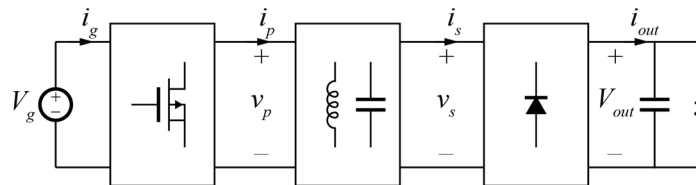


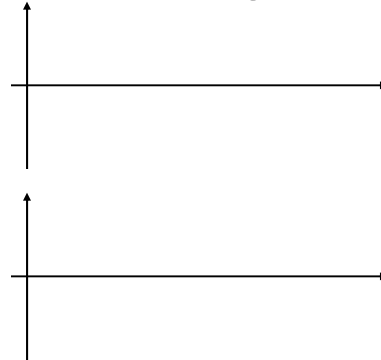
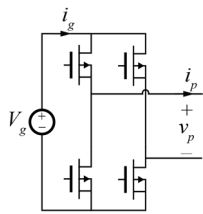
## TBC Modulation Board

- *Available for use*
  - FPGA (Spartan 6) with 300 MHz clock
    - Including Verilog code for arbitrarily timed PWM signals
  - 8 isolated digital signals
    - 4 independent floating outputs (high side)
    - 4 isolated signals sharing one common ground
  - 15V supply with adjustable linear regulator
    - 2W maximum
- You may use any other signal source
- You must implement your own gate driver and any circuitry not mentioned here
- Connection by male header pins, layout posted to website by Monday

## AC Link Waveforms

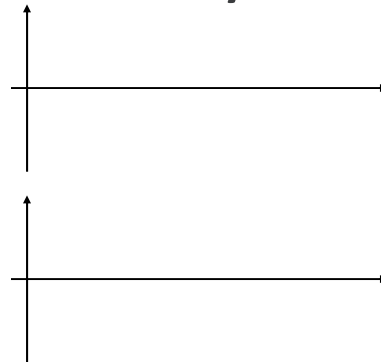
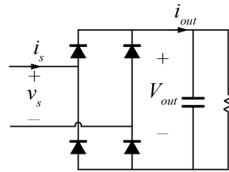


## Switch Network Sinusoidal Analysis



## Switch Network Equivalent Circuit

## Diode Rectifier Sinusoidal Analysis



## Diode Rectifier Equivalent Circuit

## Complete Equivalent Circuit

