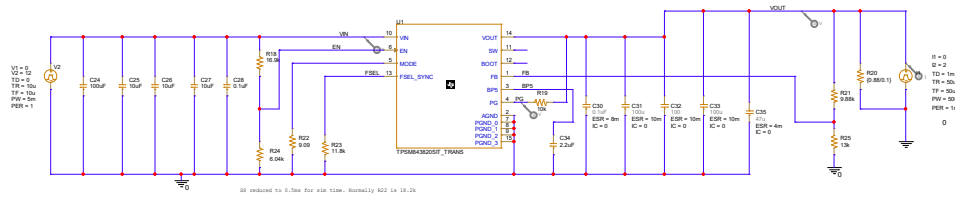


TPSM843820 STARTUP SIMULATION

Simulation Properties	
Model	TPSM843820 4V to 18V Input, 8A Micro-SMP Buck Power Module with Internally Compensated Advanced CurrentMode Control
Database	RELANCEUA_KVM_NIA
File	Thursday, June 16, 2022 10:01



Application Notes

1. The TPSM843820 model is encrypted and will only run in PSpice Versions 17.4 and up.
2. The design is similar to the TPSM843820 datasheet application information schematic and has been designed for the same input voltage, output load and output voltage conditions.
3. The testbench has been configured Vin = 12V, Vout = 1V and Iout = 8A.
4. This model has been corner tested for an input voltage range of 4V to 18V and a load current range of 100mA to 8A.
5. The RMODE resistor(R6) is reduced to 4.02k to set Soft-Start time as 0.5ms to reduce simulation time.
6. The operating quiescent current have not been modeled.
7. Thermal shutdown characteristics of the part have not been modeled.
8. Ground pins have been tied to 0V internally. Therefore, this model cannot be used for inverting topologies
9. The simulation runs for 0.8ms and takes approximately 12min to run on a 4 core 2.8GHz machine.