

# C-13. DC-DC Phase-Shift Buck Converter $V_o=12V$ $I_o=250A$

## C-13. DC-DC Phase-Shift Buck Converter $V_o=12V$ $I_o=250A$ Simulation Circuit

Input :  $V_{in}=800V_{dc}$

Output :  $V_o=12V_{dc}$   
 $I_o=250A_{dc}$

GD-IC : **BM61S41RFV**

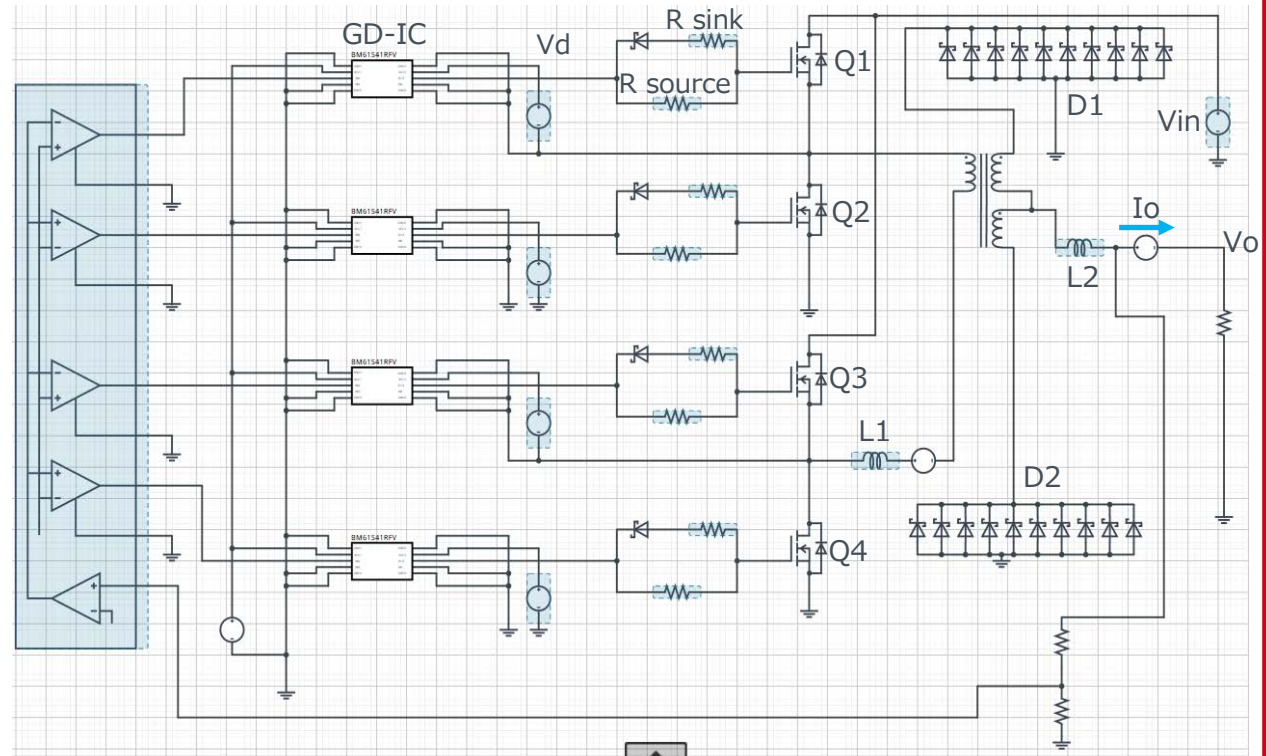
Gate Drive :  $V_d=18V$   
 $R_{source}=5\Omega$   
 $R_{sink}=2\Omega$   
 $f_{sw}=50kHz$

**Q1~Q4 : SCT3160KL**  
**SiC MOSFET(1200V 17A)**

**D1,D2 : RB238T100**  
**SBD (40V 20A)**

**L1 : 20uH**    **L2 : 10uH**

$T_j=100^\circ C$



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