

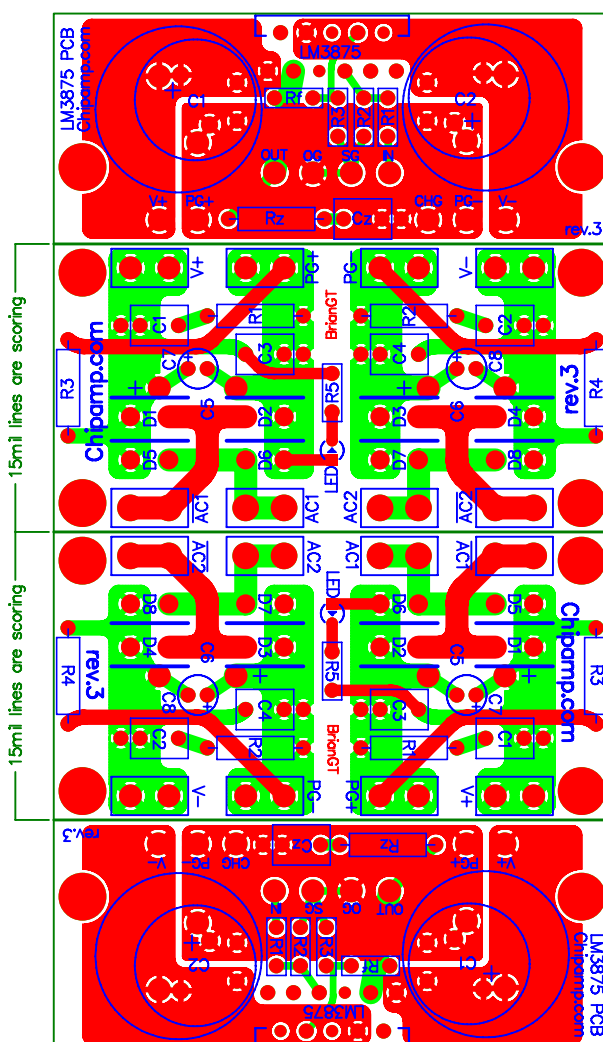
LM3875 Revision 3 PCB set changes:

- rectifier board:

- > modified to allow for optional Carlos Filipe (carlosfm) snubberized power supply setup: $((100\text{nF} + 1\text{ ohm}) \parallel 100\text{nF})$
- > placement created to allow for 10,000uF caps to be mounted under PCB (power supply pcb can be mounted to chassis with 1.5" standoffs if caps are used)
- > added placement for LED with series resistor (can be wired off board)
- > size increased from 1.2" tall to 1.5" tall

- amplifier board:

- > changed R3 footprint to compact metal film resistor (will still allow for larger resistors, mounted vertically)
- > simplified ground plane, maximizing area by removing signal ground plane
- > optimized connection between the main ground and the signal ground
- > added placement for 0.1uF caps on rails in case the snubberized setup is used (100uF caps would be mounted in the other holes)
- > surface area for power planes has been increased
- > moved zobel network to allow for more contiguous ground plane
- overall board size increased to 2.9" wide x 5.4" tall before separating components



Colors:

- red = top copper
- light green = bottom copper
- blue = top silkscreen
- dark green = board outline/scoring

Components on amplifier board:

- C1,C2 = 1,500uF FC electrolytic (for legacy setup) or 100uF FC \parallel 0.1uF PP (for new setup)
- Cz = 0.1uF polypropylene (optional)
- LM3875 = National LM3875 amp
- R1 = 1 kohm 0.5w
- R2 = 22.1 kohm 0.5w
- R3 = 681 ohm 0.5w
- Rf = 22.1 kohm 0.5w
- Rz = 2.7 ohm 2W (optional)

Components on power supply board:

- C1-C4 = 0.1uF polypropylene (for new setup)
- C5-C6 = 10,000uF FC electrolytic (mounted under pcb for new setup)
- C7,C8 = 10uF FC electrolytic (for legacy setup)
- D1-D8 = MUR860 diodes
- R1,R2 = 1 ohm 2W (for new setup)
- R3,R4 = 2.2 kohm 2W (bleeder resistors for new setup)

Board will print actual size if this document is printed without scaling.

Thanks to the Peter Daniel, Carlos Filipe and the diyAudio community for their appreciated input and support.

-- Brian Bell (BrianGT)