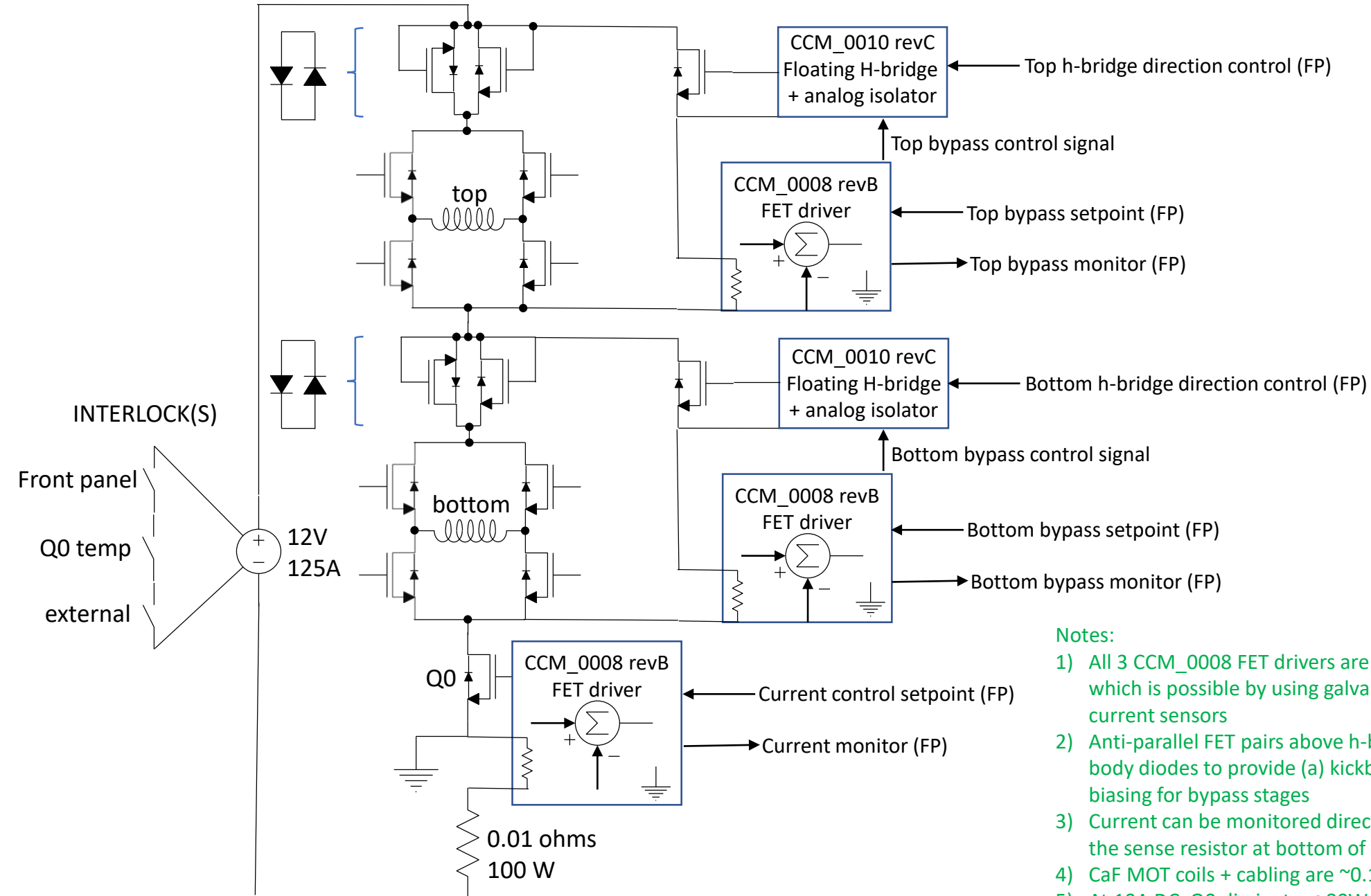


# Simplified schematic for MOT coil control



## Notes:

- 1) All 3 CCM\_0008 FET drivers are lab ground referenced, which is possible by using galvanically isolated CASR current sensors
- 2) Anti-parallel FET pairs above h-bridge stages use the FET body diodes to provide (a) kickback protection and (b) biasing for bypass stages
- 3) Current can be monitored directly by measuring across the sense resistor at bottom of chain
- 4) CaF MOT coils + cabling are  $\sim 0.1$  ohms (1V  $\sim$  10A)
- 5) At 10A DC, Q0 dissipates  $\sim 80$ W (12V supply = 8V\*10A)