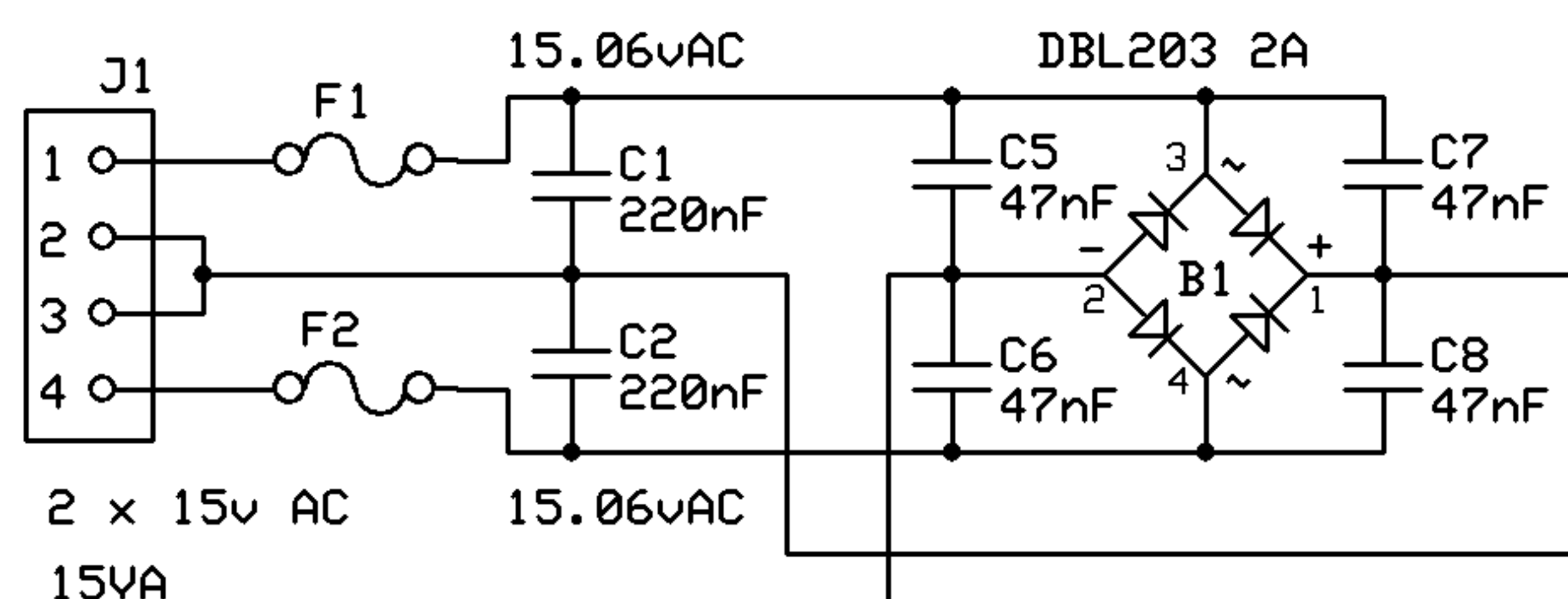


230v fuse: 1A

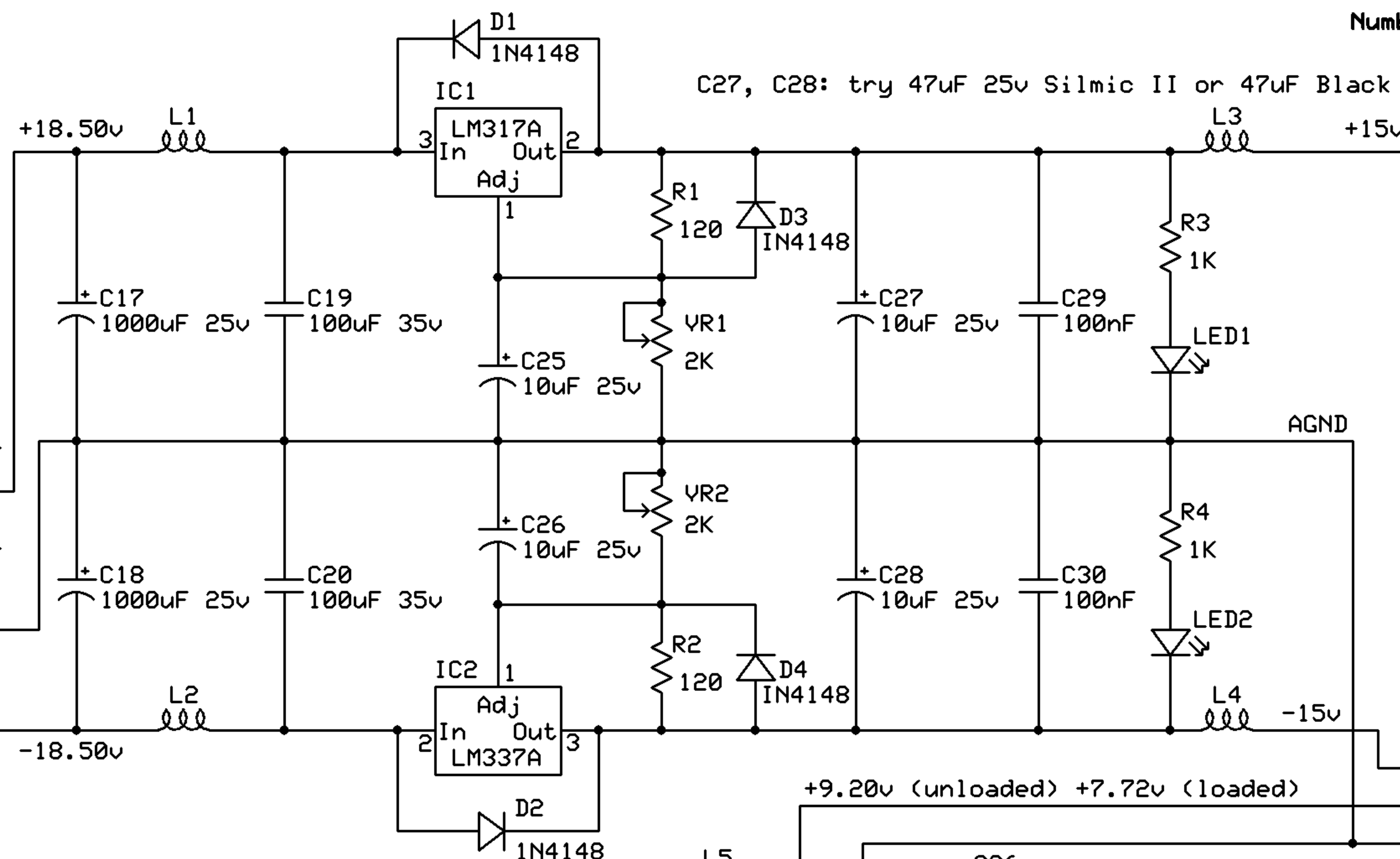
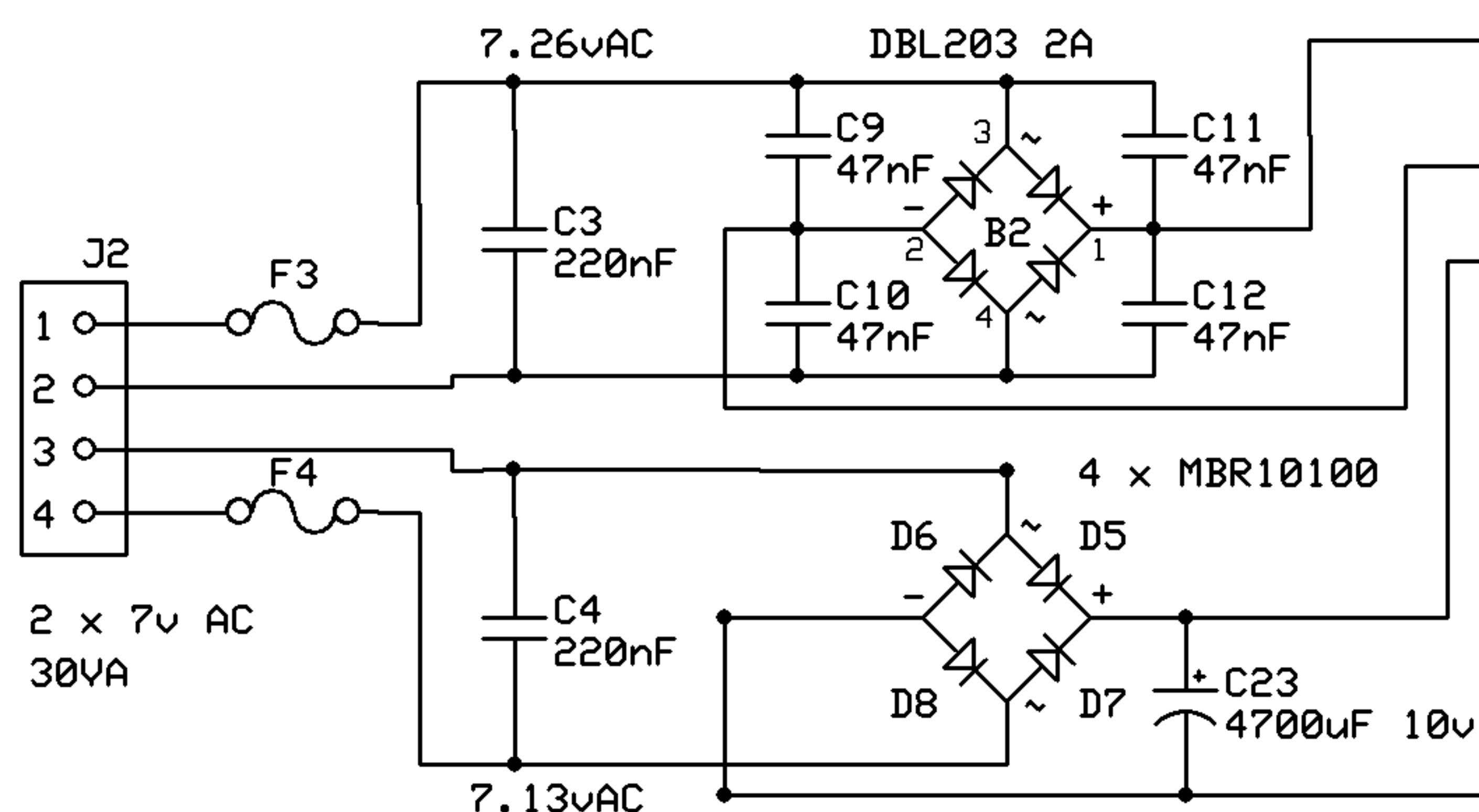
Add a big tube bead ferrite around the 230v AC cables.

Numbers are Farnell references

**IMPORTANT:** This power supply produce some heats.  
The box need holes vent top of the PSU.



Voltage tested with 228v AC at input.



Resistors: type MRS16S  
R1, R2: 120R 1/4W  
R3, R4: 1K 1/4W  
R5: 21K 1% 1/4W 100ppm

IC3: PTN78000WAH  
Farnell: 1295923  
Radiospares: 545-7811  
Digi-Key: 296-20506-ND

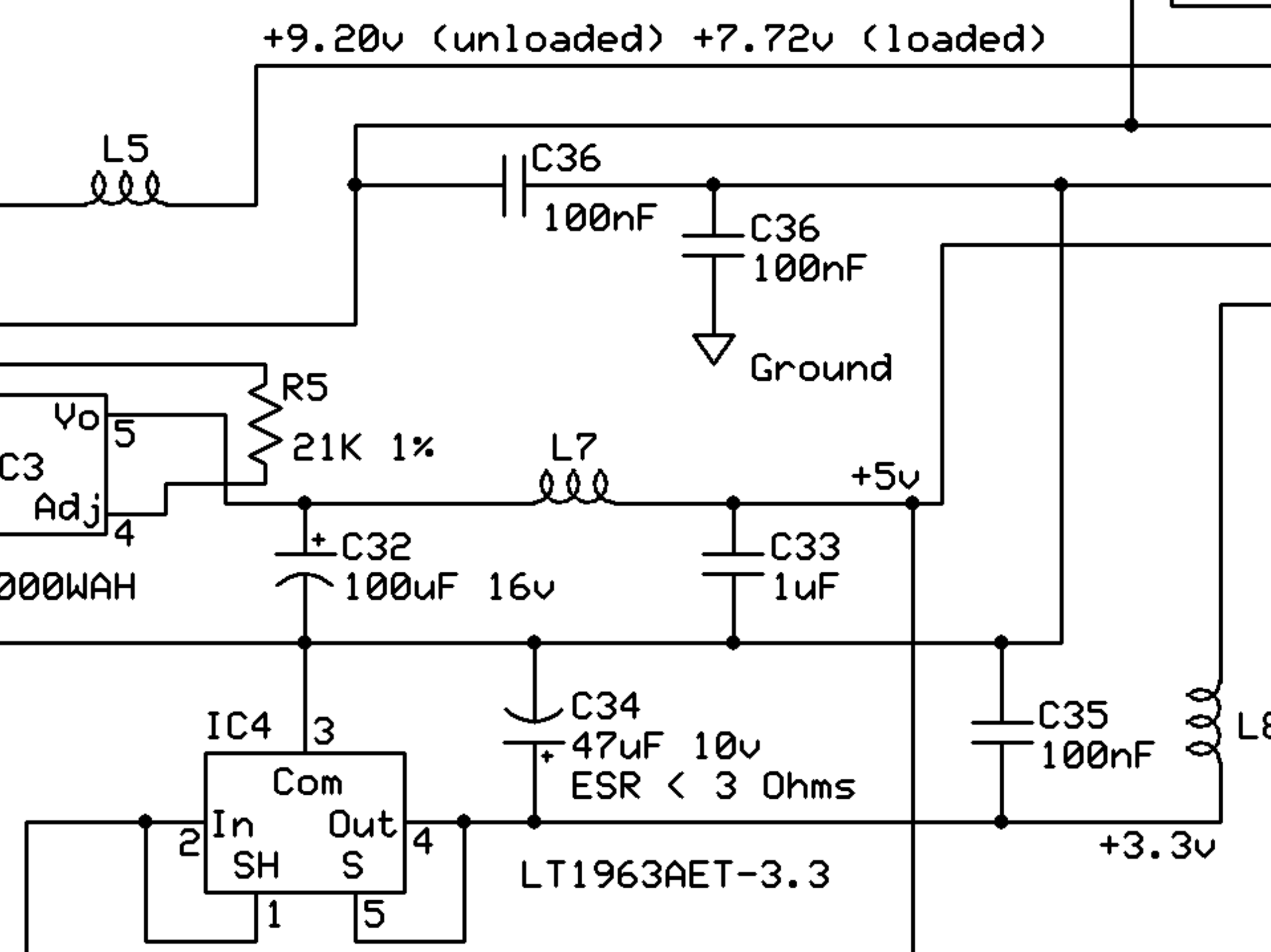
Original  
values for DEQ

J3		
1	+15v	- 87mA
2	-15v	- 84mA
3	+9v	- 378mA
4	AGND	- 330mA
5	DGND	- 946mA
6	+5v	- 554mA
7	+3.3v	- 392mA

To DSP

9v is to fit an LM7805  
on the DSP board.  
(analog)

C31: try 4.7uF Kemet C1206  
C34: try 68uF Sanyo 10SH68M



Bridge B1, B2 : bridge DBL203 2A 1299294 (DIL-4)  
D1, D2, D3, D4: 1N4148 9843680 (DO-35)  
D5, D6, D7, D8: MBR10100 9549447 (TO220AC)  
VR: 15 turns cermet 2K T63YB 1141446  
F1, F2: Polyswitch RXE025 0.25A 1175860 (7.4x7.6x5.1)  
F3: Polyswitch RXE090 0.90A 1175869 (11.7x7.6x5.1)  
F4: Polyswitch MFR250 2.5A 9350500 (11.7x7.6x5.1)  
J1, J2: 4 poles connector 3089058 (PCM 5)  
J3: 7 poles connector 3089083 (PCM 5)  
L1 to L8: 2 x tube bead 3x4mm per inductor 242500  
C31: 2.2uF 16v Kemet 9227911 (SMD 1206)

C24, C33: 1uF 25v Kemet 9227865 (SMD 1206)  
C23: Rubycon ZLH 4700uF 10v 8126224  
C21: Rubycon ZLH 2200uF 25v 8126445  
C17, C18: Rubycon ZLH 1000uF 25v 8126437 (23x10x5)  
C19, C20: Rubycon ZLH 100uF 35v 8126658 (11x6.3x2.5)  
C5 to C16: 47nF 50v multilayer ceramic X7R 1200402 (PCM 2.5)  
C1, C2, C3, C4: polyster AVX 220nF 63v 1189290 (PCM 5)  
C25, C26, C27, C28 Tantalum 10uF 25v 1100479 (PCM 5)  
C34: Tantalum 47uF 10v 1100460 (PCM 5)  
C22, C29, C30: Wima MKS2 100nF 63v 1006031 (PCM 5)  
Others: 100nF 50v multilayer ceramic X7R 1200403 (PCM 2.5)

C32: 100uF 16v Sanyo OSCON SH 9189343 (10.5x8x3.5)  
Socket for IC3: 5 x 1mm Harwin socket 150501  
LEDs: small red led or what you want.  
For IC4: heat sink for T0-220 8 C/W SK409-25 4621293  
Optional: Fan PAPS 255M 5v (25mm x 8mm)

## DIY DEQ2496 PSU

for personnal use

Stef

Rev 0.4.3  
8/10/2007

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