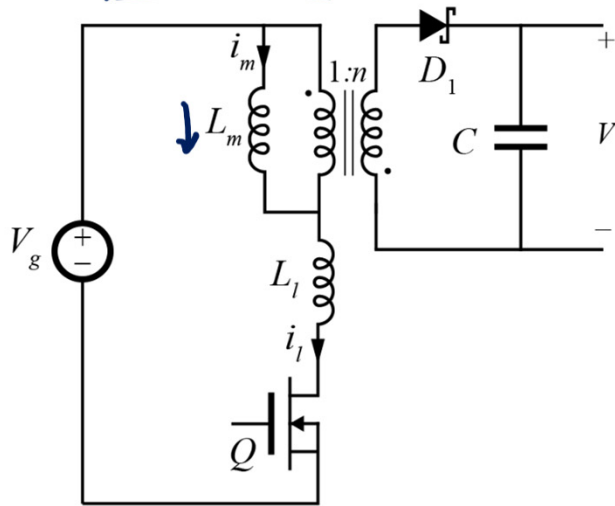
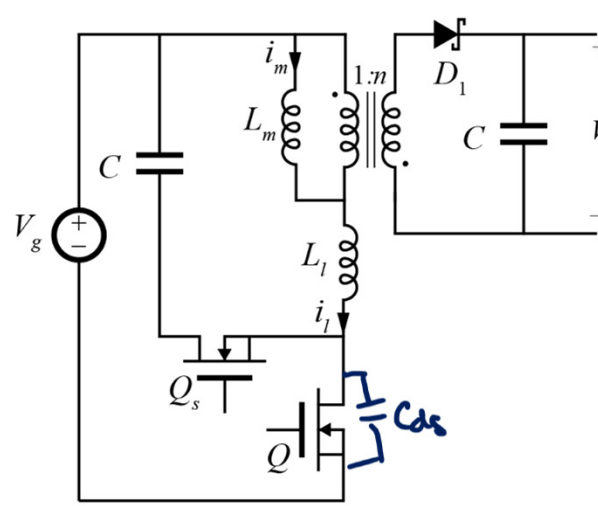


Topology Discussion

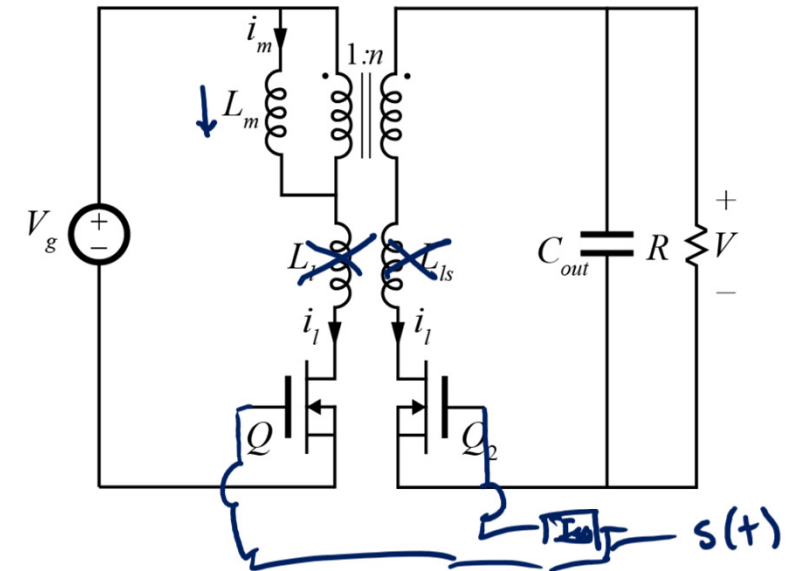
Q_{sw} flyback



Active clamp flyback



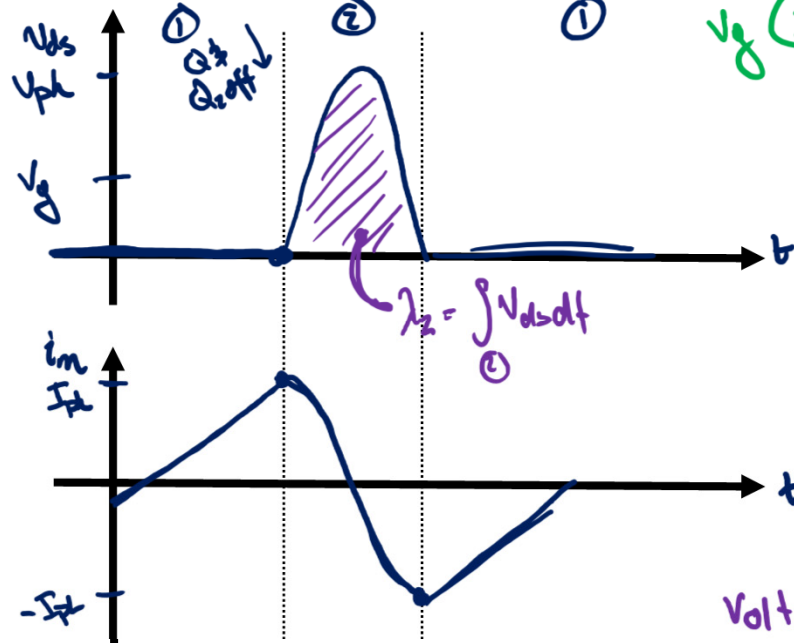
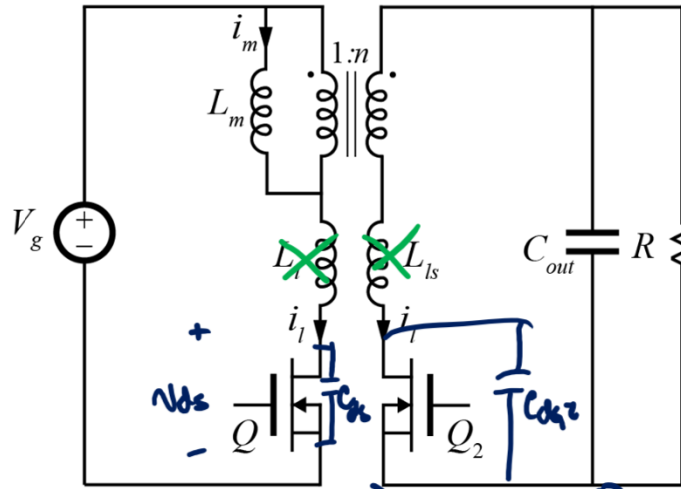
Direct Power Converter (DPx)



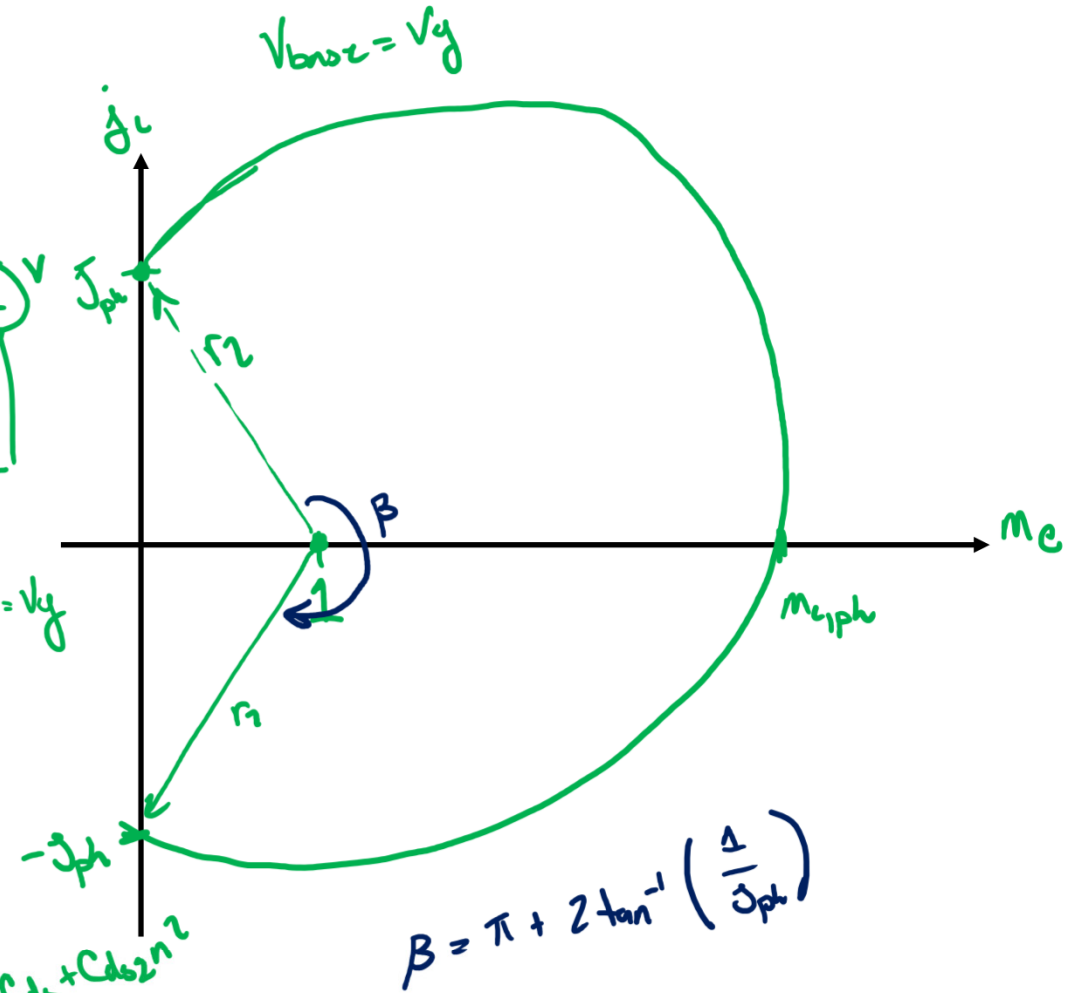
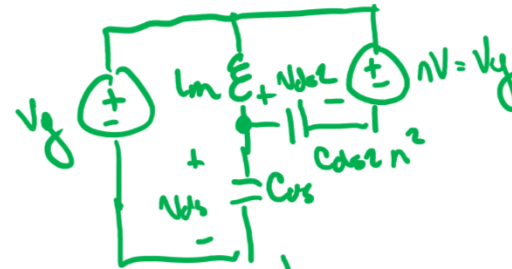
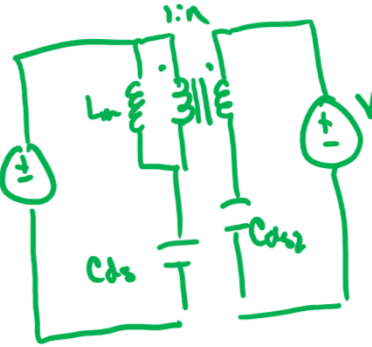
$$\frac{V}{V_g} = \frac{1}{n} \rightarrow \text{unregulated}$$

maximize $D \rightarrow s(t)$ on time

Direct Power Converter

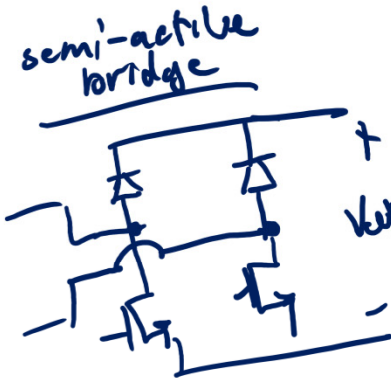
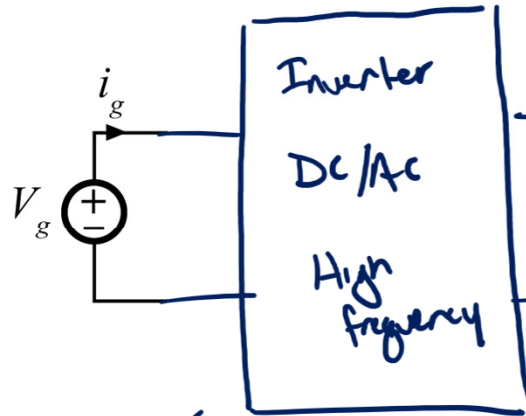
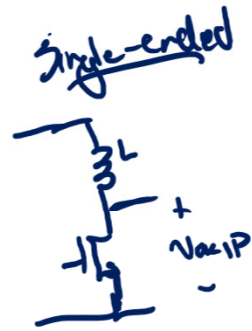


During dead time

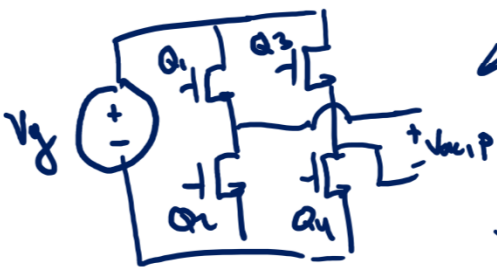


Volt-sec balance on L_m : $V_g t_1 = (V_g t_2 - \lambda_2)$

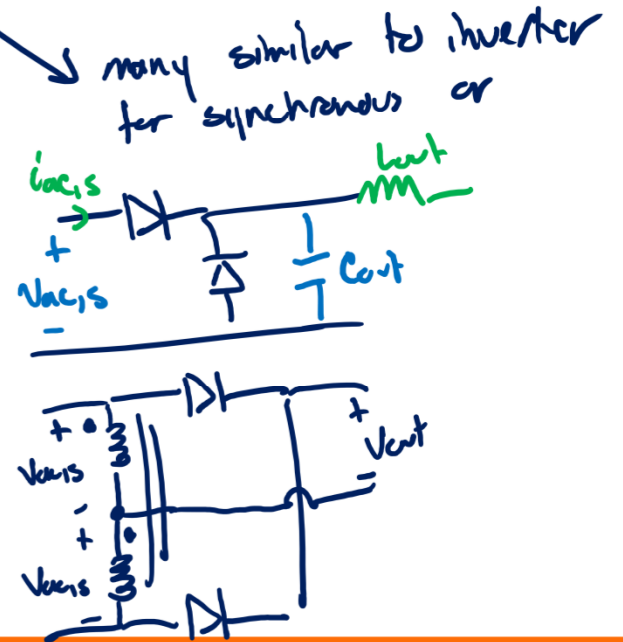
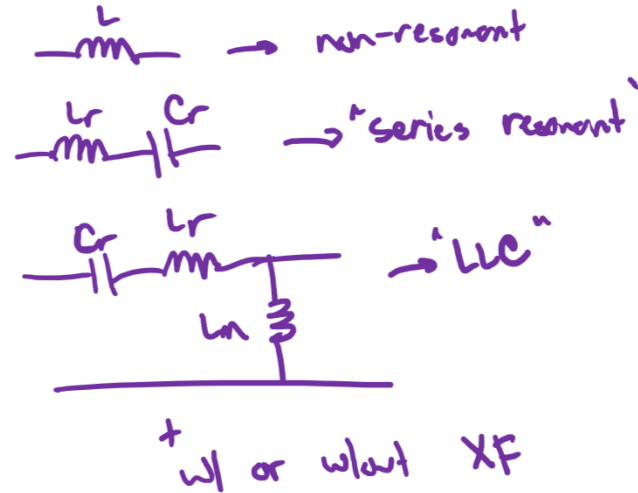
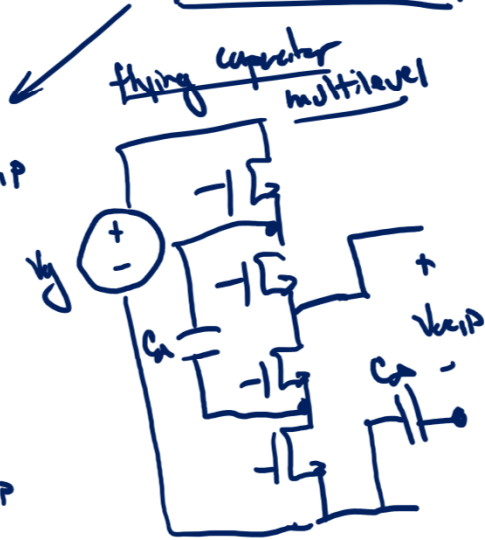
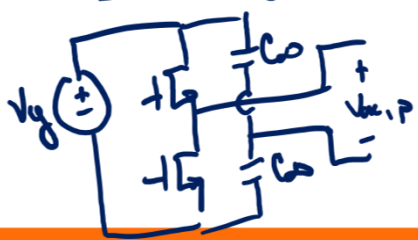
Introduction to AC-link topologies



Full bridge

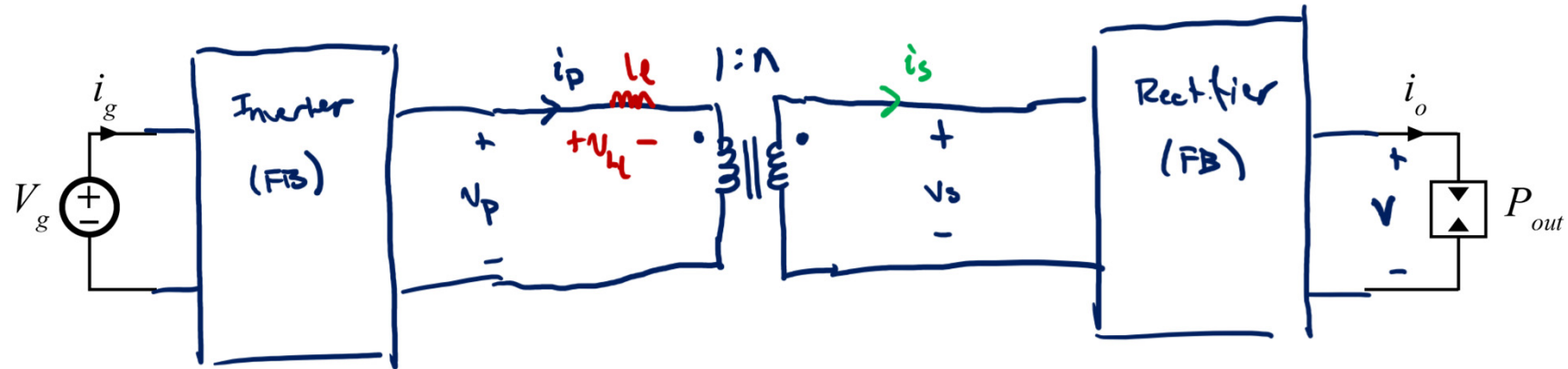


Half-bridge



DC-Transformer (DCX)

$$\frac{V}{V_g} = M = n$$



avg
 $n=1$

