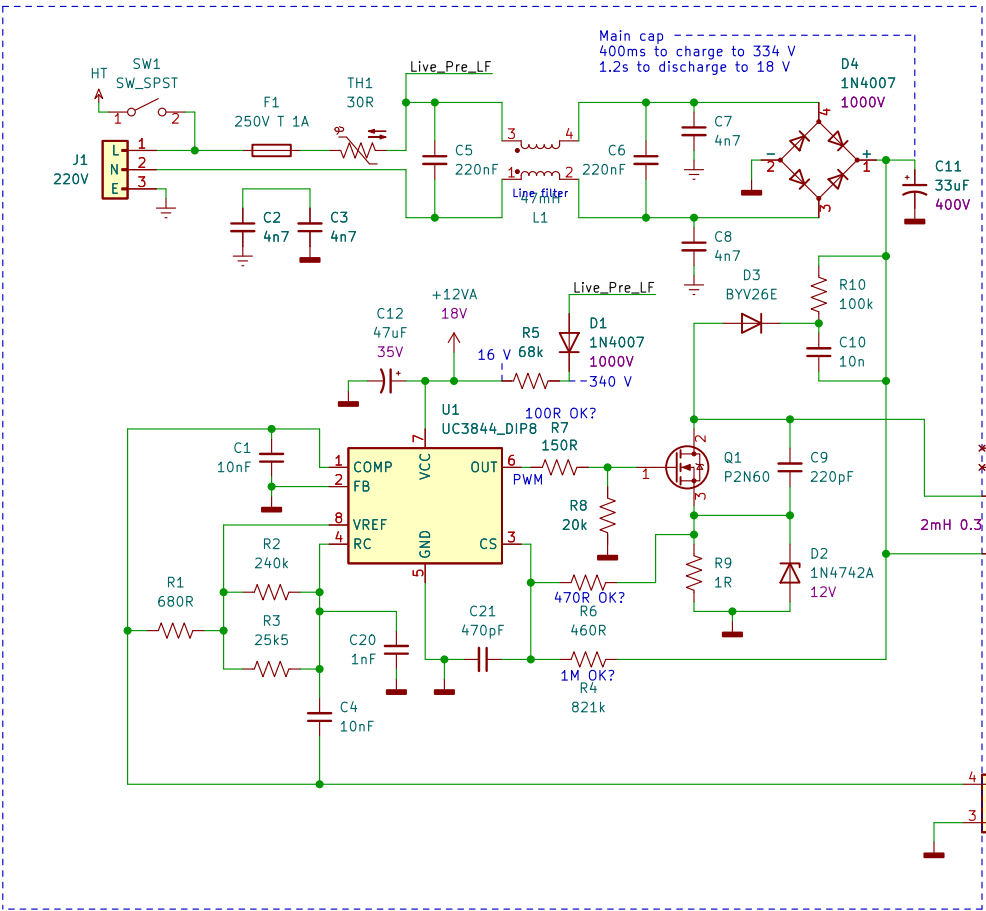


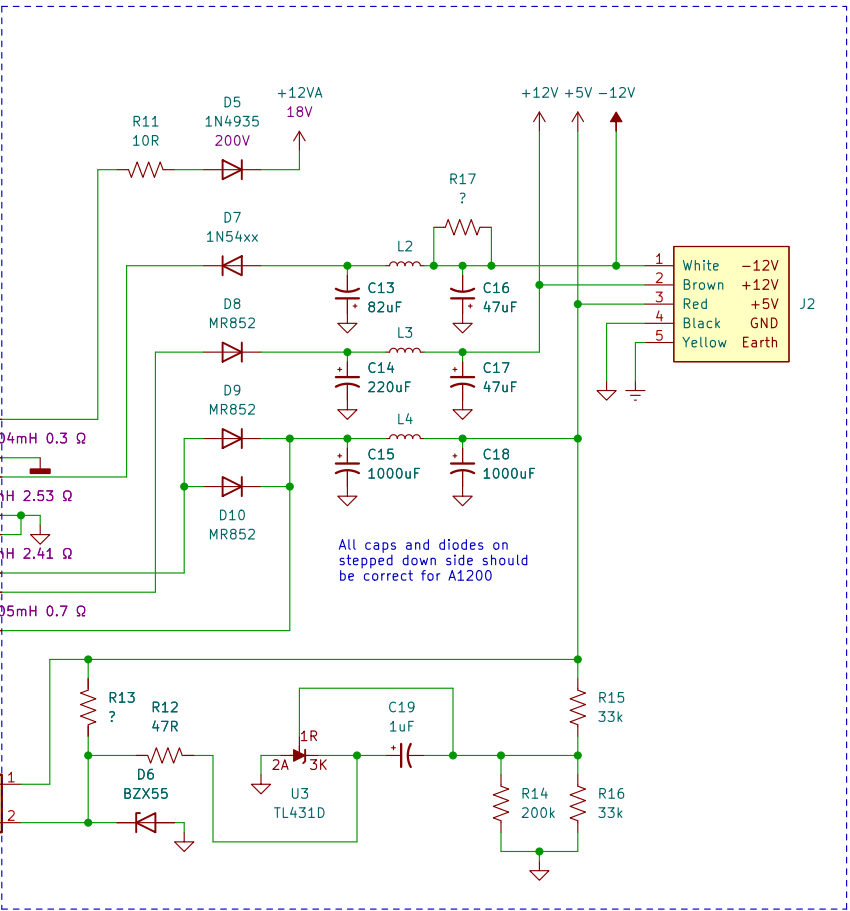
!WIP!

Based on the A500 PSU schematic by Greg McCarthy (<https://github.com/StormTrooper>)  
Some part values will still be for A500 PSU, so always double check before ordering

AC/DC line voltage



DC stepped down



Test of known good working PSU  
AC current measurements under load  
Tested on 240 VAC with dim bulb limiter  
Ticking sound under no load is normal

5 VDC	12 VDC	240 VAC
0.00 A 4.90 V	0 mA 16.00 V	31 mA
0.00 A 5.10 V	70 mA 10.96 V	37 mA
1.00 A 4.99 V	70 mA 11.89 V	68 mA
1.45 A 4.93 V	70 mA 12.10 V	97 mA
3.00 A 4.70 V	70 mA 12.60 V	180 mA

Test of known good working UC3844 PWM IC  
Pin 6 (OUT)  
Load on 5V output

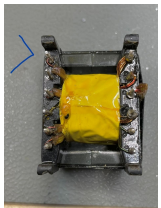
I (5 V)	Duty	Period	V max
0 mA	7.0%	276 ms	18.0 V
28 mA	4.0%	25 us	12.2 V
1.0 A	9.5%	25 us	14.8 V
3.0 A	15.0%	25 us	16.4 V
6.0 A	20.0%	25 us	19.0 V

UC3844  
Broken: p5-6 2 ohm  
Working: p5-6 16M ohm

- 1: 5 V constant after 600 ms
- 2: 0 V
- 3: 1 V pulse after 1 s
- 4: 3 V 69 kHz (15 us) signal after 600 ms
- 5: 0 V
- 6: 13 V PWM
- 7: 16 V linear charge over 600 ms, drops to 11 V
- 8: 5.4 V after 600 ms

P2N60 alternatives

GDS  
600 V 2.9 A 70 W  
RDS(on) < 3.5 ohm  
Vgs +/- 20 V  
STP4NK60Z (4 A)  
STP5NK60Z (5 A)  
IRFBC30PBF (3.6A)



P-No: 391029-02  
Board: 30501-001 A  
Rating: UK 220-240 V 300 mA  
Based on the A500 PSU schematic by Greg McCarthy  
**Nick Bolton**

Sheet: /  
File: a1200-psu.kicad\_sch

**Title: Amiga A1200 PSU (UK)**

Size: A3 Date: 2023-02-10  
KiCad E.D.A. kicad (6.0.10)

Rev: 1F  
Id: 1/1