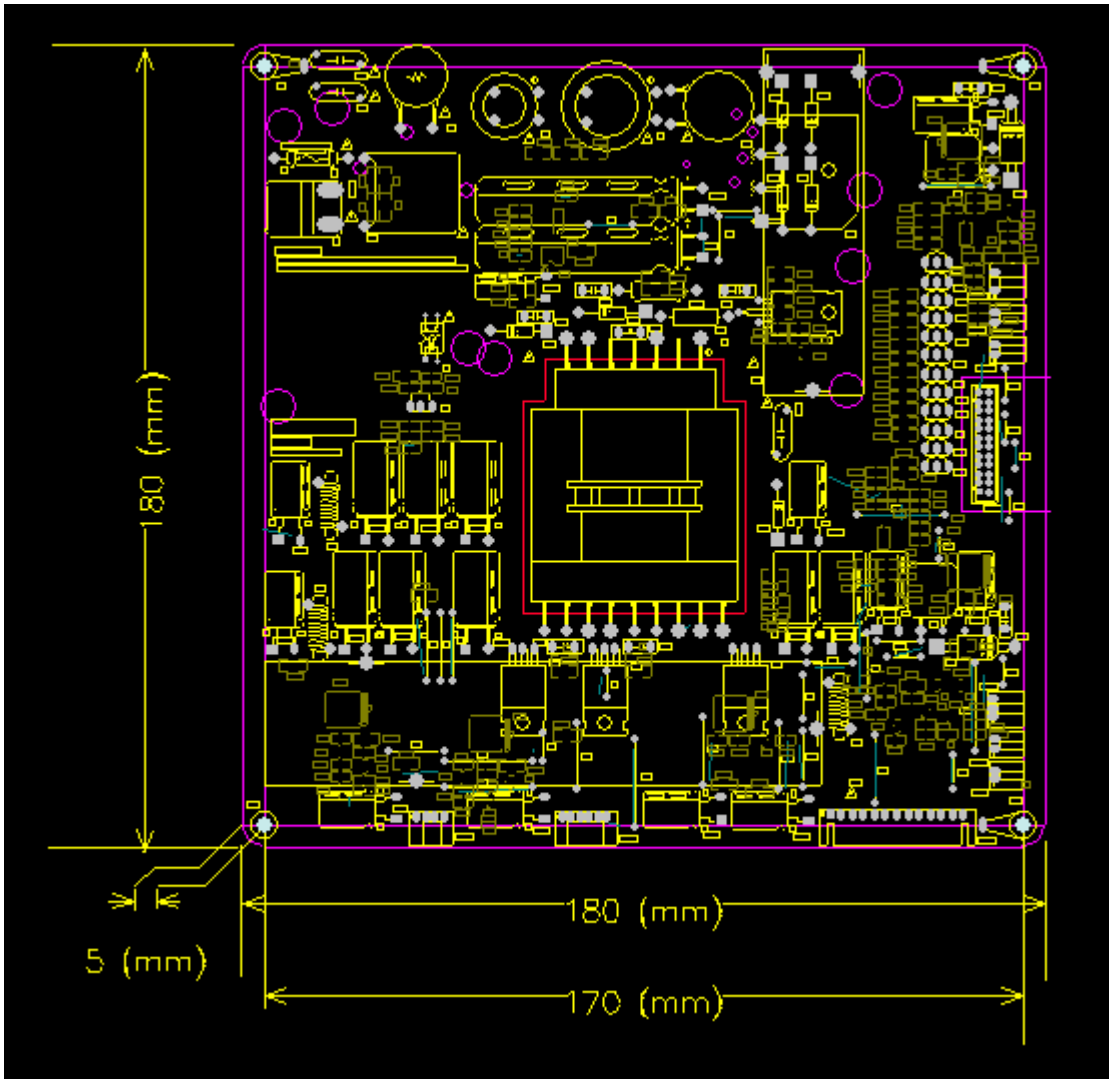
Note: CON1 -- VH CONNEETION, TYPE : pitch3.96mm

Fig.8.1 Pin Connection (Top View)



Note: The image shown here is indicative only. If there is inconsistency between the image and the actual product, the actual product shall govern.（ 此图片仅供参考。若图片与实物有所不同，则以实物为准。）

9. Power Supply Mounting （安装尺寸）



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PART Ⅲ

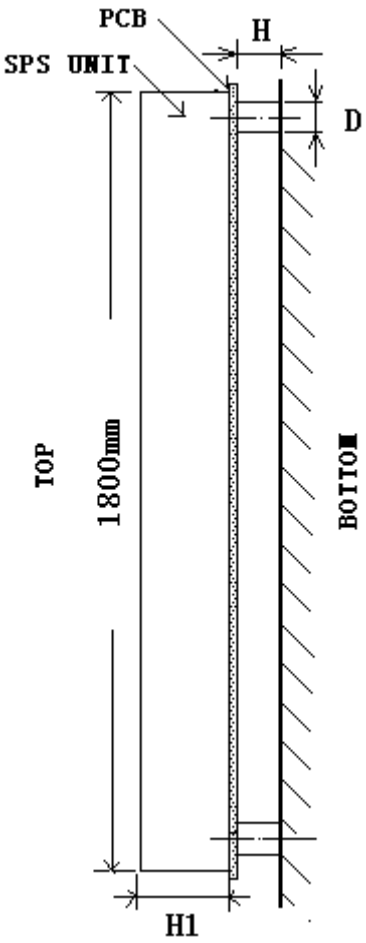
1. Mount Method（ 装配注意事项 ）

Table 14

D	≤5.5mm
H	≥3.0mm
	≤6.0mm (1*)
H1	≤12mm (2*)

Note: 1*. Mount the unit to the mounting board using M3 screw. The maximum value of the tightening torque is 0.4N-M. The insertion depth of the screw should be less 6.0mm.（用 M3 螺钉安装此电源板。最大力矩为 0.4N-M，螺钉安装深度需小于 6.0mm。）

2*. Add 185mm×185mm× 0.25mm (L*W*H) Mylar under PCB bottom.（在电源板底部垫一张 185mm×185mm× 0.25mm 麦拉片。）



2. Package (包装)

2. 1 Pack the SPS using 280mm*280mm anti-static air bubble bag.(使用 280mm*280mm 防静电气泡袋包装此电源。)

2.2 The size of packing case:445mm*445mm*205mm(L*W*H).(包装箱尺寸：445mm*445mm*205mm(L*W*H))