

NCV896530 PSPICE ac simulation model

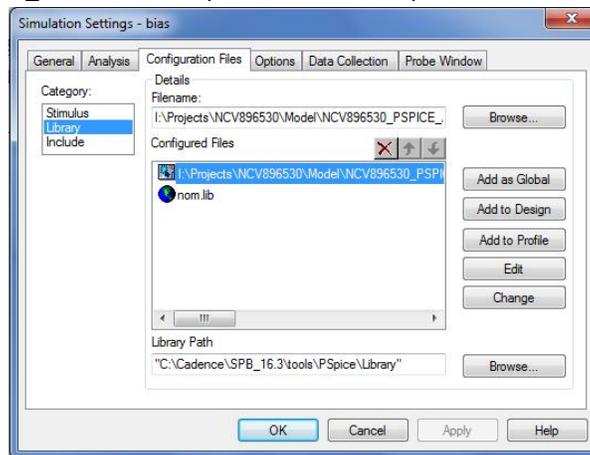
This model is intended to be used in ac simulations only, to help design loop compensation.

It already includes the inductor (inductor value and series resistance are parameters to be fed to the model).

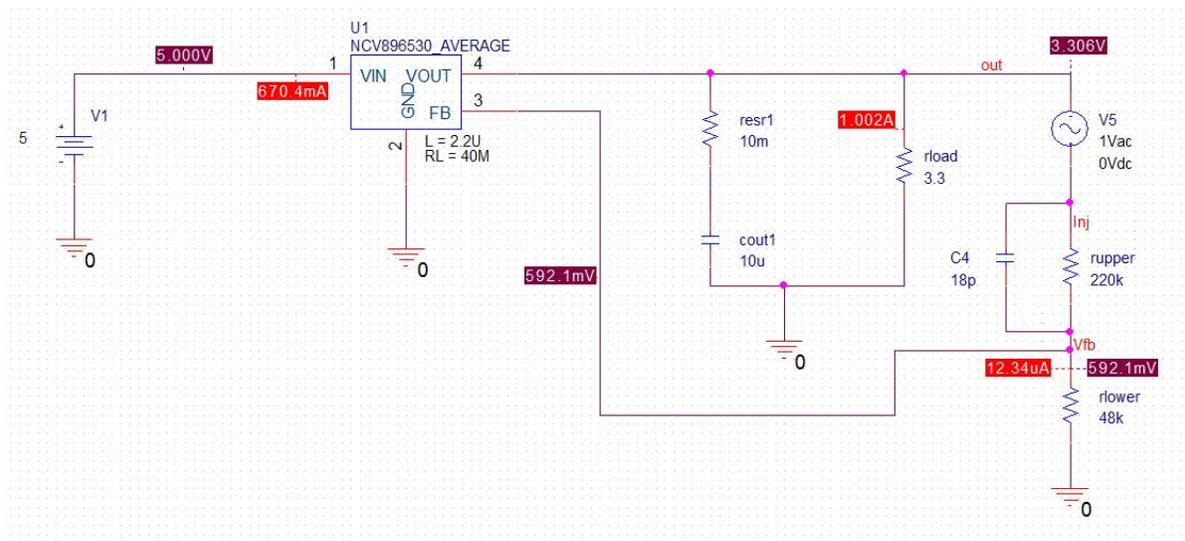
External components that must be added for a complete, closed-loop simulation are:

- Input voltage source
- Output capacitor with series resistance
- Output load
- Feedback divider
- 1Vac stimulus source (0Vdc).

Include the NCV896530_PSPICE_AVERAGE library in the simulation profile:



Example of a test bench for the model (provided in the zip file):



Always check that the bias operating point is correct (expected output voltage).

To obtain a body plot of the closed-loop system:

- In the “add trace” pop-up window, select “Plot Window Templates” in the drop-down menu
- Select “Body Plot dB – Separate” for $V(\text{out})/V(\text{Inj})$

