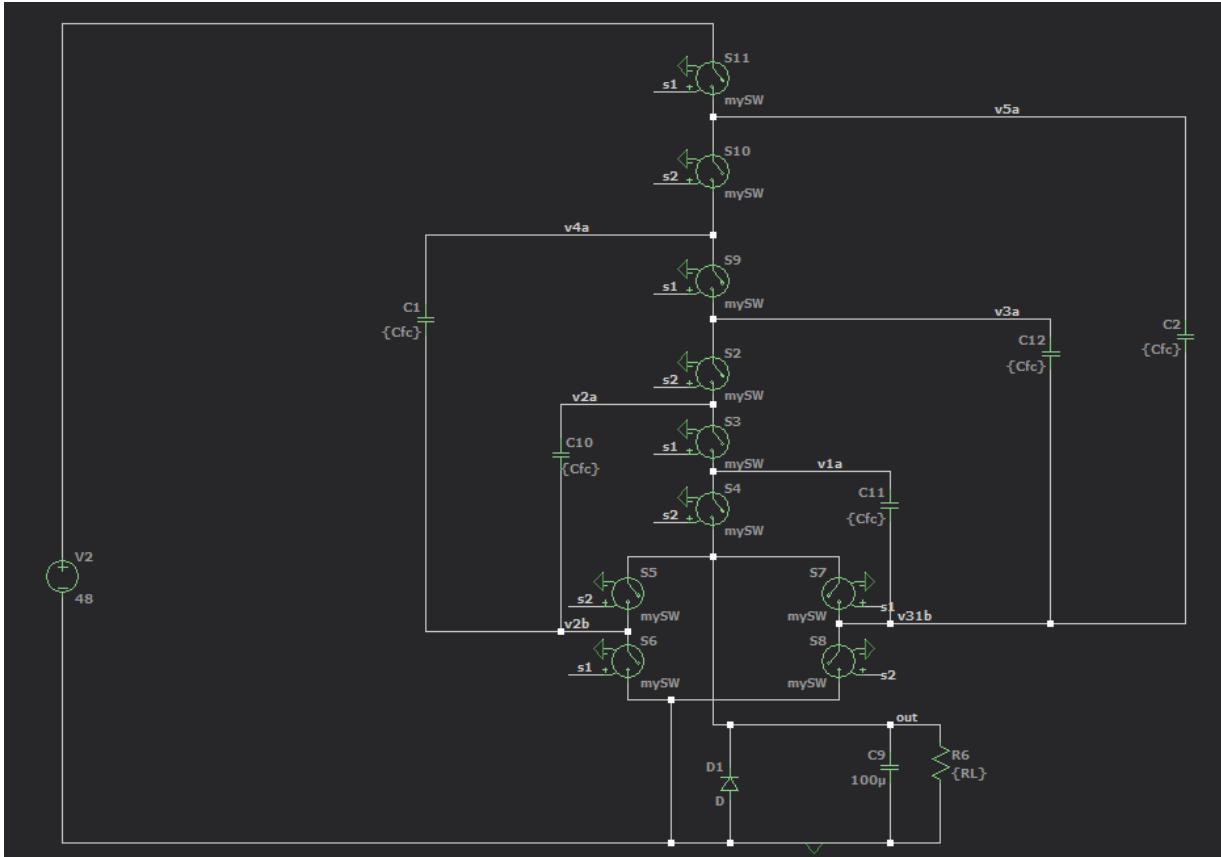
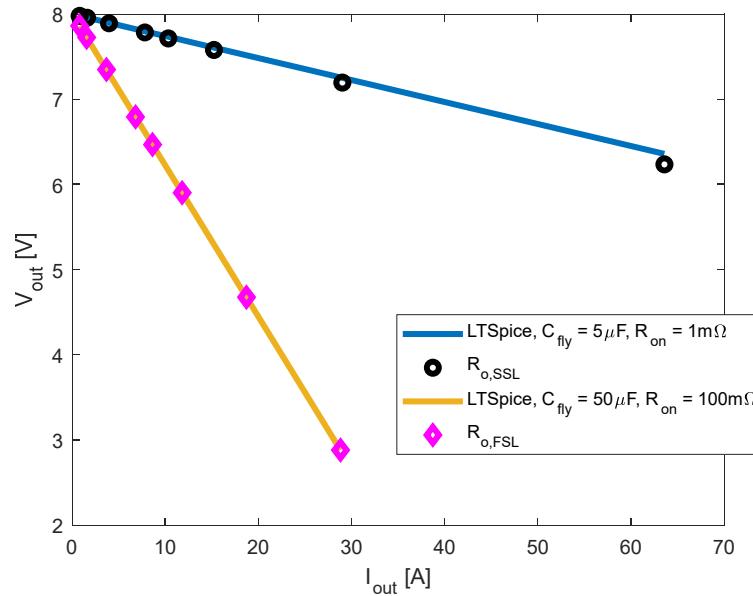


# 6:1 Dickson Converter Simulation



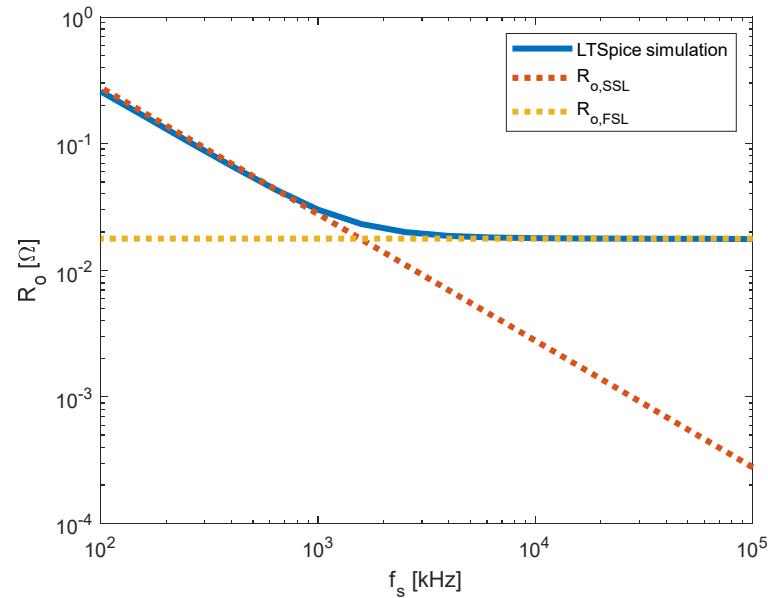
# Simulation Comparison to Model

fixed  $f_s = 1\text{MHz}$



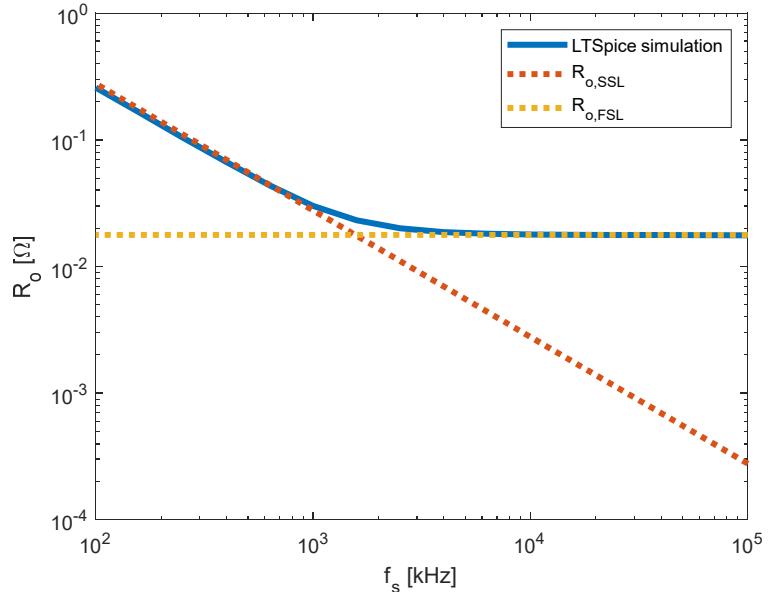
# $R_o$ vs Switching Frequency

fixed  $R_{on} = 10\text{m}\Omega$ ,  $C_{fly} = 5\mu\text{F}$

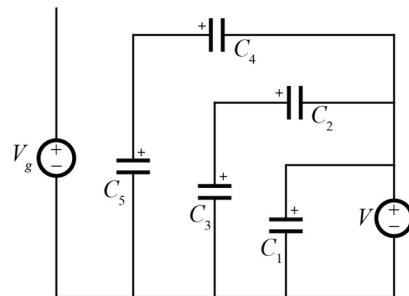
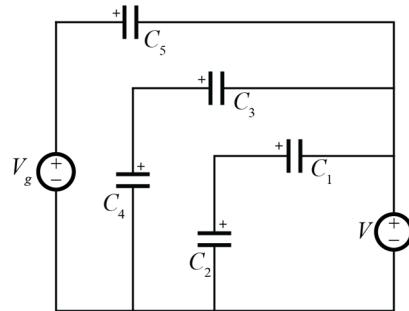


# Switching Losses in SC Converters

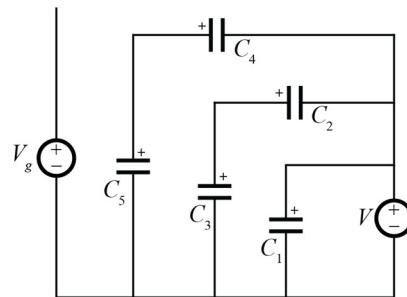
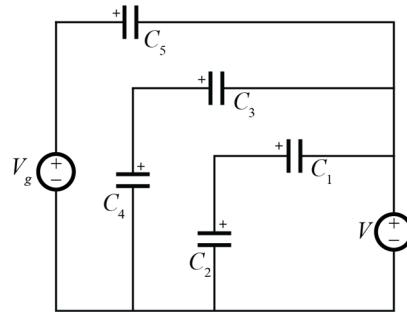
# Charge Sharing Loss and Soft Charging



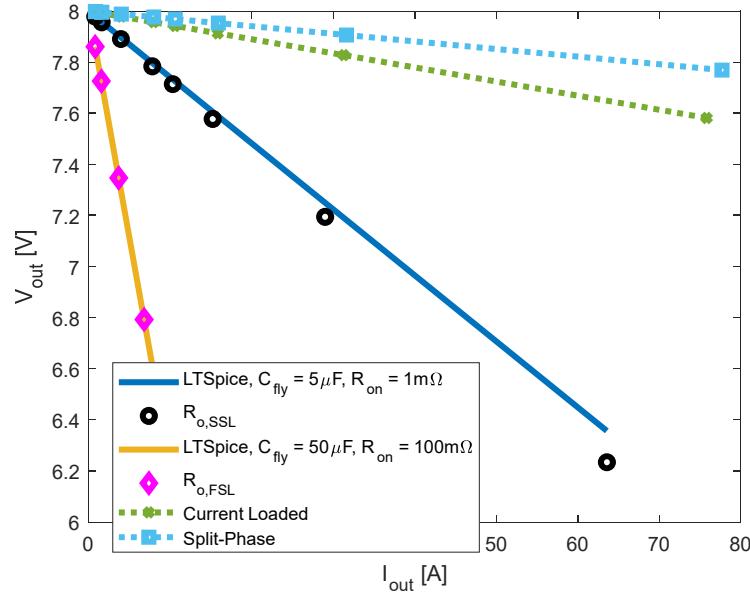
# Hybrid Dickson Converter



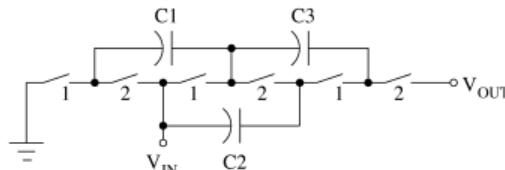
# Split-Phase Control



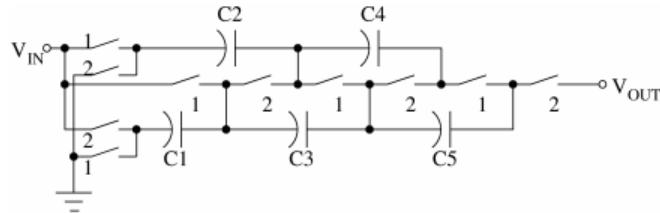
# LTS spice Simulation



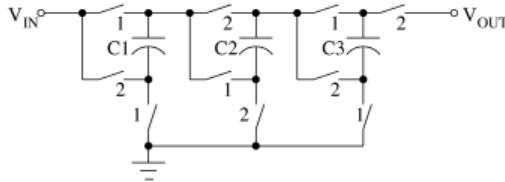
# Complete Soft Charging



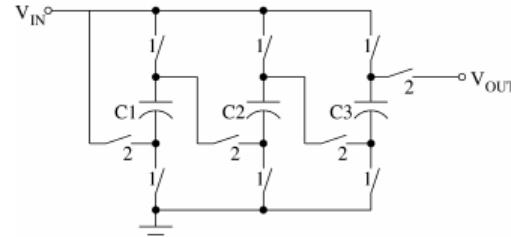
a) Ladder



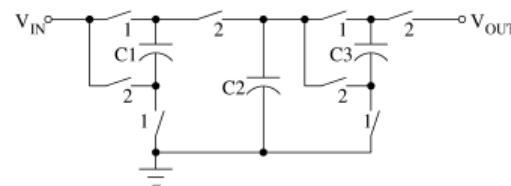
b) Dickson Charge Pump



c) Fibonacci



d) Series-Parallel



e) Doubler