

Figure 14 EPC9145 main schematic

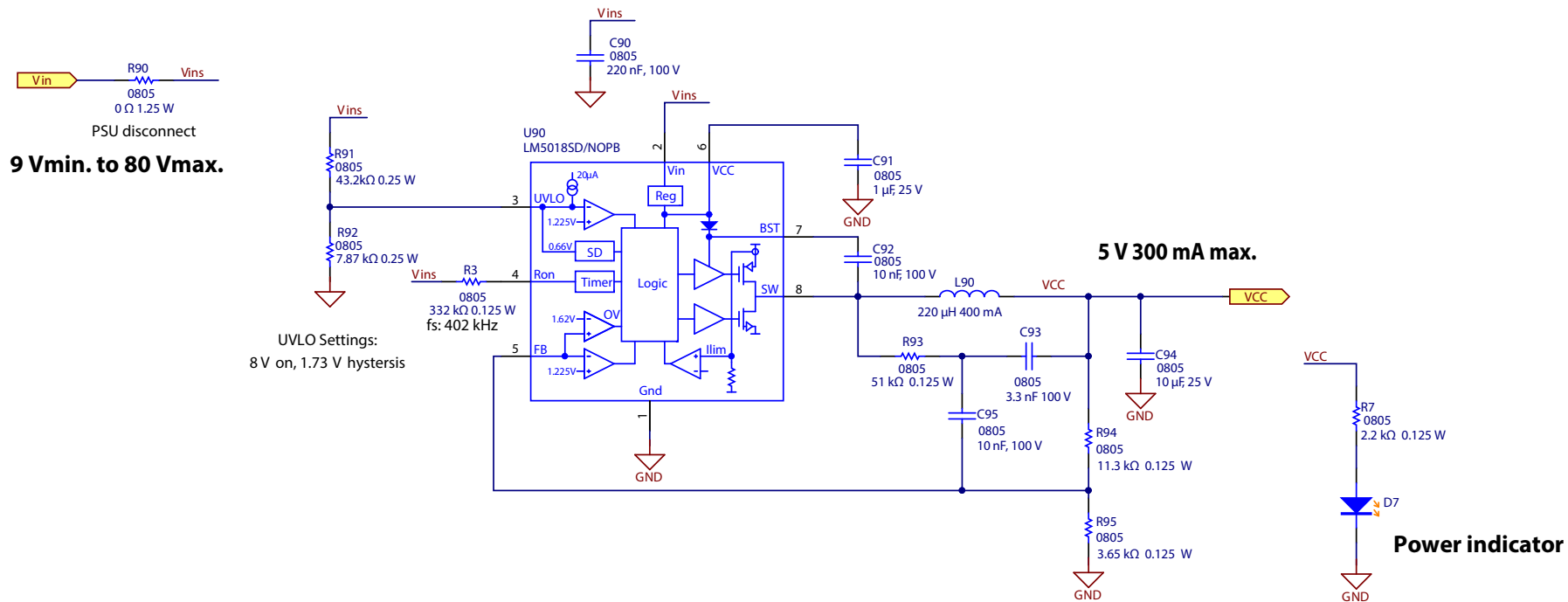
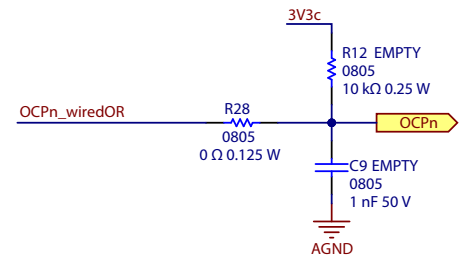
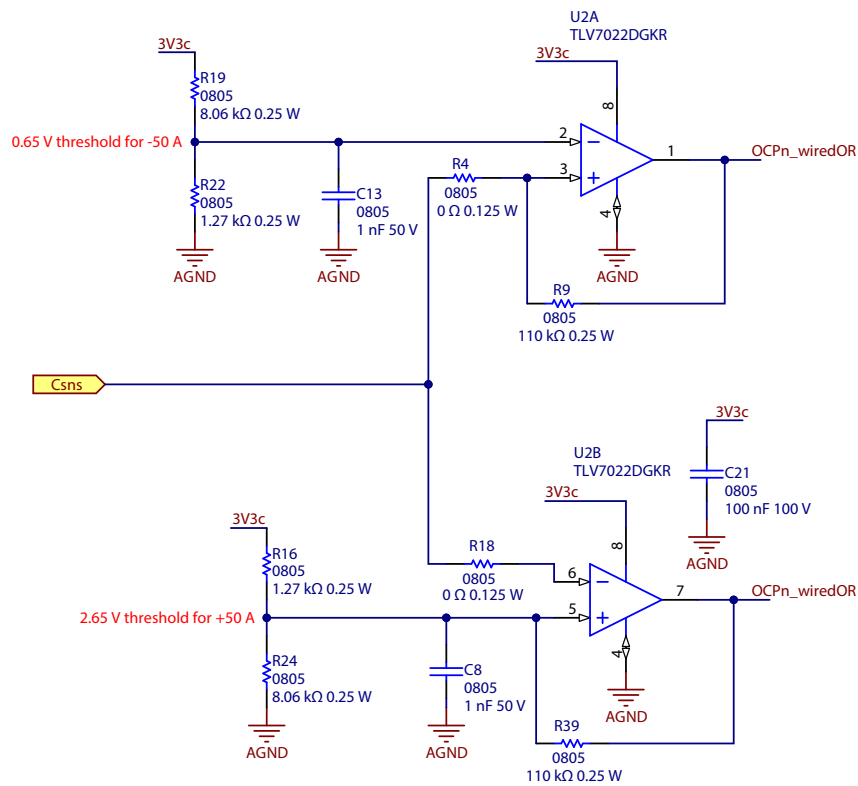
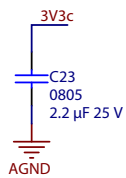


Figure 15: 80 V to 5 V V housekeeping power supply



R12 and C9 are not mounted because they are mounted in front of the gate driver.

Figure 16: Bi-Directional Over Current Detection

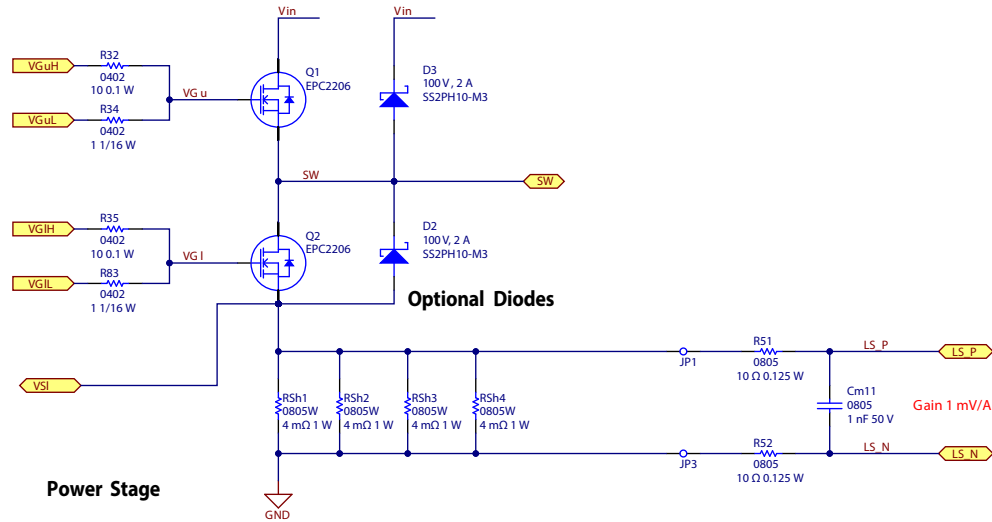
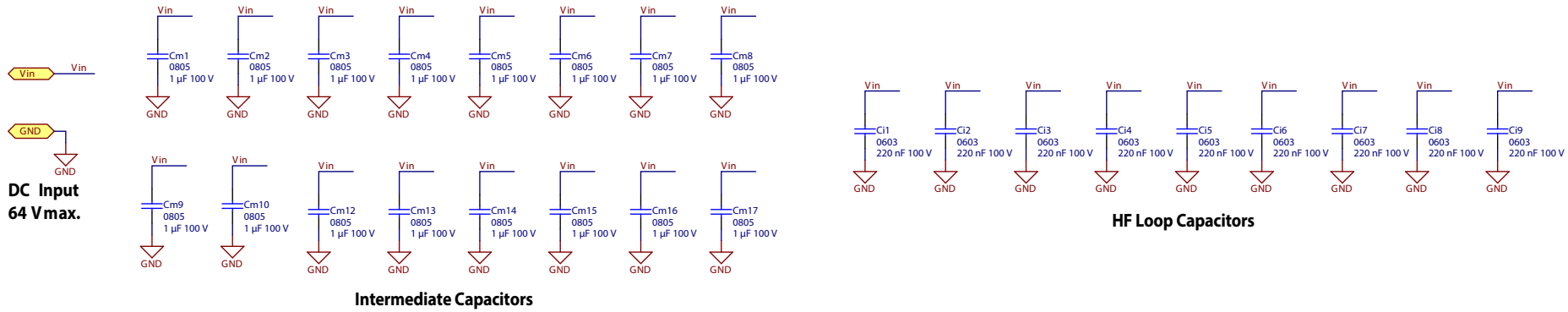


Figure 17: EPC2206 Phase-Leg

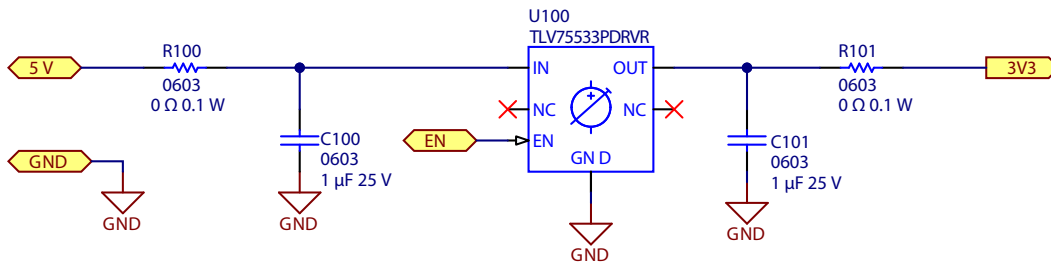


Figure 18: 5 V to 3.3 V LDO power supply

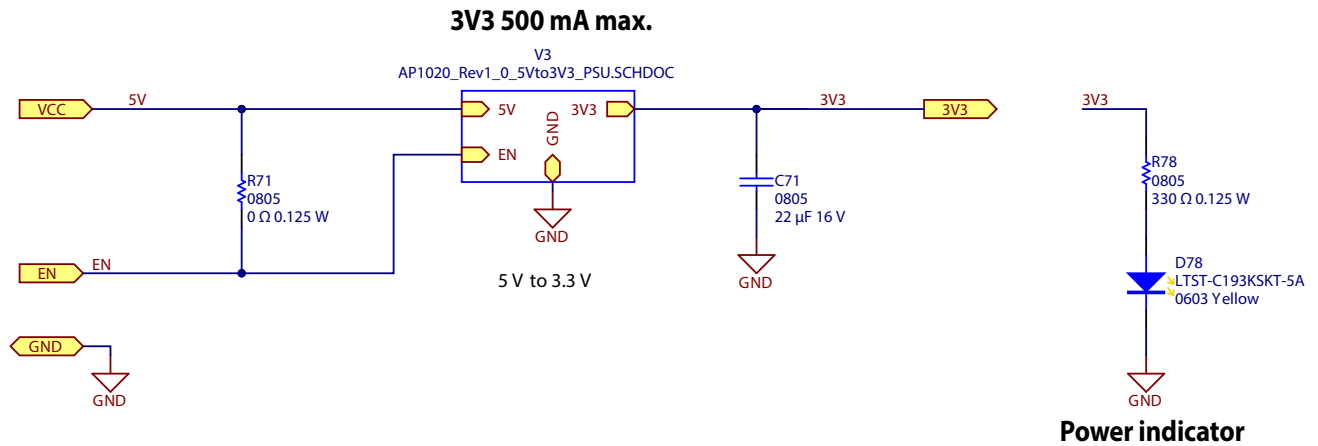


Figure 19: 5 V to 3.3 V LDO Housekeeping Power Supply

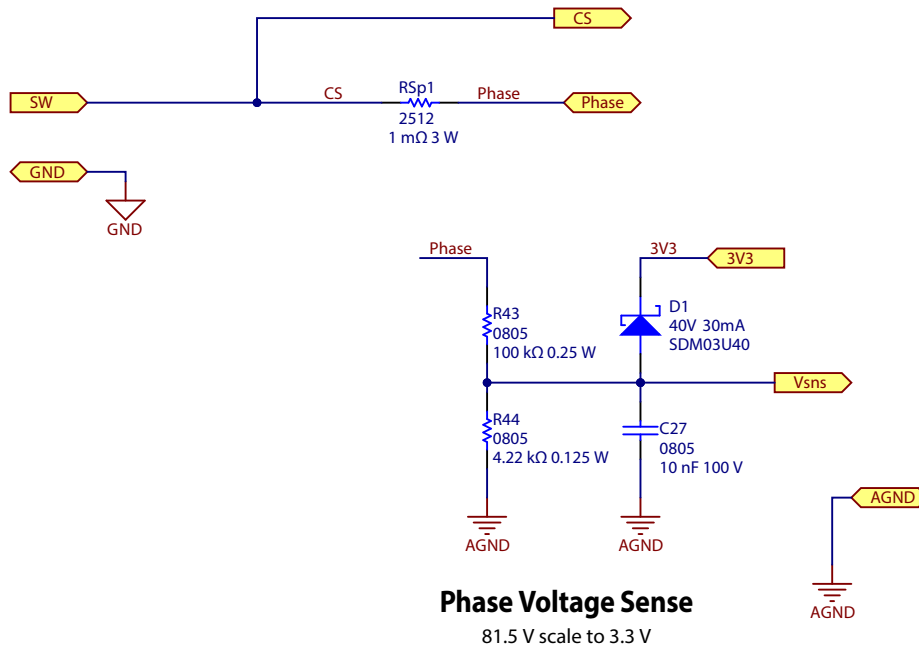
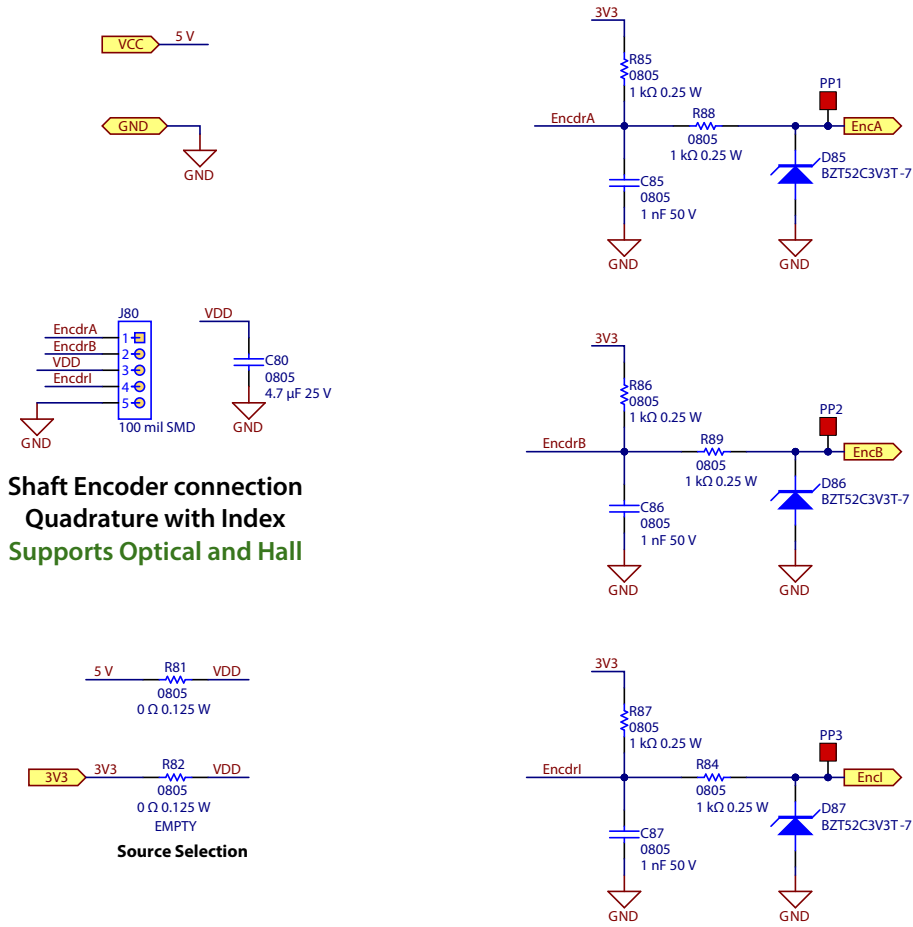


Figure 20: Phase shunt and phase voltage sense



**Shaft Encoder connection**  
**Quadrature with Index**  
**Supports Optical and Hall**

Figure 21: Shaft-encoder interface schematic

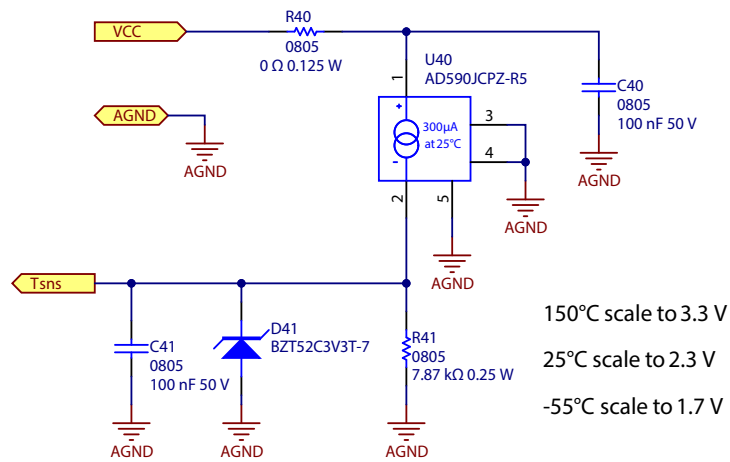


Figure 22: Temperature sensor schematic

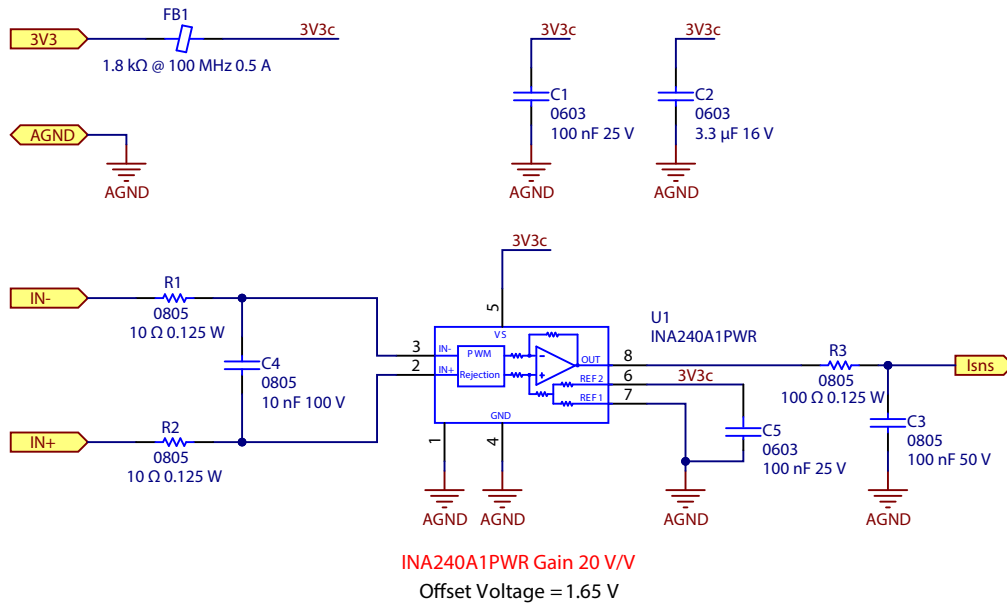


Figure 23: Current sense amplifier

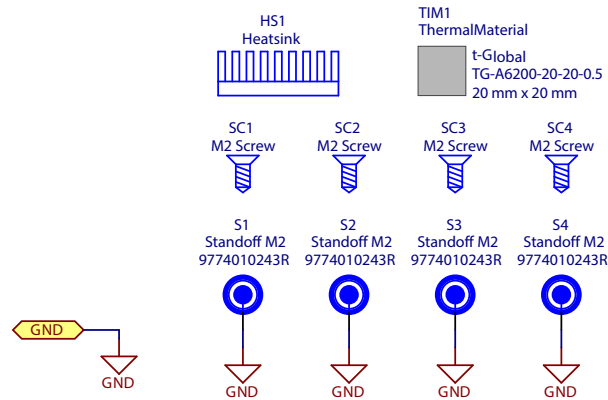


Figure 24: Heatsink kit schematic

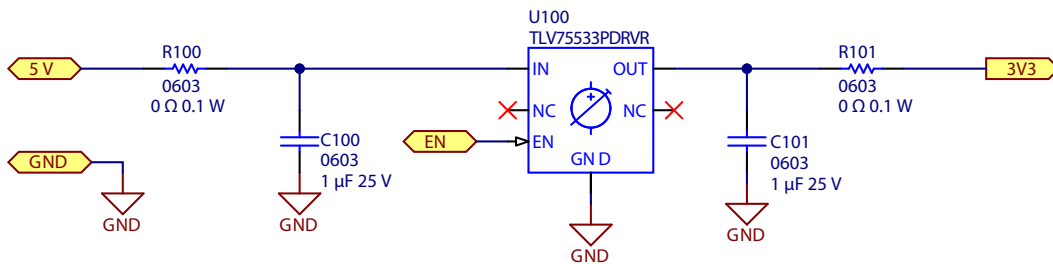
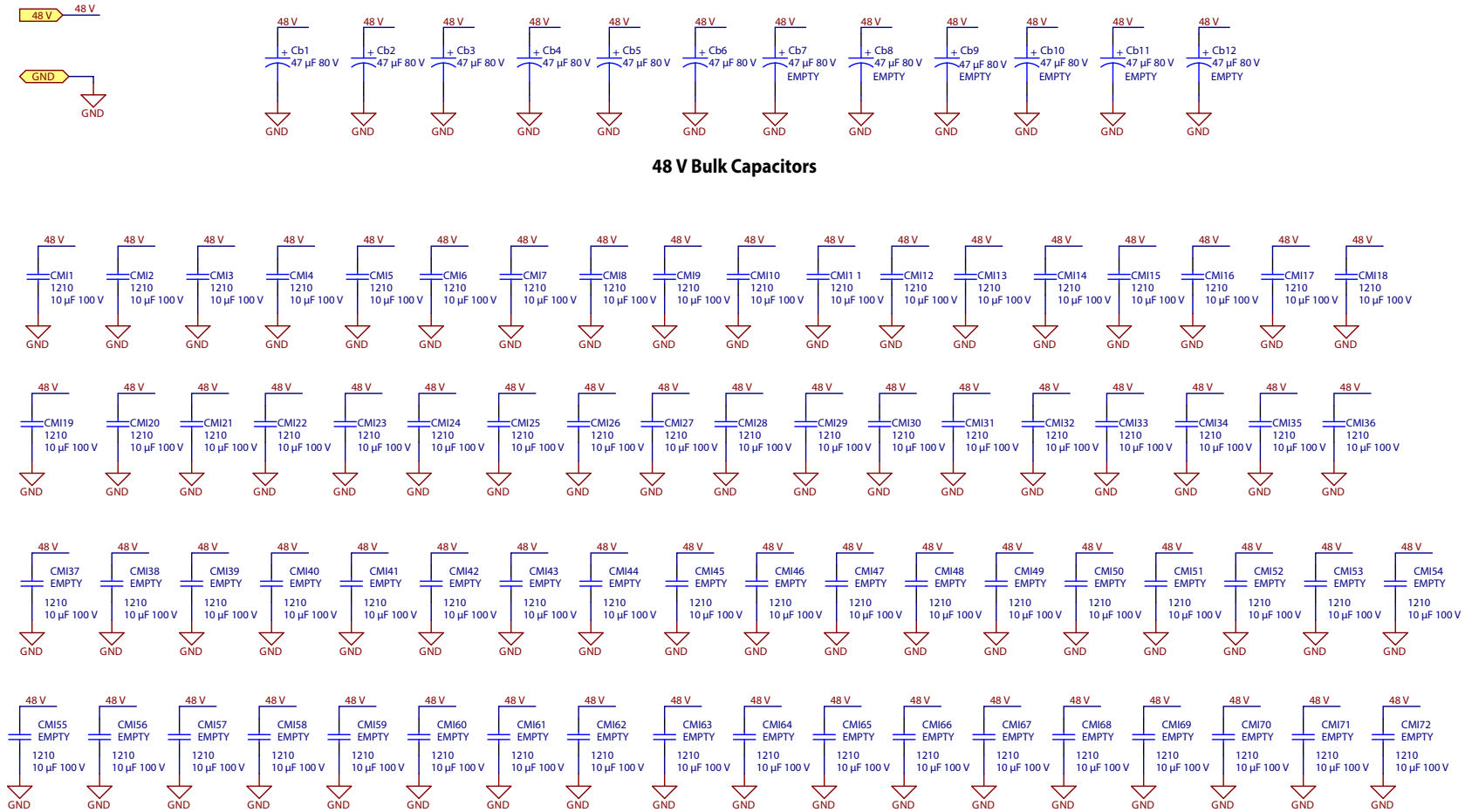


Figure 25: 5 V to 3.3 V LDO power supply schematic



**48 V Bulk Capacitors**

**48 V Medium Frequency Capacitors**

Figure 26: High Power Motor Drive DC Bus Capacitors



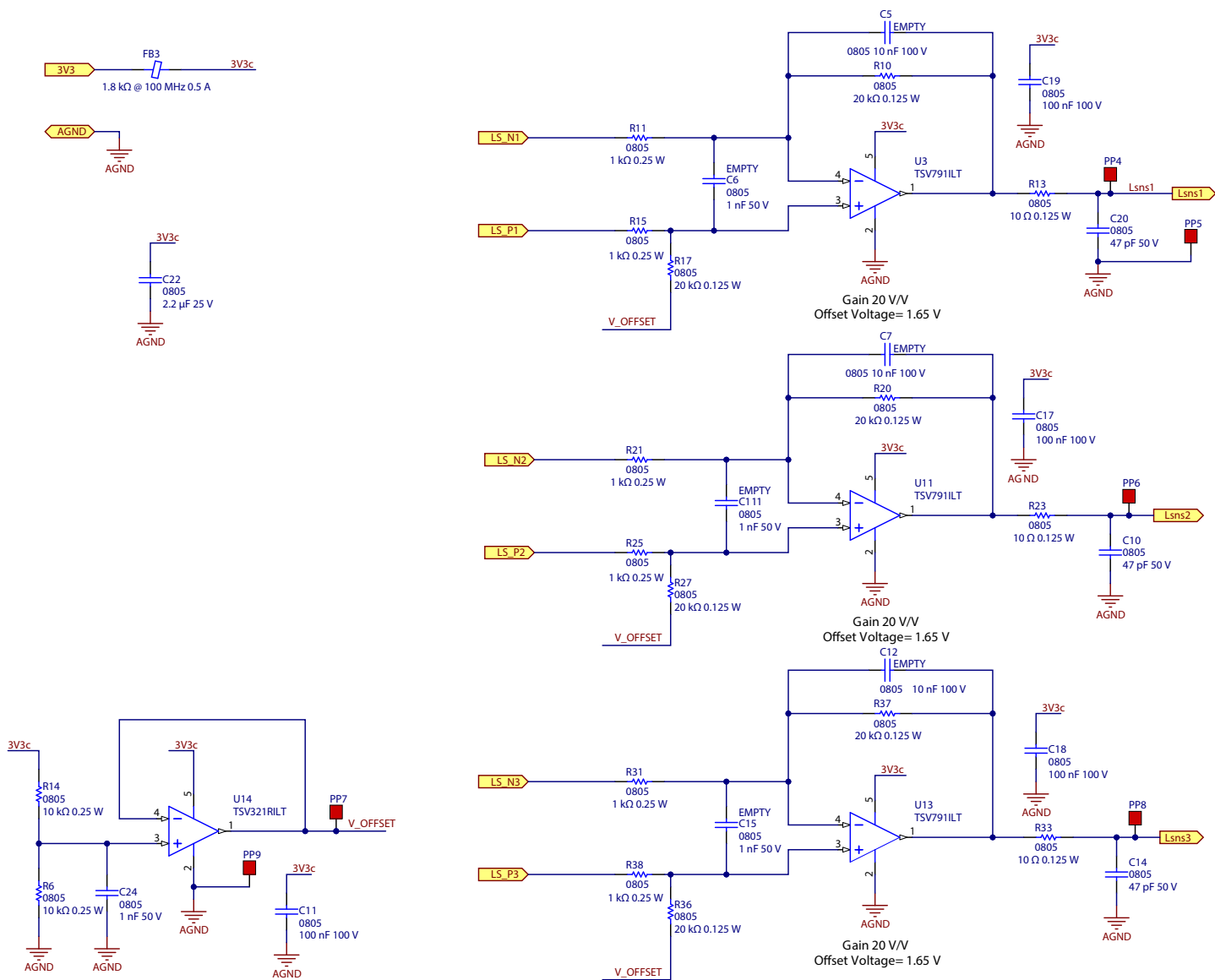


Figure 27: Bi-Directional Leg Current Sense Amplifier

