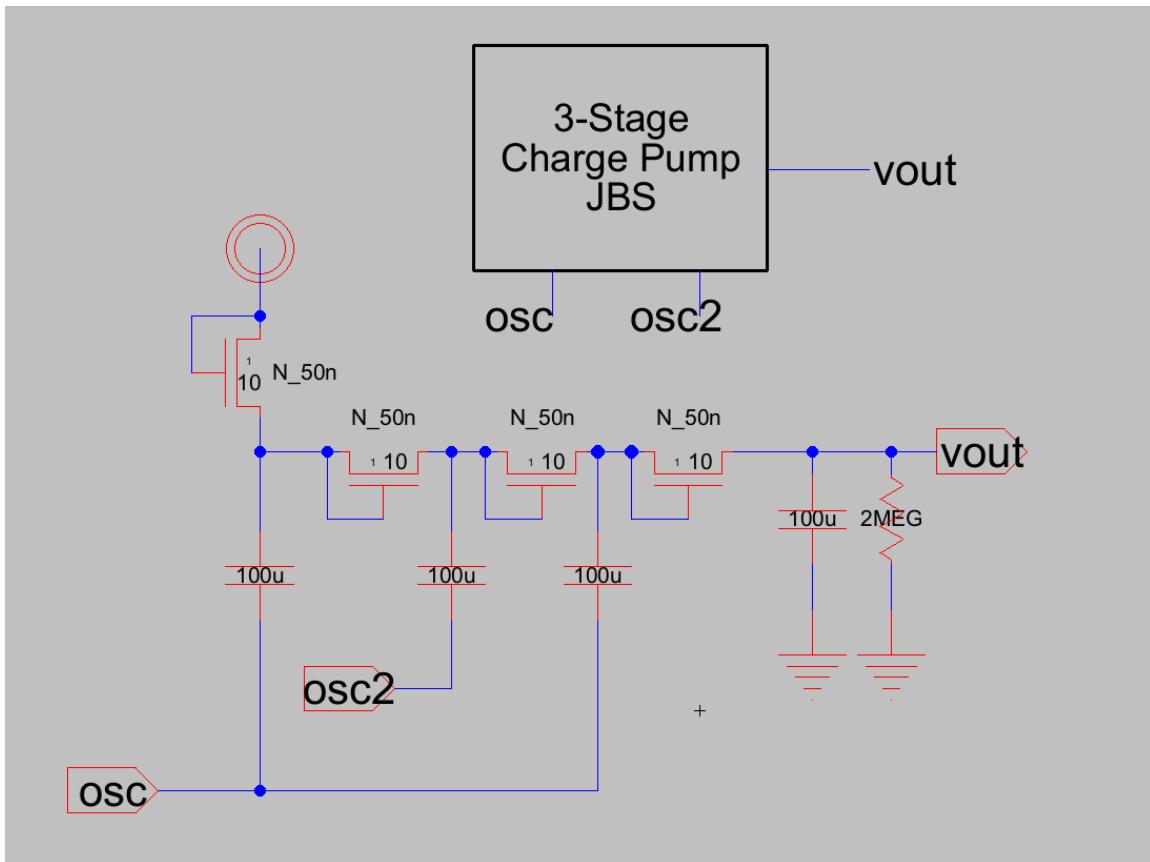


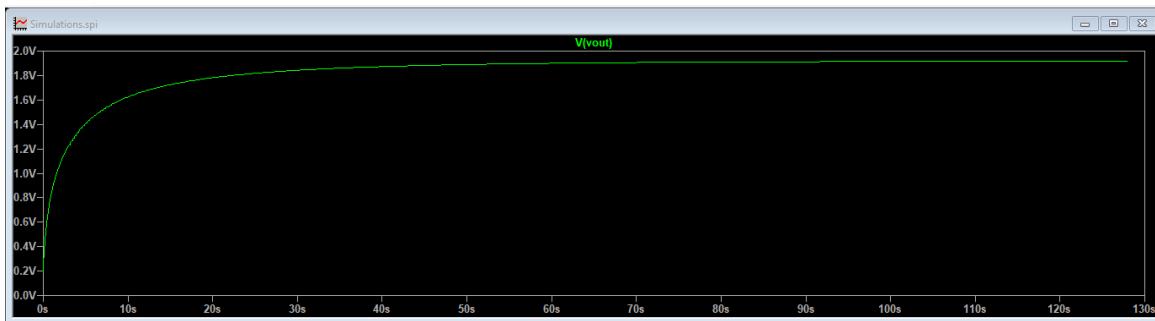
Lab 6

Name: Jameson Stanley Date: November 5, 2025, 2025

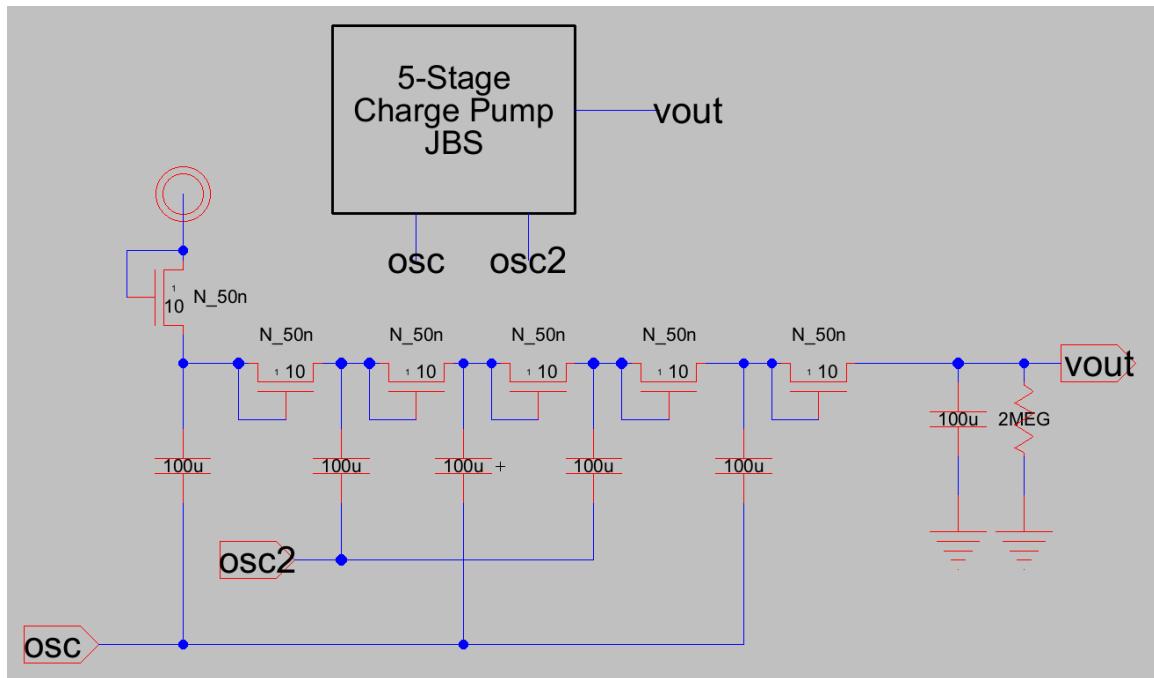
3-Stage Charge Pump Schematic



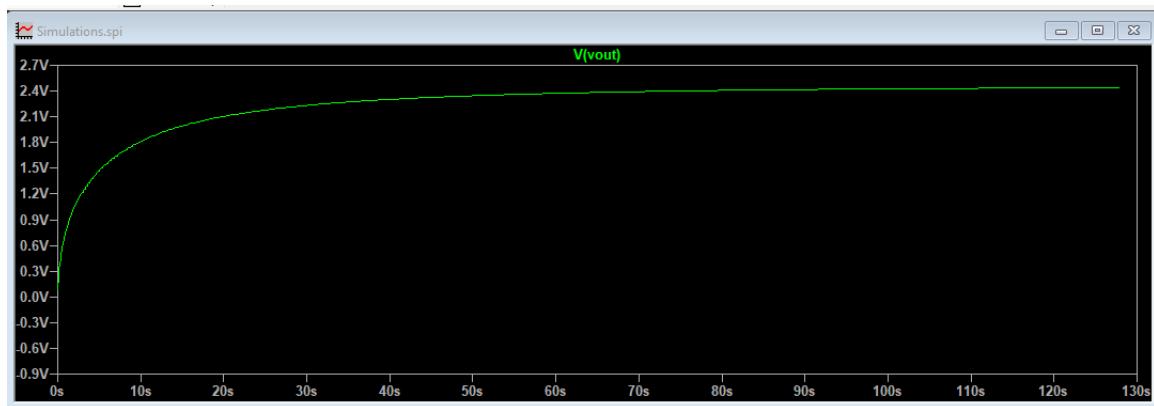
3-Stage Charge Pump Simulation



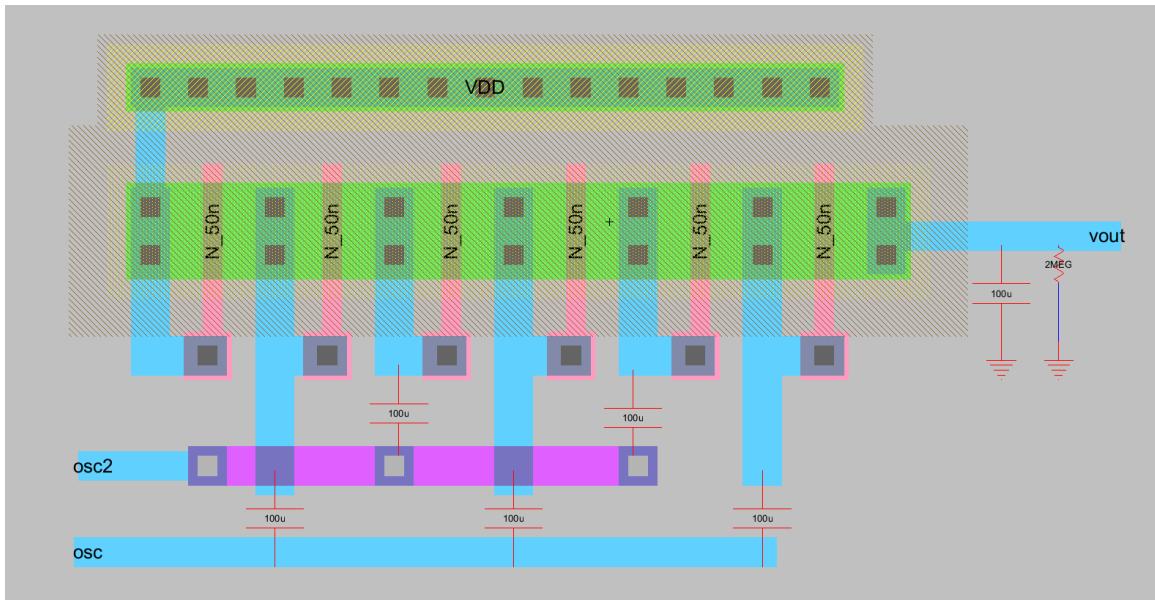
5-Stage Charge Pump Schematic



5-Stage Charge Pump Simulation

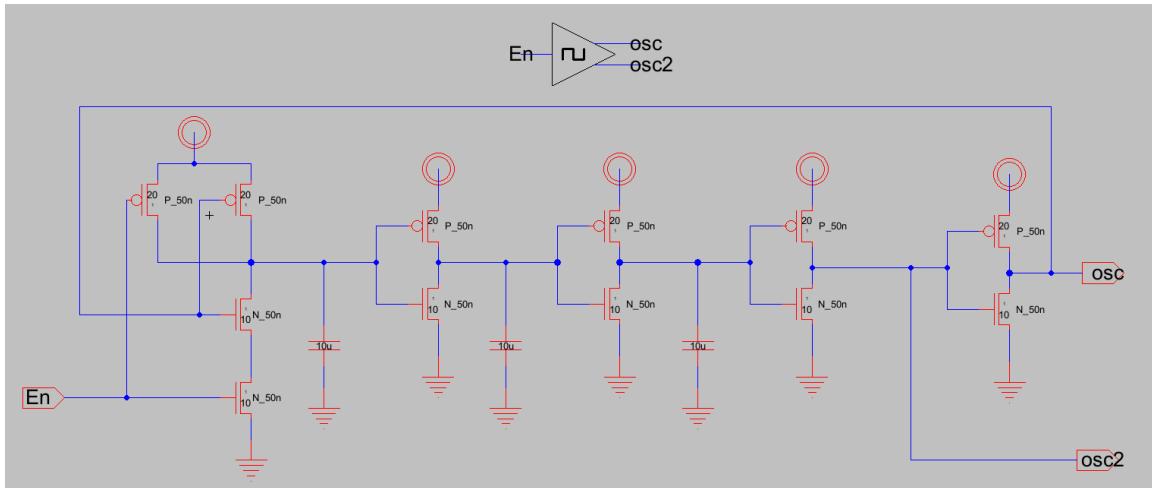


5-Stage Charge Pump Layout

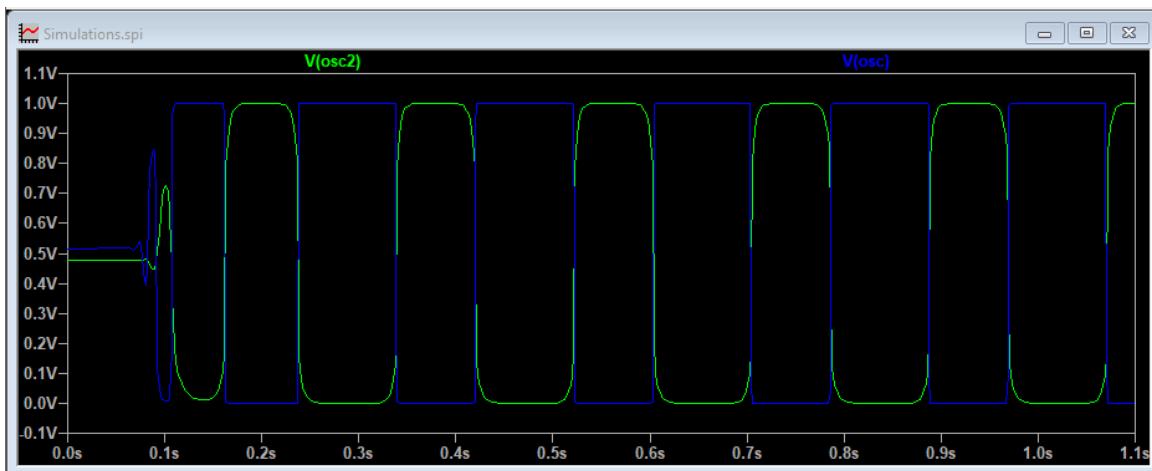


The layout design composes of 6 NMOS transistors in line. This design was chosen for its inline and organization which will allow for easier assembly of the final DC-DC Charge Pump design.

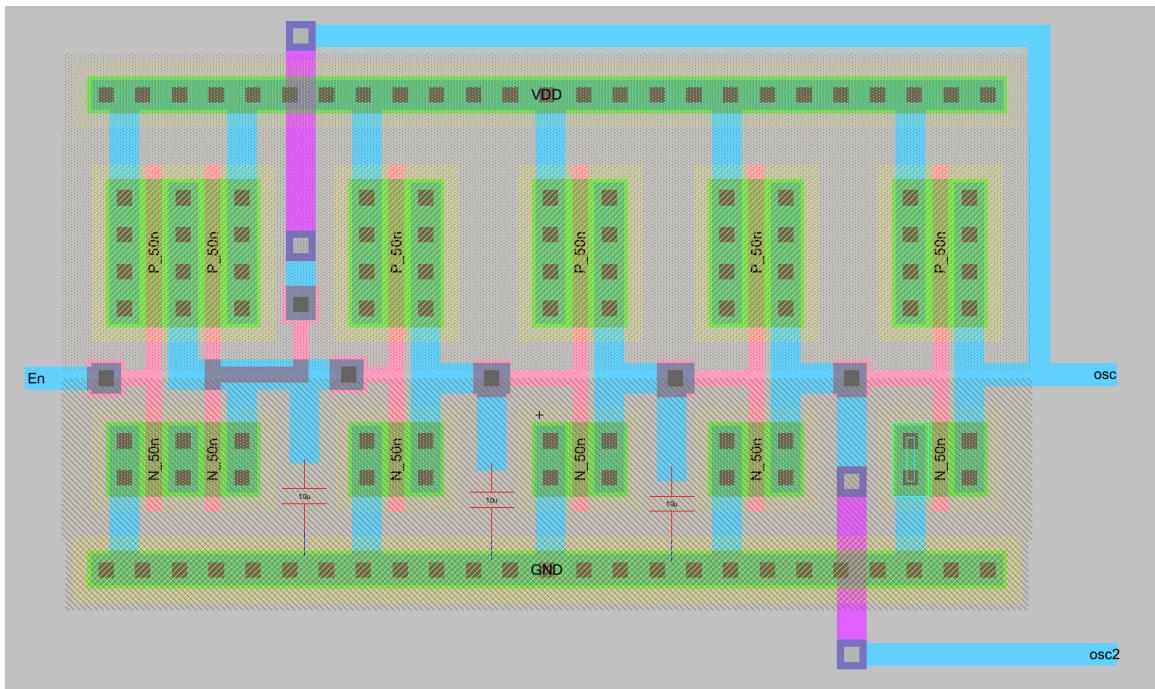
Ring Oscillator Schematic



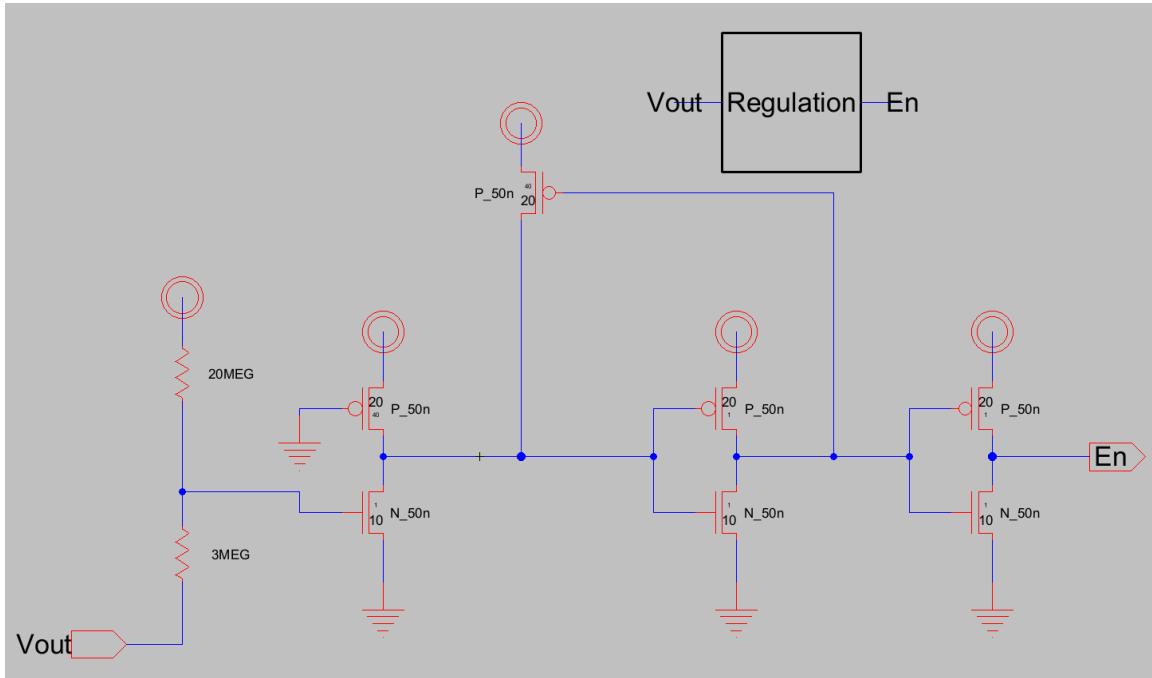
Ring Oscillator Simulation



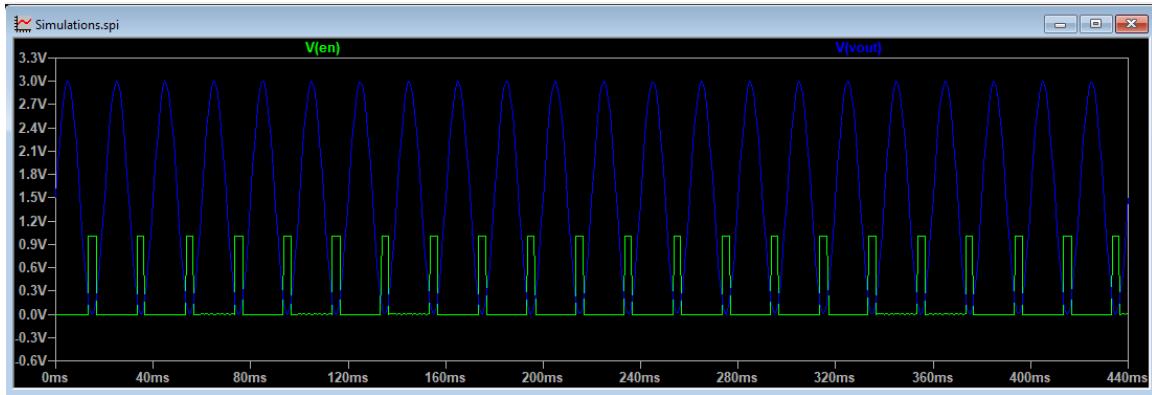
Ring Oscillator Layout



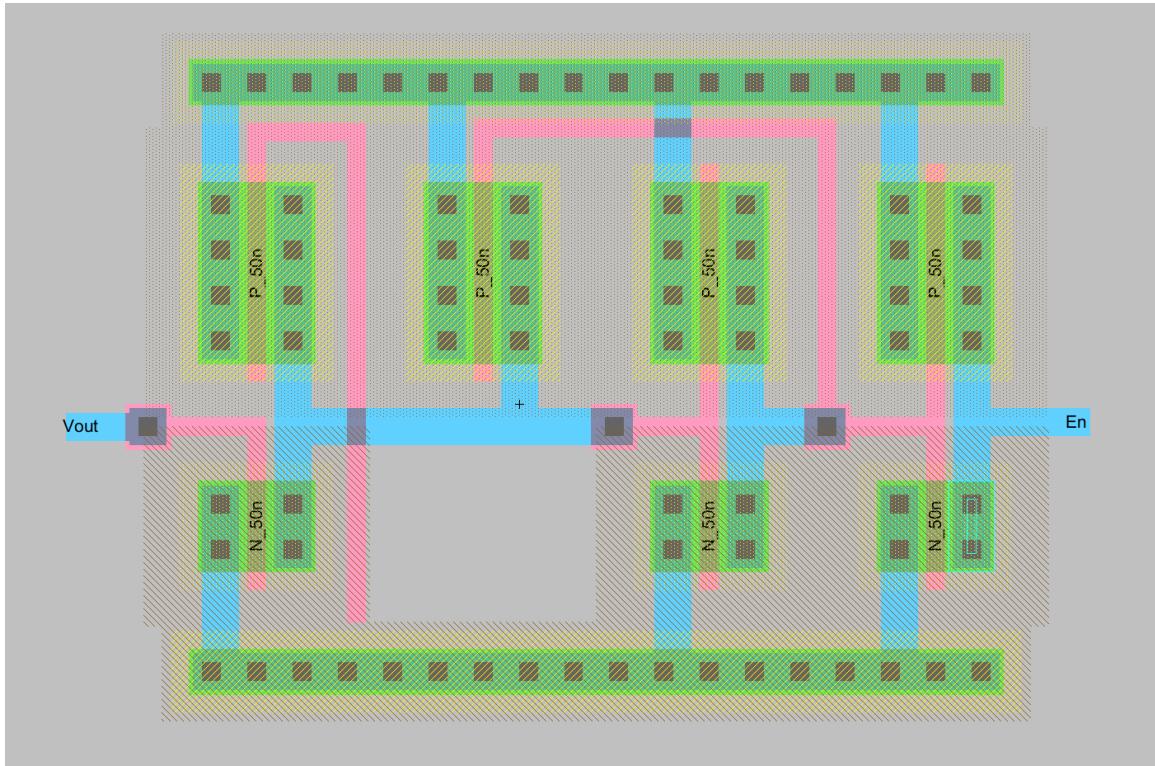
Regulator Circuit Schematic



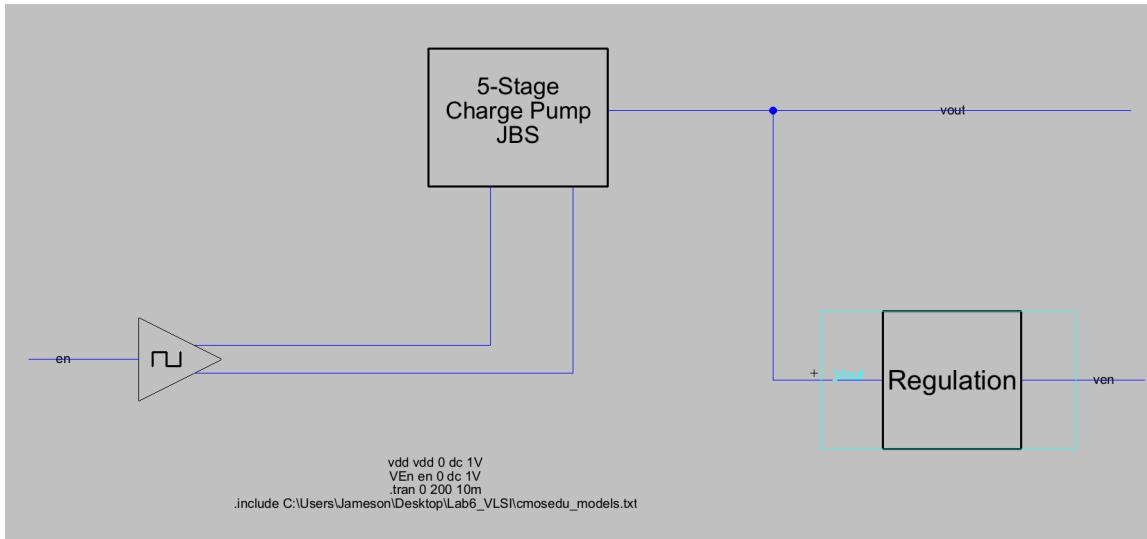
Regulator Circuit Simulation



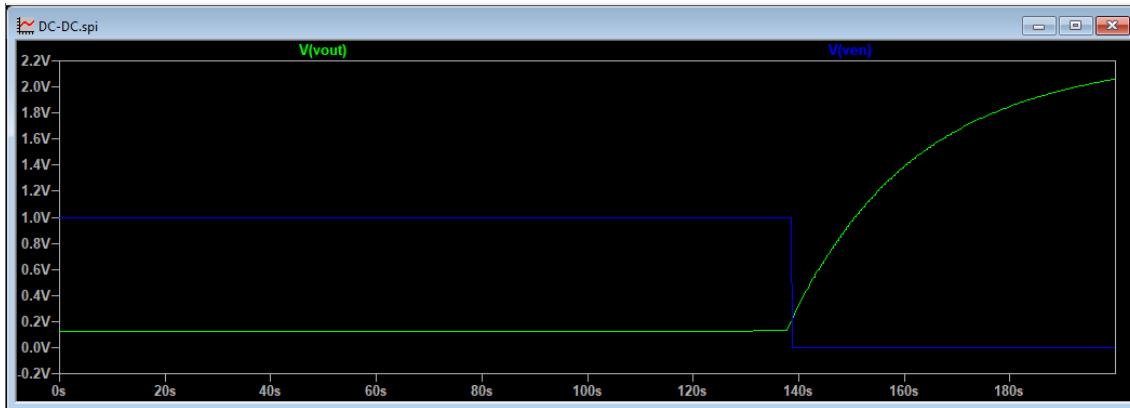
Regulator Circuit Layout



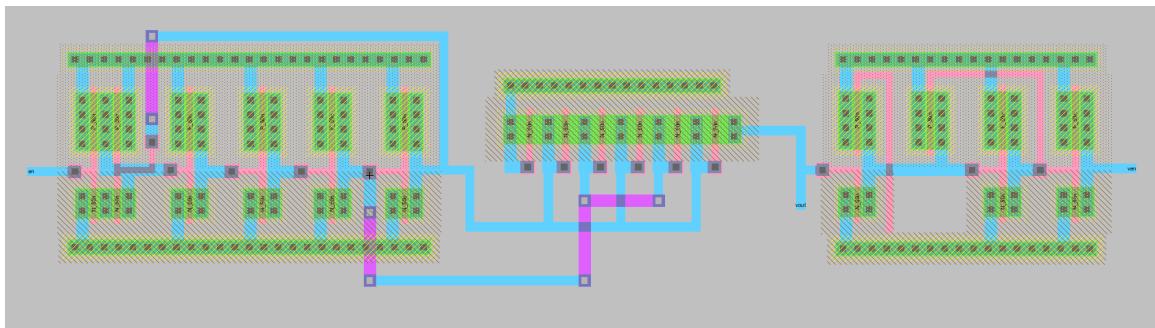
DC-DC Charge Pump Schematic



DC-DC Charge Pump Simulation



DC-DC Charge Pump Layout



NRC and DRC Check

All pass NRC and DRC checks