

Power

Power.sch

Gain/Phase Analyzer

**WCP52**

Sheet: /

File: wcp52-output.sch

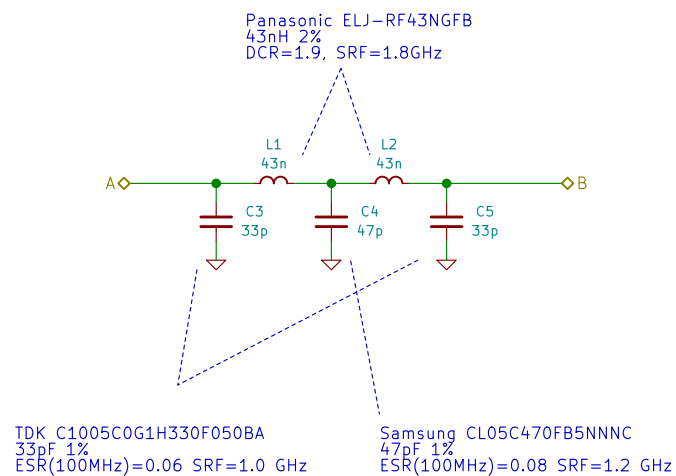
**Title: Output Amplifier Prototype**

Size: USLetter Date: Sun 16 Nov 2014

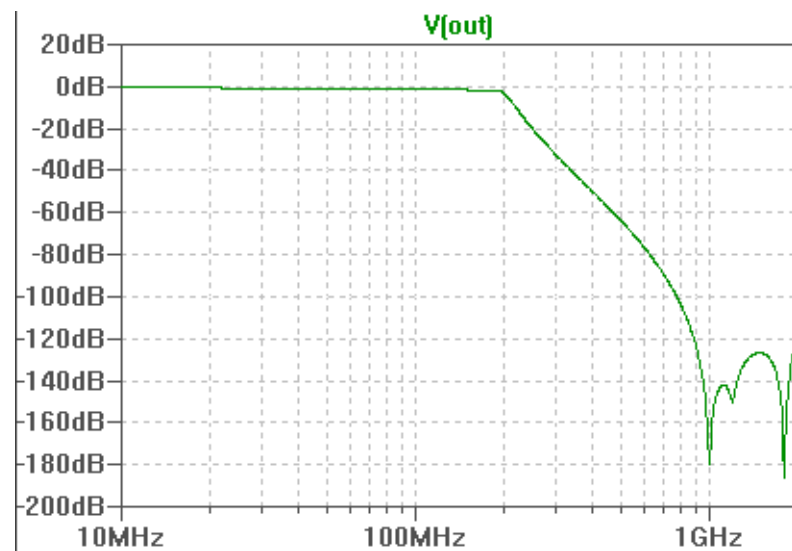
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Voltage insertion gain of output filter:



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**WCP52**

Sheet: /LPF/

File: LPF.sch

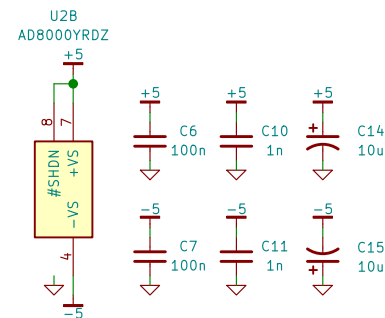
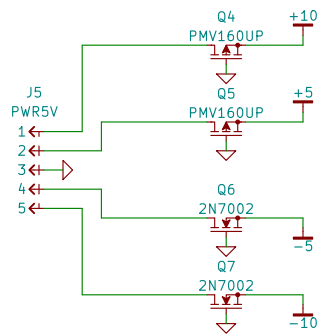
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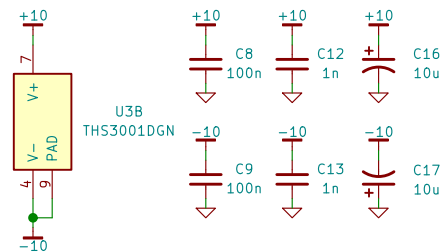
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Decoupling: ADI recommends a low-impedance 100nF capacitor directly next to each supply pin, claiming that lower capacitances do not aid decoupling but can help bypass high frequency noise to ground. This is why the 100nF capacitor is closest to the chip, not the 1nF.

The 10uF capacitor is a low-impedance type as well, but still not as low as a high-performance MLCC to avoid causing regulator oscillations.



Decoupling: TI's recommendations were very similar to ADI's, so the same decoupling pattern was used.

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