Exp. 4 notes

• Layout of the analog control circuitry is critical! It is relatively high impedance, and is prone to picking up noise

• Open loop:
  – Use 0.1 uF ceramic decoupling capacitor from UC3525 pin 2 to UC3525 ground pin

• Closed loop:
  – Use twisted pair to transmit feedback signal and ground from converter output to error amplifier
  – Use twisted pair to transmit gate drive signal and ground
  – Need decoupling caps for all ICs
  – Where do the ground currents flow? Do the power stage ground currents flow through the control circuitry?

• Power supply
  – Set current limit to a level greater than your converter should need, but smaller than the transistor current rating
  – Use soft start feature of UC3525 to get the closed-loop converter to start up