MEGMEET®

SPECIFICATION

产品规格书

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Model No.:　MLT666TM

Description: LCD-TV 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)	2010-10-28
1.1	更新安装尺寸、更新包装箱尺寸	2010-11-07

Content 目录

1. Electrical Specification 电气规格

1.1 Input Electrical Characteristics（输入特性）

Table1 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	3Amax at full load condition
Inrush current (cold start) /浪涌电流	50Atyp peak, 120Vac;100Atyp peak, 220Vac
Efficiency(full load) /效率	81min at 100Vac; 84%min at 220Vac
Leakage Current /泄漏电流	Less Than 0.5mA, 230Vac input
Standby Power Consumption /待机功耗	≦1W 240Vac input ,Output current≤50mA
Input Fuse /输入保险	T5AH/250Vac

1.2 Output Electrical Characteristics（输出特性）

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

Table 2 Output Voltage ,Current & Regulation.（输出调整率）

Output Voltage 输出电压	Regulation 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
+V1(+24V)	+V1±5%	0.2 A	0.2A-5A			≤6.0A
+V2(+12V)	+V2±10%	0.3 A	1.2A	2A	3A	≤45W
+5.0V	+5.0V±5%	0.1 A	4A	2.5A	1A	
+5.0V(STB)	+5.0V±5%	0.05 A	1A	1A	0.5A	

Note:* The peak current or power should be test at other of dc output at Rated load ,And the peak current pulse width within 100ms 峰值电流或功率的测试是在其它额定负载时测试，且脉宽小于 100 毫秒。

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

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

Output Voltage	Ripple & Noise (Max.)
+V1(+24V)	240mVp-p@25℃; 350mVp-p@-10℃
+V2(+12V)	120mVp-p@25℃; 200mVp-p@-10℃
+5.0V	50mVp-p@25℃; 200mVp-p@-10℃;
+5.0V(STB)	60mVp-p@25℃; 200mVp-p@-10℃; 150mVpp when STB

Note: 1) Measurements shall be made with an oscilloscope with 20MHz bandwidth./示波器须设

置在 20 兆赫兹带宽

2) Outputs shall be bypassed at the connector with a 0.1uF ceramic capacitor and a10uF electrolytic capacitor to simulate system loading.
输出须并联 0.1uF 的陶瓷电容和 10uF 的电解电容来模拟负载

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
5.0V/5.0VSB±5% 24V/12V/±10%	0.2A/uS	Min. to 50% load and 50% to Max load
All output±10%	0.2A/uS	Min. load to Max load

Note: Transient response measurements shall be made with a load changing repetition rate of 50Hz to 10kHz.以 50~10KHz 的频率跳变负载来测试。

1.2.4 Hold-Up Time（输出保持时间）

Table 5 Hold-Up Time（输出保持时间）

Output Voltage	120Vac input	220Vac input
+V1(+24V)	≥10 mS	≥10 mS
+V2(+12V)	≥10 mS	≥10 mS
+5.0V	≥10mS	≥10 mS
+5.0V(STB)	≥10 mS	≥10 mS

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

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

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
+V1(+24V)	+ 24V	5%	5%
+V2(+12V)	+ 12V	10%	10%
+5.0V	+5.0V	5%	5%
+5.0V(STB)	+5.0V	5%	5%

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 DC output voltage rise time（输出上升时间）

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

Output Voltage	120Vac input &Full Load	220Vac input &Full Load
+V1(+24V)	≤100mS	≤100mS
+V2(+12V)	≤100 mS	≤100 mS
+5.0V	≤100mS	≤100mS
+5.0V(STB)	≤60 mS	≤50 mS

Note: The output voltages shall rise from10% to 90% of their output voltage.
输出从 10%上升到 90%的时间

1.3 Remote On/Off Control（遥控功能）

The power supply DC outputs (without +5.0Vsb) shall be enable with an active-high TTL(≥2.5V/2.0mA)-compatible signal(Ps-on). The +5.0Vsb is on whenever the AC power is present.

除 5.0Vsb 外，其余输出受控于一个 TTL 电平兼容的信号（Ps-on≥2.5V/2.0mA），5.0Vsb 上电就存在。

When Ps-on is pulled to TTL high, the DC outputs are to be enabled.
Ps-on 高电平，打开输出

When Ps-on is pulled to TTL low or open circuit, the DC outputs are to be disabled.
Ps-on 低电平，关闭输出

Table 8

Ps-on Signal	Comments	Outputs
Ps-on- high	≥2.5V&2.0mA (source)	Output
Ps-on- low	≤0.5V	X
Ps-on-open	--	X

1.4 Protection（保护功能）

1.4.1 DC output Over Voltage Protection. （输出过压保护）

Table 9 DC output Over Voltage Protection. （输出过压保护）

Output Voltage	TYP. Over Voltage	Comments
+V1(+24V)	28V	Hiccup 尝试重复启动

Note: The power supply shall be test at max AC voltage (264Vac) and min load or no load.
应该在最大交流输入电压 264 伏和轻载、空载下测试。

1.4.2 DC Output Over current Protection. （输出过流保护）

Table 10 DC Output Over current Protection. （输出过流保护）

Output Voltage	Over Current	Comments
+V1(+24V)	≥6Atyp*	Power supply latch into shutdown state 输出锁机
+V2(+12V)	≥2Atyp*	Hiccup 尝试重复启动
+5V	≥3.5Atyp*	Hiccup 尝试重复启动
+5.0VSTB	≥1.5Atyp*	Hiccup 尝试重复启动

Note:* The over current protection should be test at other of dc output at Rated load

过流保护测试是在其它额定负载时测试.

1.4.3 DC Output Short Circuit Protection. （输出短路保护）

Table 11 DC Output Short Circuit Protection. （输出短路保护）

Output Voltage	Comments
+V1(+24V)	Shutdown 关机
+V2(+12V)	Hiccup 尝试重复启动
+5V	Hiccup 尝试重复启动
+5.0V(STB)	Hiccup 尝试重复启动

Note:* The Short Circuit protection should be test at other of dc output at Rated load
短路保护测试是在其它额定负载时测试.

1.4.4 Reset After Shutdown.（保护功能复位）

Recycle the ps-on signal, the power supply will restart after the fault removed.
故障去除后，关掉 Ps-on 信号再打开，电源即可恢复。

2. Isolation（绝缘性能）

2.1 绝缘阻抗

Table 12 （绝缘阻抗）

Input To Output	DC500V 8MΩmin (at room temperature)

2.2 绝缘耐压

Table 13（绝缘耐压）

Input To Output	3000Vac 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/EN55022, CLASS B
*GB13837-2003, CLASS B
*CISPR13:2001/FCC PART15 CLASS B

2) Radiated Emission： （辐射干扰度）

*EN55013/EN55022, CLASS B
*GB13837-2003, CLASS B
*CISPR13:2001/FCC PART15 CLASS B

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 Lever 3

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

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

*192 mm X 130mm X 30mm(元件面高) (长 L *宽 W * 高 H).

7. Weight （重量）

约 500 **g**

8. Pin Connection (连接器脚位定义)

Table 14 CON2(13Pin) Connection And Function

NO.	Pin Connection	Function
1	GND	RETURN
2	GND	RETURN
3	+5V	+5V DC OUTPUT
4	+5V	+5V DC OUTPUT
5	Ps-on	Ps-on control
6	+5VSB	+5VSB OUTPUT
7	+5V	+5V DC OUTPUT
8	+5V	+5V DC OUTPUT
9	GND	RETURN
10	GND	RETURN
11	GND	RETURN
12	+12V	+12V OUTPUT
13	+12V	+12V OUTPUT

Note: DOUBLE ROW CONNEETION, pitch:2.5mm

Table 15 Pin-CON4 Connection And Function

NO.	Pin Connection	Function
5. 6. 7. 8	GND	+24VDC RETURN
1. 2. 3. 4	+V1	+24VDC OUTPUT

Note: CON103 -- XH CONNEETION, TYPE : pitch2.5mm

Table 16 Pin-CON3 Connection And Function

NO.	Pin Connection	Function
3. 4	GND	+24VDC RETURN
1. 2	Vaudio	+24VDC OUTPUT

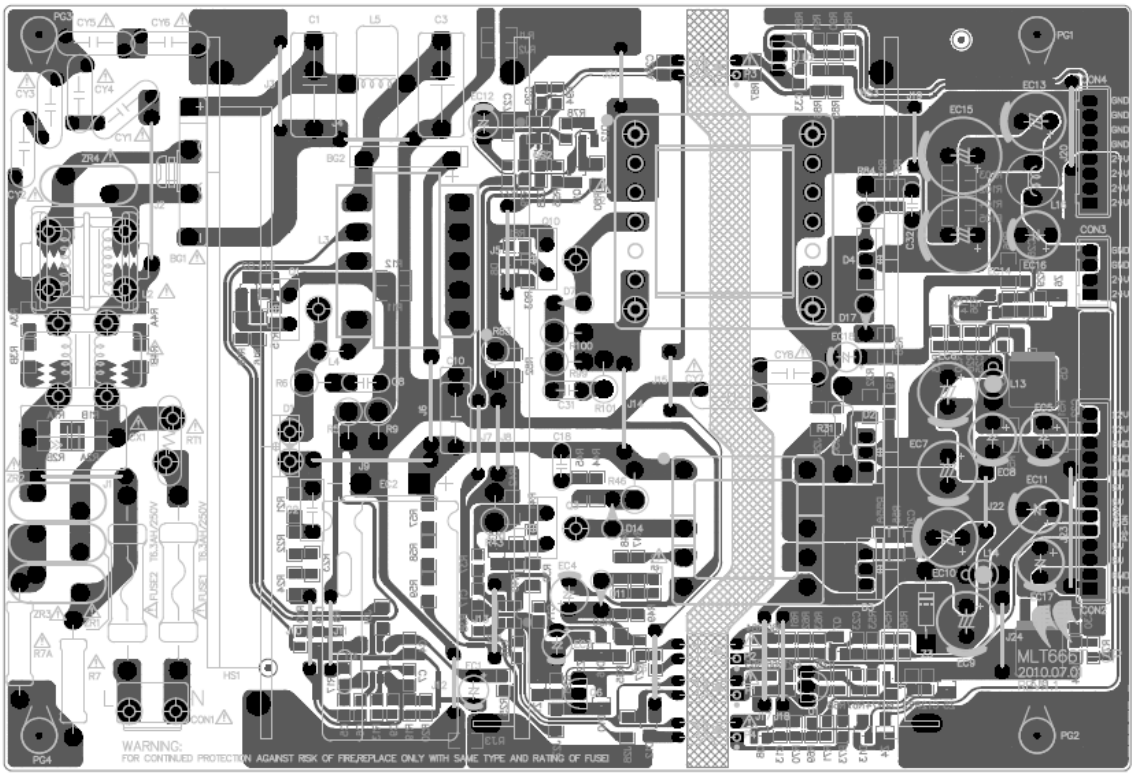
Note: CON103 -- XH CONNEETION, TYPE : pitch2.5mm

Table17 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)



9. Power Supply Mounting （安装尺寸）

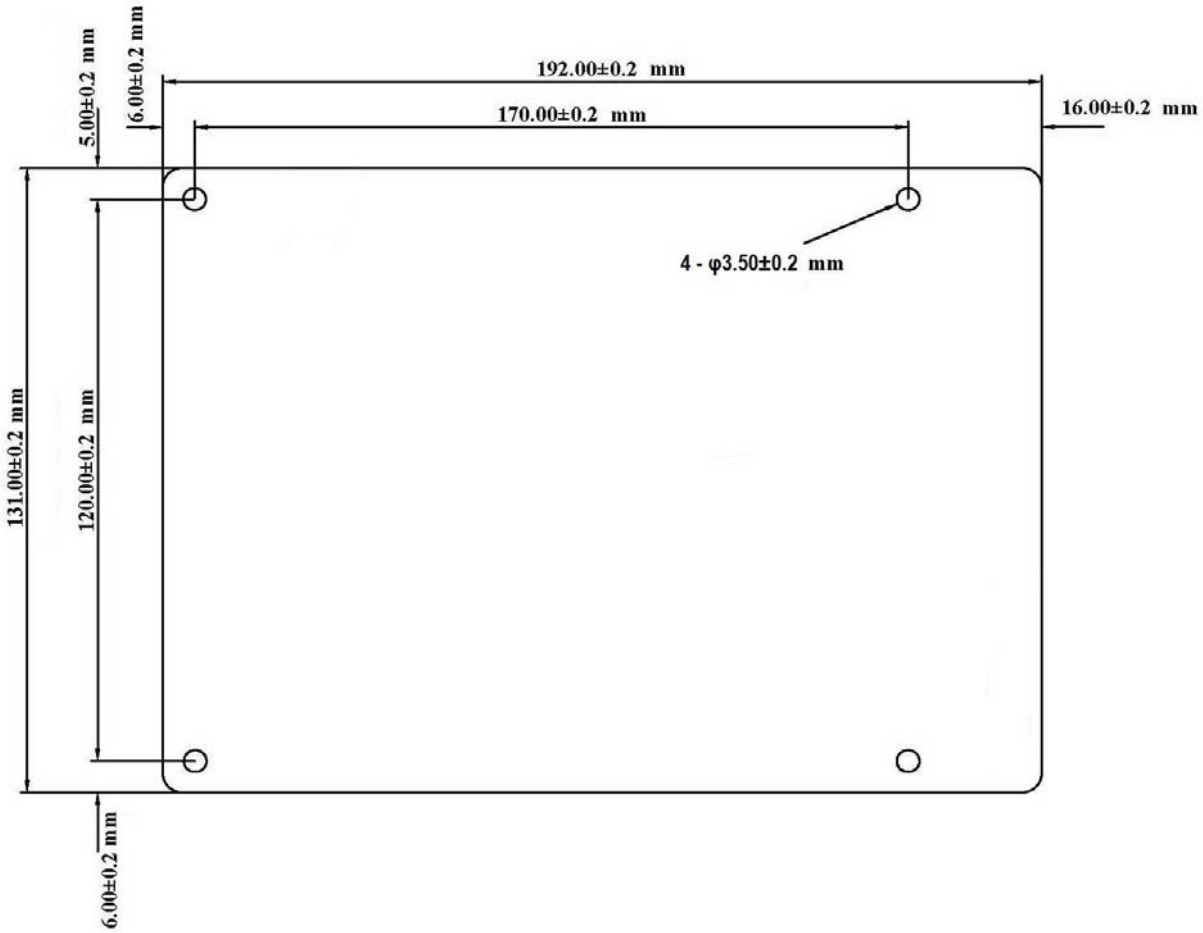


Fig 9.1 Power Supply Mounting Dimension (安装尺寸)

电源为横装结构，散热器应有良好自然通风。散热器离外壳金属板间距应大于 5mm,不足应加绝缘处理。

10. Package （包装）