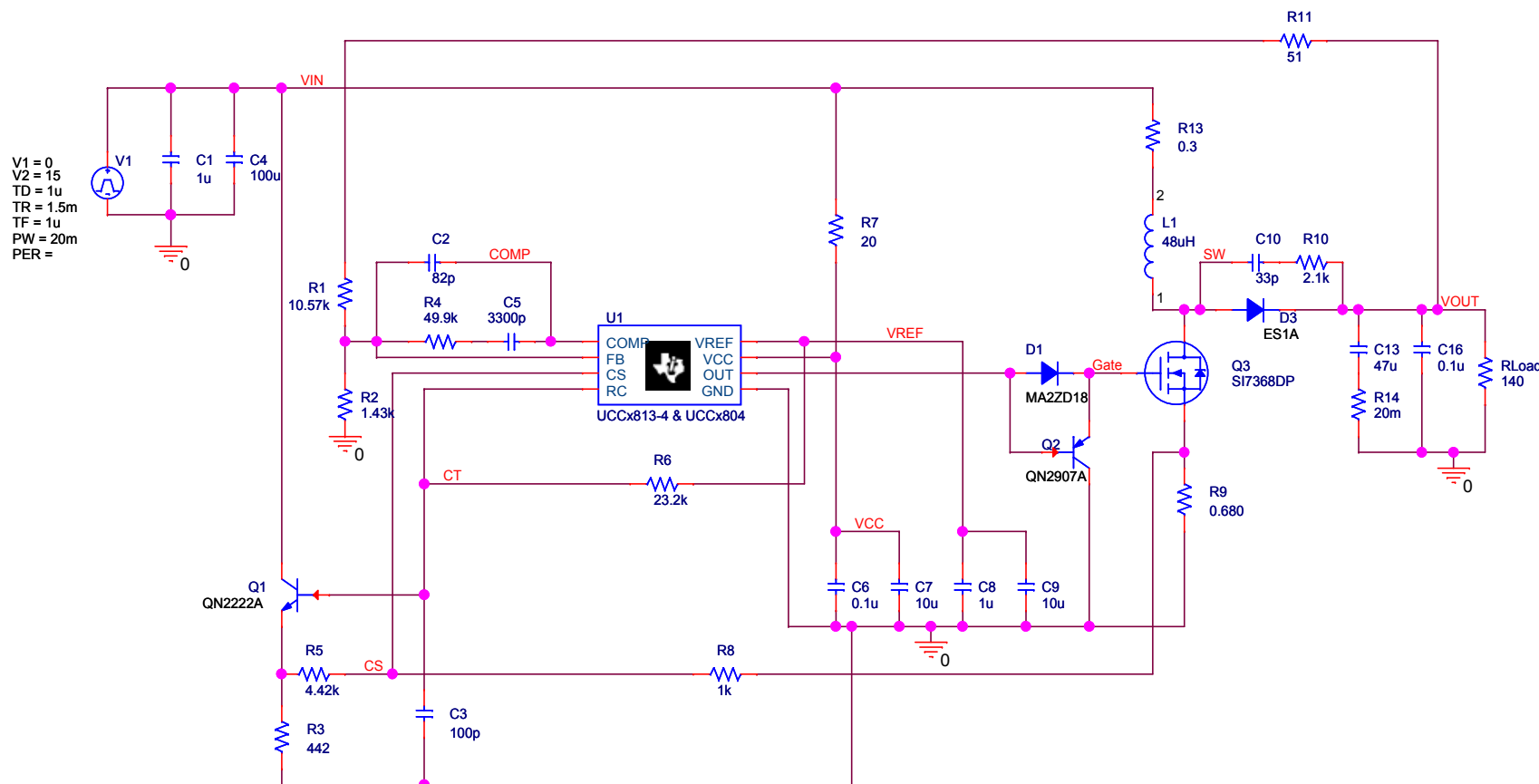


## UCCx813-4 and UCCx804 - Startup Circuit

Associated Parts: UCC2813-4, UCC3813-4, UCC1804, UCC2804, UCC3804



### Application Notes:

1. The PSpice macromodel for UCCx813-4 /UCCx804 is encrypted.
2. This design is based on the circuit in Figure 1 in the application note SLUA288.pdf (<http://focus.ti.com/lit/an/slue288/slue288.pdf>). Some of the external components have been changed in order to use UCCx813-4/UCCx804 in this application.
3. Zero initial conditions are given in this testbench to any capacitor or inductor since we are observing startup.
4. Click PSpice ---> Run (F11) to run the simulation. The Startup simulation runs till 8 ms and takes ~ 10 minutes to run.
5. This application has been tested for an input voltage range of 15V to 18V and an output current range of 50mA to 150mA.
6. The output load can be adjusted by changing RLoad.
7. The input voltage is deliberately allowed to rise at a controlled rate to prevent inrush currents to the input filter network.
8. Recommended maximum current loading = 150mA.
9. If you observe skipped pulses, run the simulation with reduced step size. However, note that the simulation will become slower.
10. To run the Steady State analysis, change the root to Steady\_State and then click PSpice ---> Run (F11).

Title		
UCCx813-4 and UCCx804 - 15V to 21V Boost Converter		
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	Based on Application Note: SLUA288.pdf	1.0
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