

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