

Design Values

Minimum Input Voltage: 44 V

Maximum Input Voltage: 55 V

Output Voltage: 200 V

Output Current: 5 A

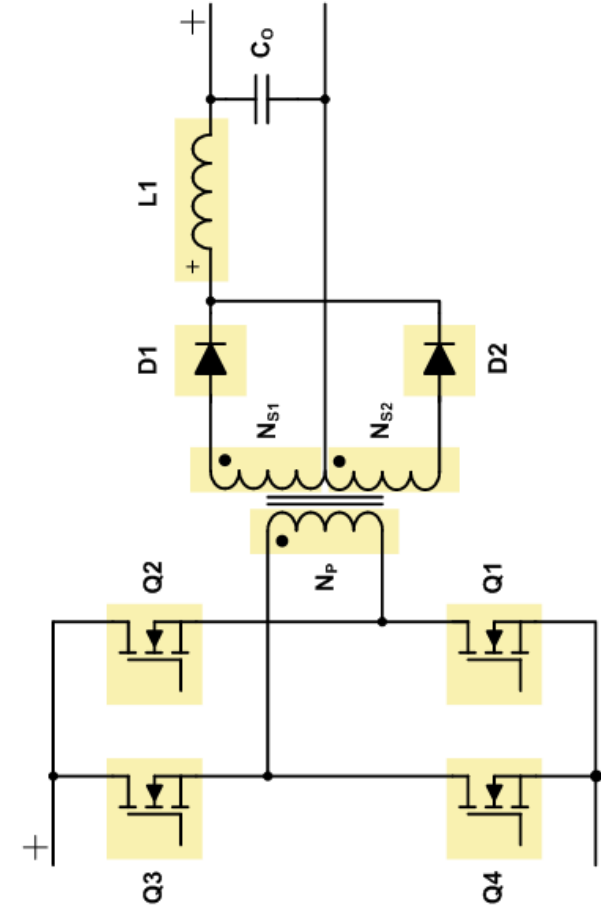
Switching Frequency: 50 kHz

Diode Voltage Drop: 0.02 V

Inductor Current Ripple: 20 %

Maximum Duty Cycle: 90 %

Magnetizing Current: 5 %



Recommended Values

Calculated Turns Ratio: 0.20 : 1

Calculated Transformer Inductance: 313.60 μH

Calculated Inductance: 560.06 μH

Choose Values

Choose Turns Ratio: 0.2 : 1

Choose Inductance for Transformer: 300 μH

Choose Inductance: 600 μH

Calculated Values

Period: 20.00 μs

Duty Cycle: 90.92 %

On-Time: 9.09 μs

Off-Time: 0.91 μs

Zero-Time: 0.00 μs

Input Power: 1000.10 W

Output Power: 1000.00 W

Rect. Diode Losses: 0.10 W

Input Current: 22.73 A

Current Ripple: 0.30 A

Mag. Current: 1.33 A

L_{sec}: 7500.00 μH

Info

[Link to TI Power Management Products](#)

