

Figure 13: EPC9145 main schematic

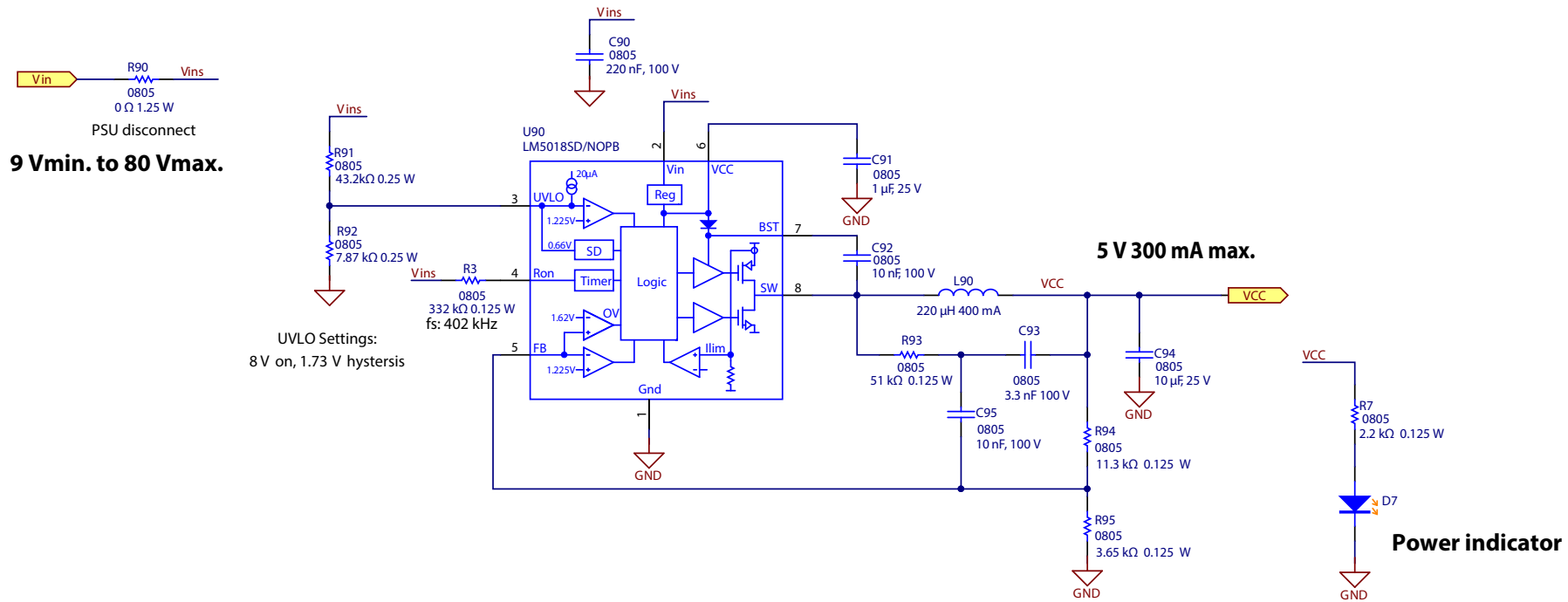
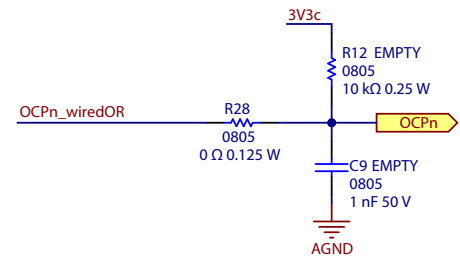
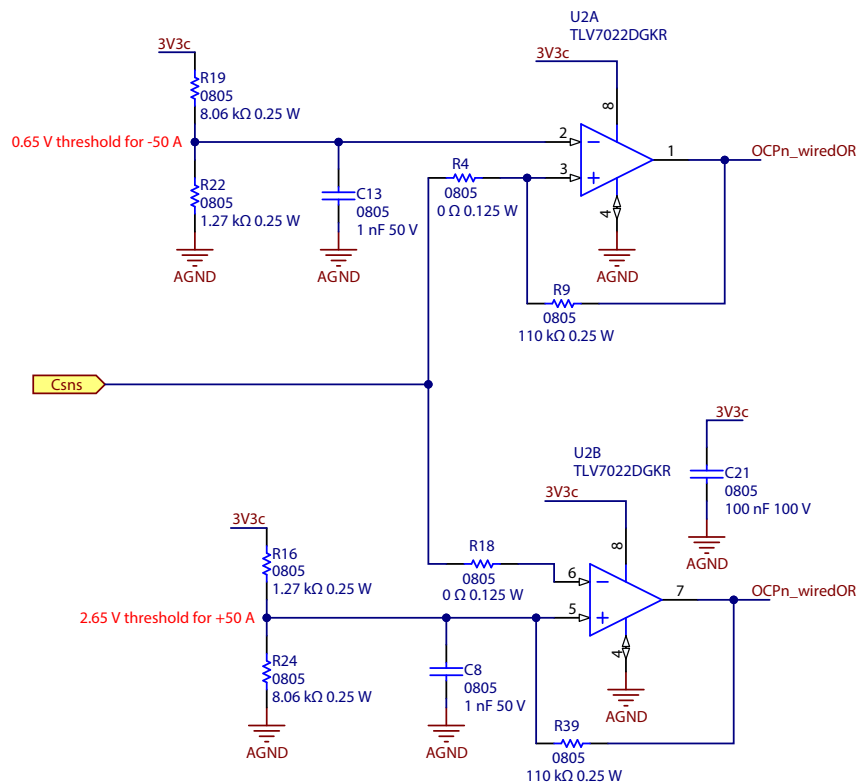
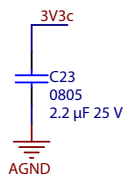
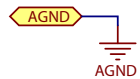
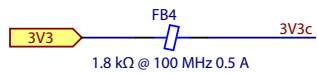


Figure 14: 80 V to 5 V V housekeeping power supply




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

Figure 15: Bi-Directional Over Current Detection

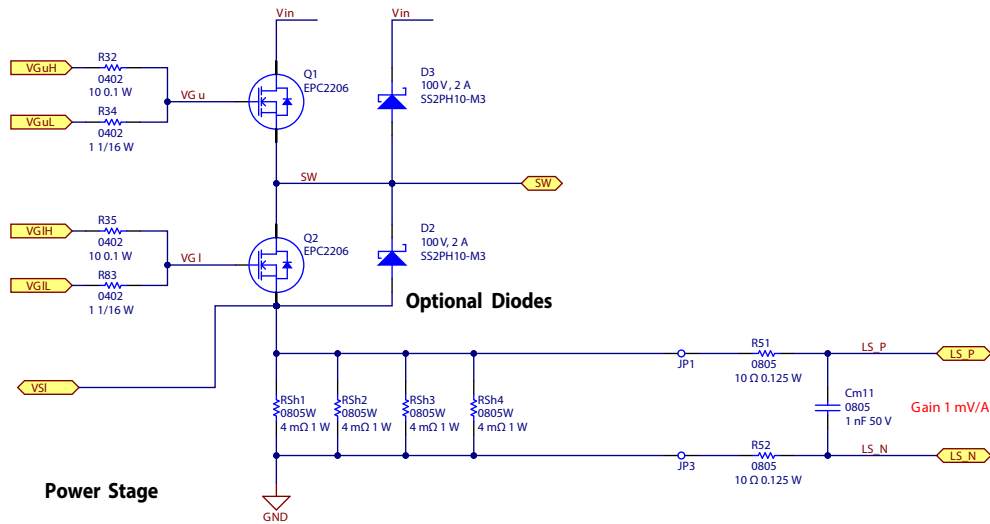
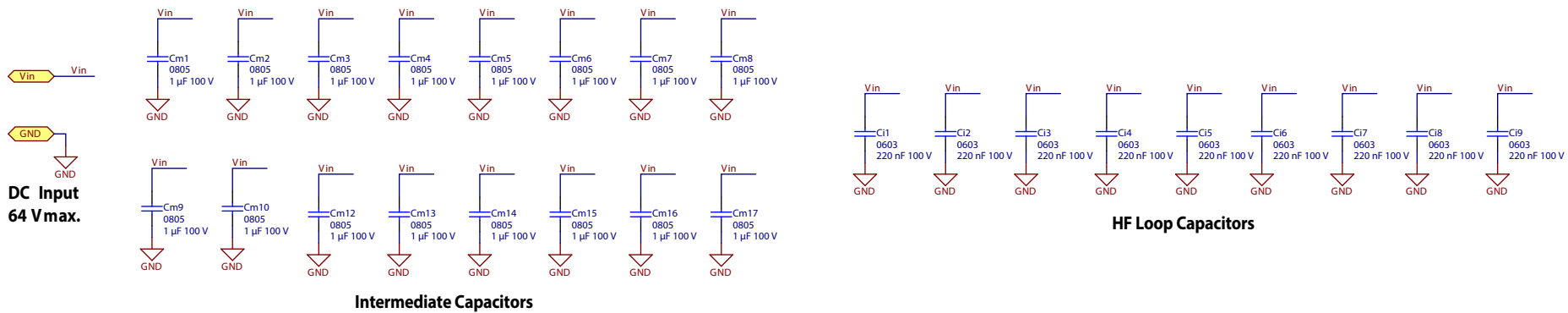


Figure 16: EPC2206 Phase-Leg

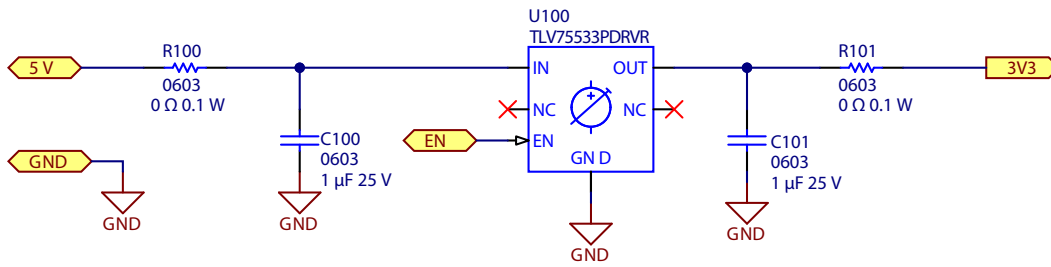


Figure 17: 5 V to 3.3 V LDO power supply

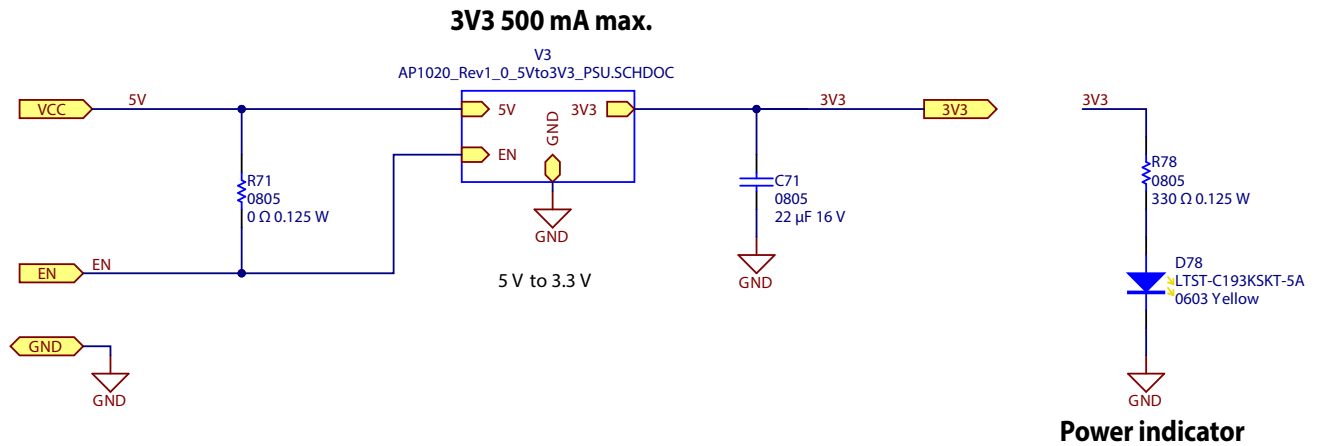
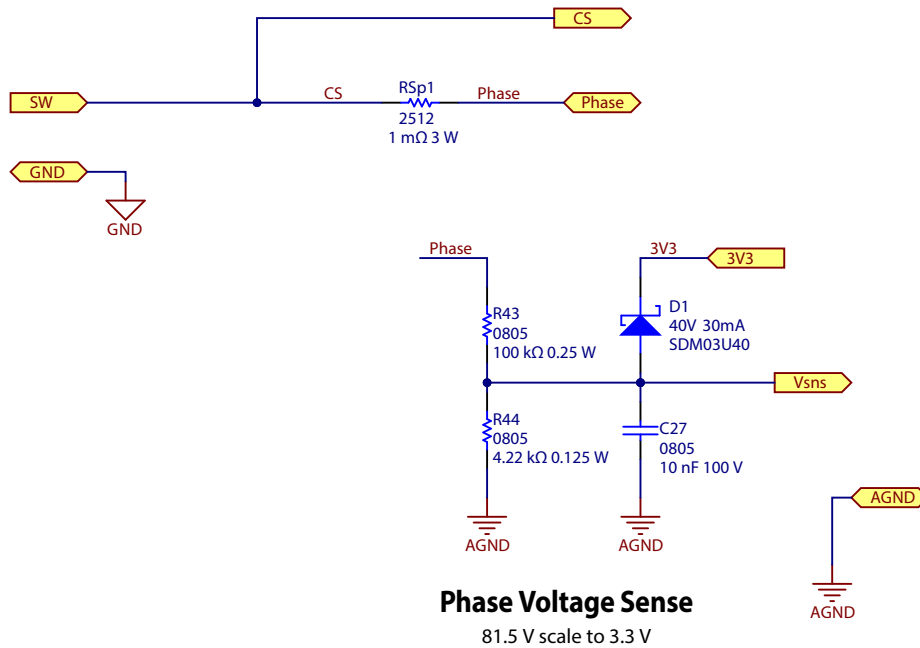
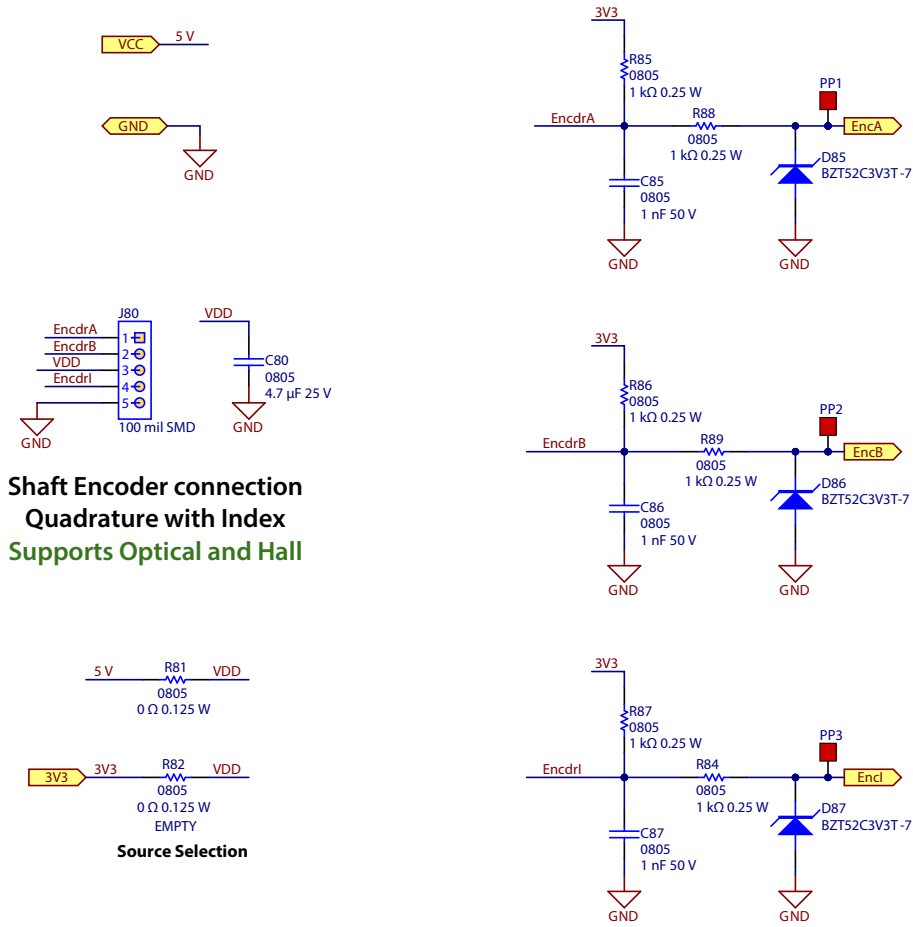


Figure 18: 5 V to 3.3 V LDO Housekeeping Power Supply



Phase Voltage Sense
81.5 V scale to 3.3 V

Figure 19: Phase shunt and phase voltage sense



Shaft Encoder connection
Quadrature with Index
Supports Optical and Hall

Figure 20: Shaft-encoder interface schematic

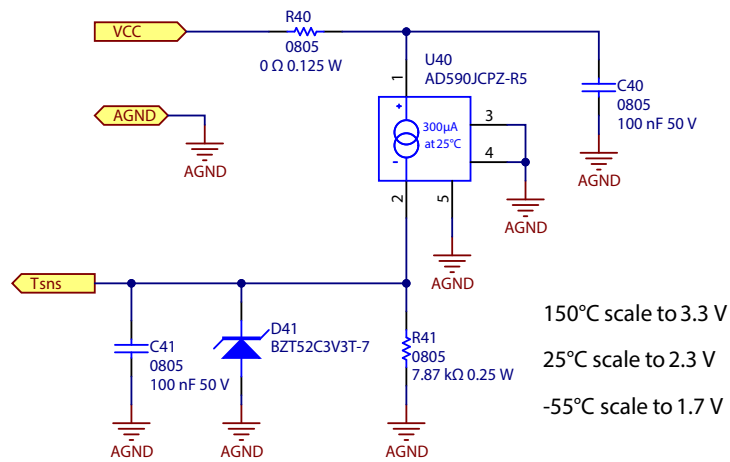


Figure 21: Temperature sensor schematic

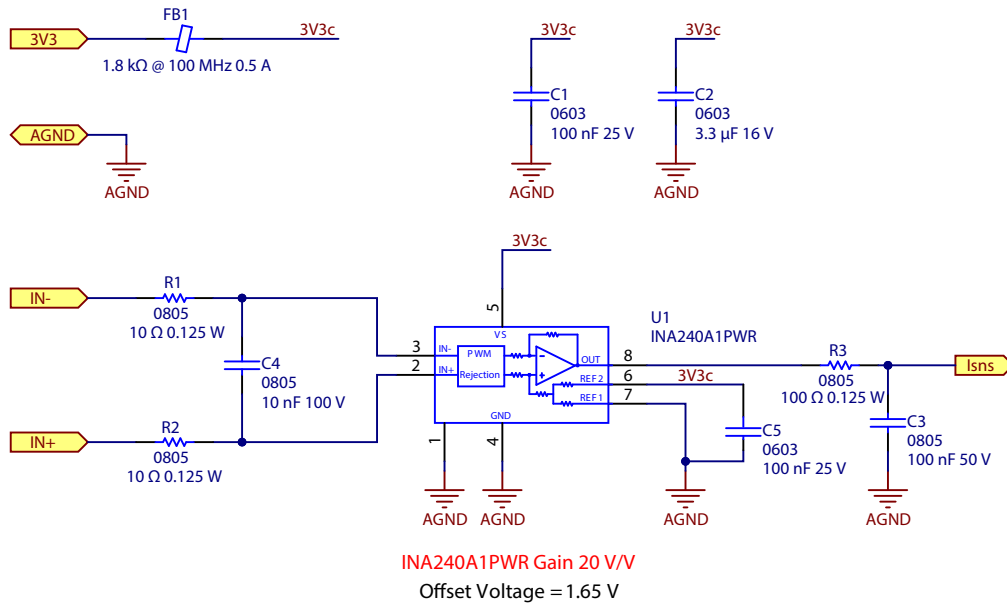


Figure 22: Current sense amplifier

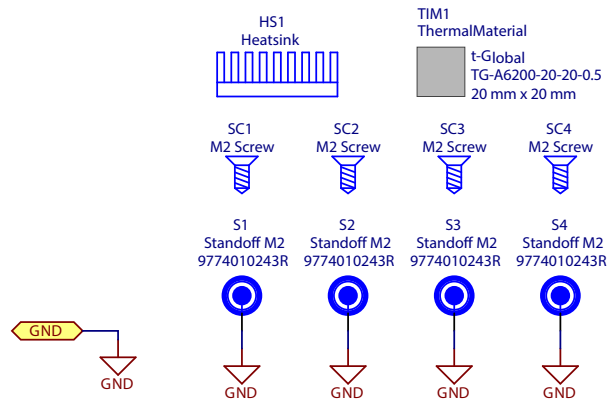
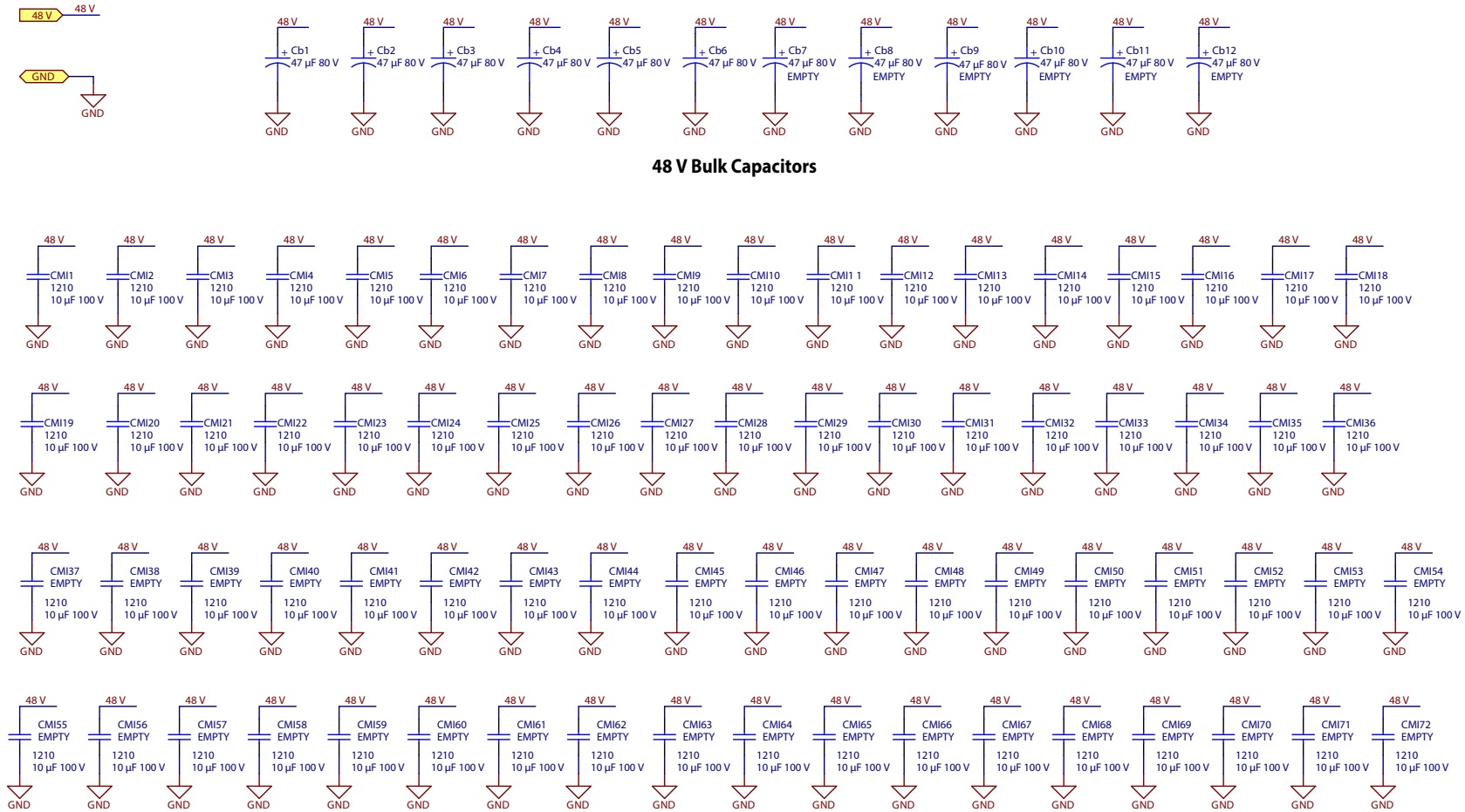


Figure 23: Heatsink kit schematic



48 V Bulk Capacitors

48 V Medium Frequency Capacitors

Figure 24: High Power Motor Drive DC Bus Capacitors

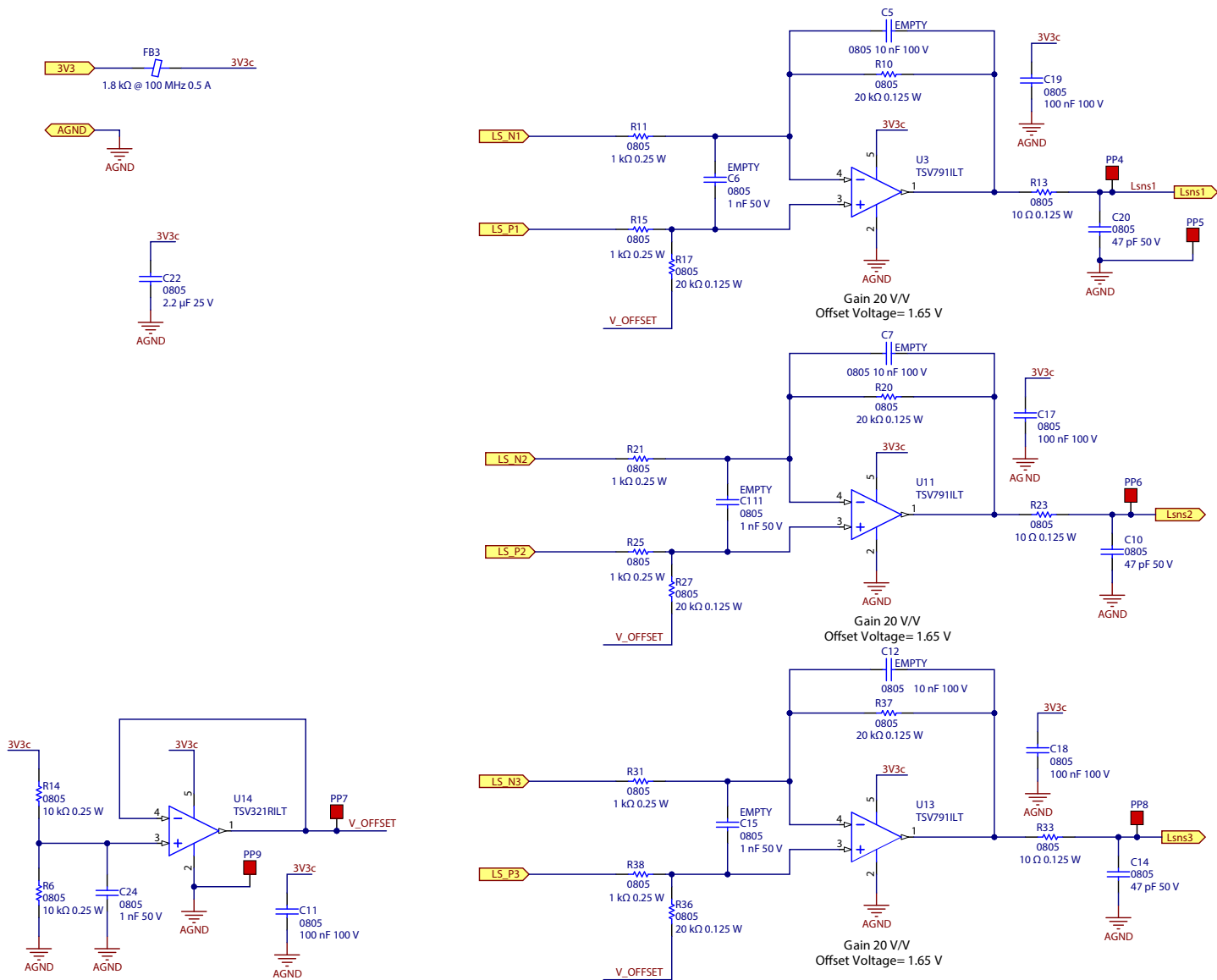


Figure 25: Bi-Directional Leg Current Sense Amplifier