

Project: Dual Active Bridge DC-DC isolated converter single and three phase

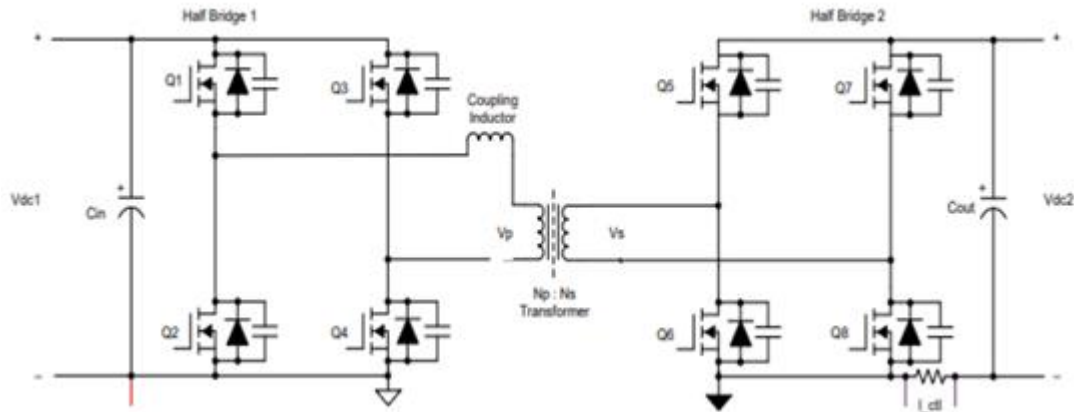


Figure 1: DAB DC-DC converter single phase

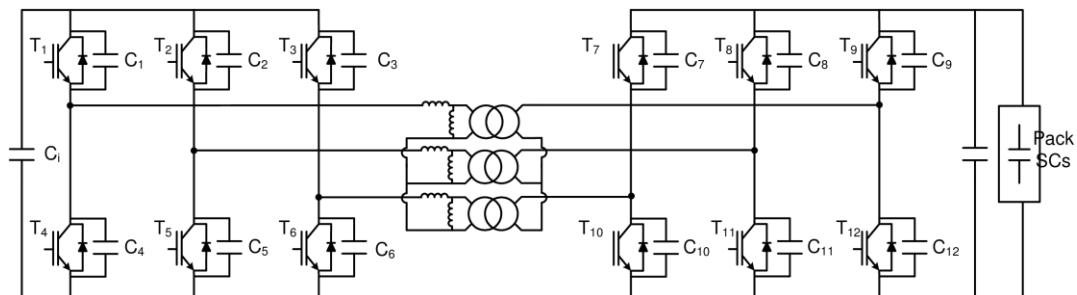


Figure 2 : DAB3 Converter

the choice of input parameters are chosen by the student by setting the power, input and output voltage, switching frequency, value of the primary side inductance and phase shift

1) Set up a simulation of the dual active bridge DC-DC isolated converter using:

- a) Phase shift modulation operating in both buck and boost modes
- b) Phase shift modulation in closed loop by regulating the output voltage
- c) Triangle and trapezoidal modulation

2) Set up simulations for the three-phase case using the phase shift mode