

Re: PSU for precision audio opamps

You should also be very careful about where the DC–DC converter's input side ripple can flow to and the capacitively driven AC current that is forced between its input side and output side.

DC–DC converters also radiate AC magnetic fields. The shield over the top of them never fully stops it. Ideally the DC–DC should be on the far side of some of the sheet metal.

You can get a serious amount of noise magnetically induced from fans, AC or DC brushless. One has to worry about loop areas, yet another interesting constraint in PCB layout.

Not to mention the spikey 120 Hz mag field from the ac power wiring, slamming tens of amps peak into the bridge rectifier and input cap of the power supply, assisted by some coils in the EMI filter maybe.

And all the RF that's available to rectify.

John

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