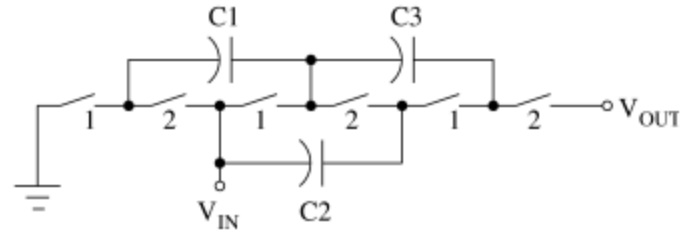
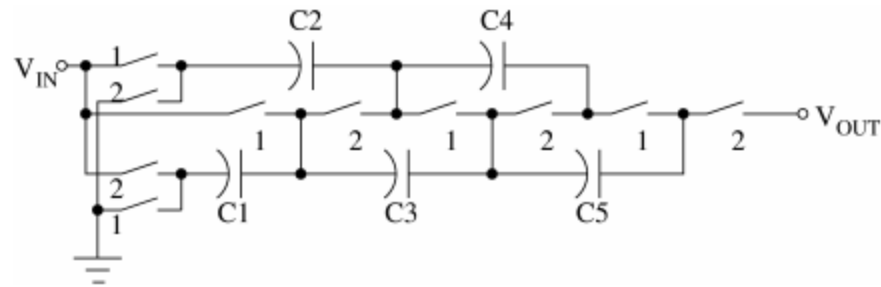


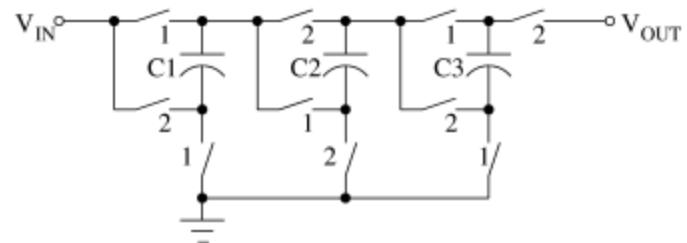
SC Converter Topologies



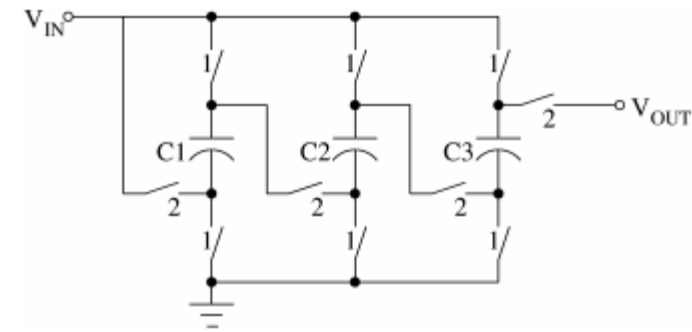
a) Ladder



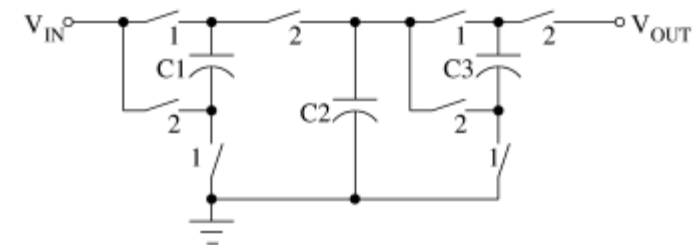
b) Dickson Charge Pump



c) Fibonacci

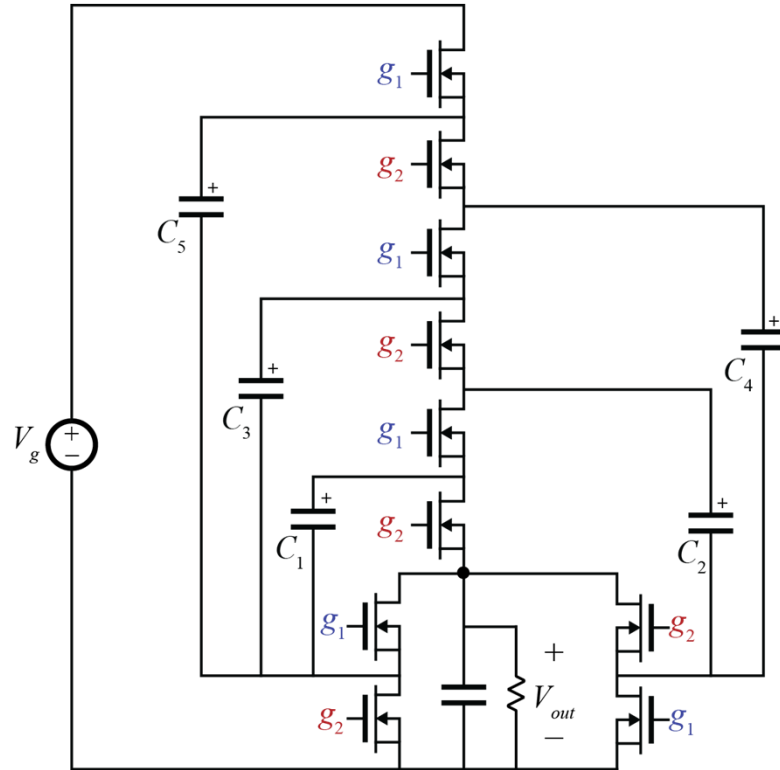


d) Series-Parallel

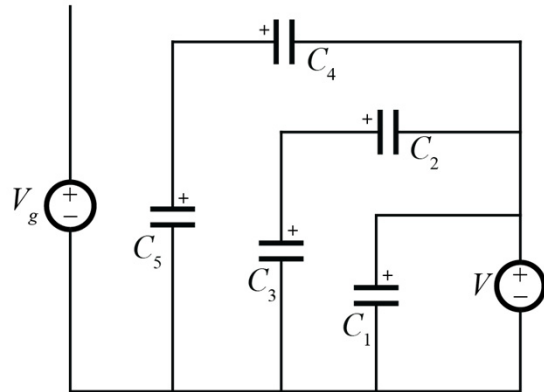
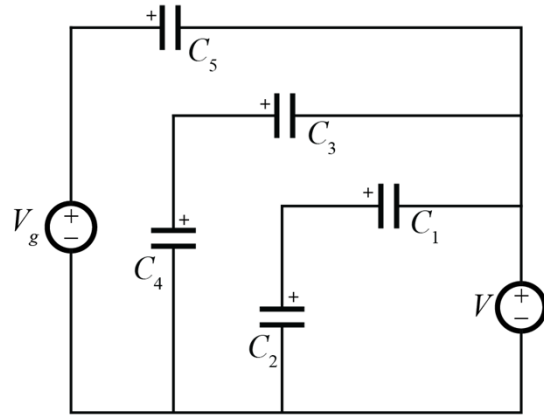


e) Doubler

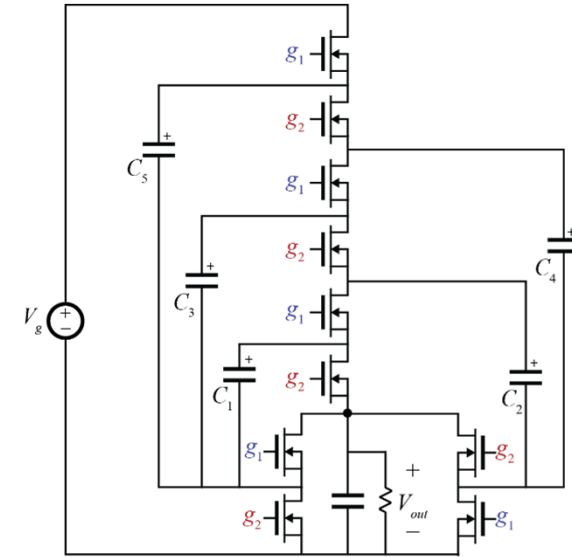
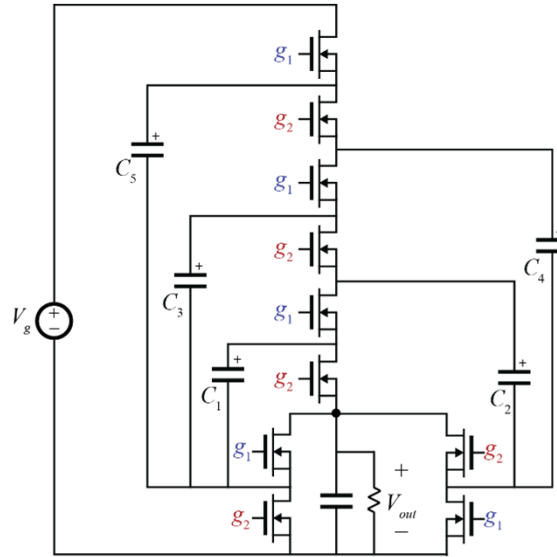
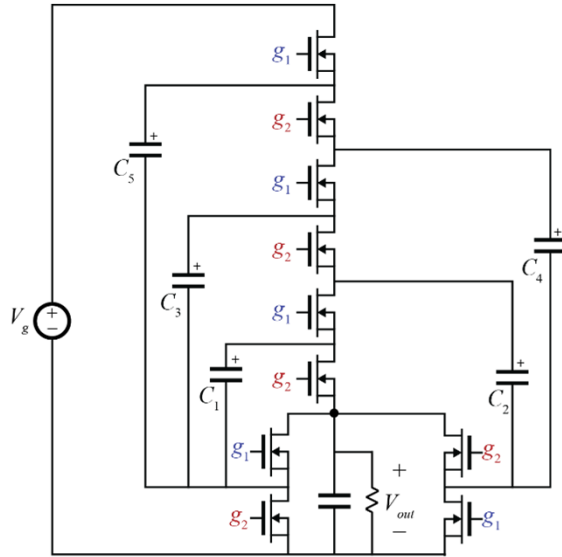
Dickson Converter



Dickson Subintervals



Dickson Converter Variants



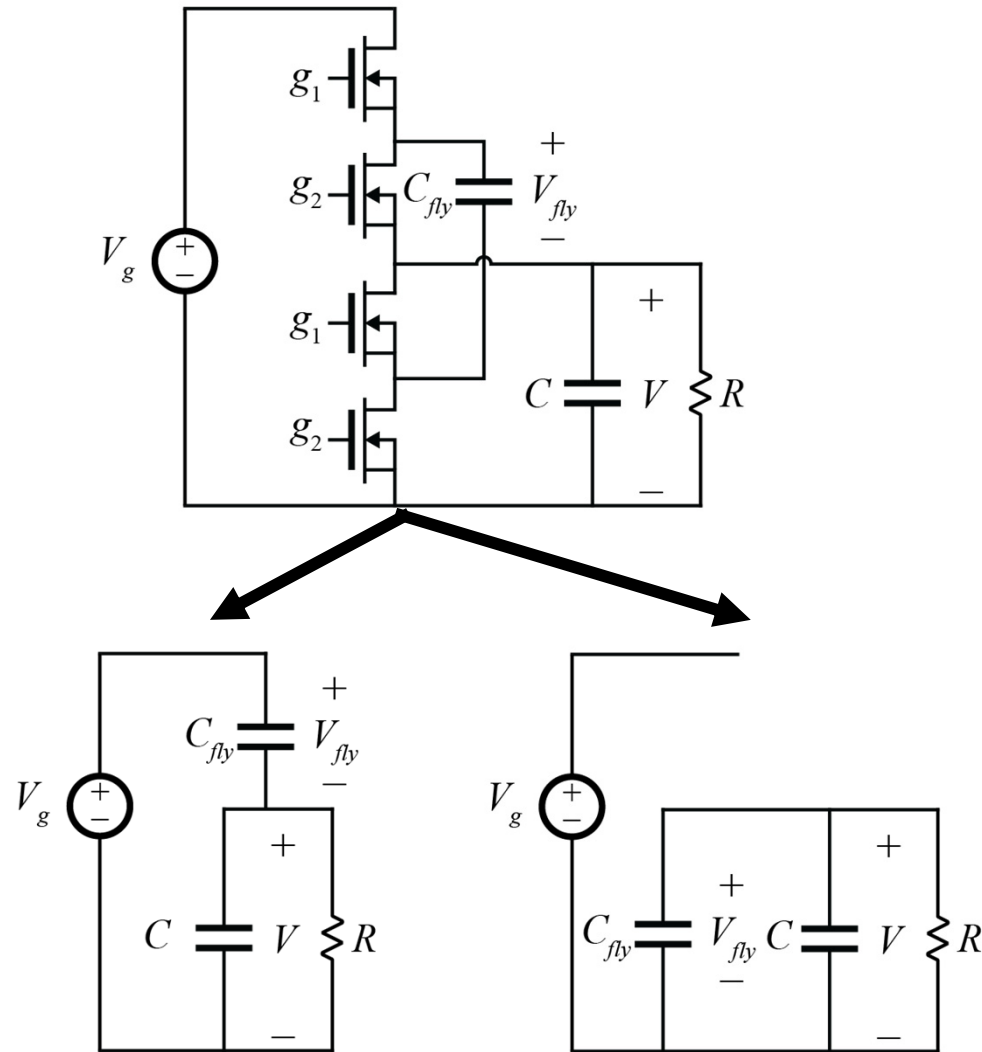
Y. Lei, R. May, and R. Pilawa-Podgurski, "Split-Phase Control: Achieving Complete Soft-Charging Operation of a Dickson Switched-Capacitor Converter," 2016

Y. Li, X. Lyu, D. Cao, S. Jiang and C. Nan, "A 98.55% Efficiency Switched-Tank Converter for Data Center Application," 2018.

Charge Vector Analysis: Notation

Charge Vector Analysis: Rules

2:1 Converter Charge Vector Analysis



Tellegen's Theorem

SSL Output Resistance