

MPCPB, preferably with direct attachment for thermals.

BOM: <https://www.digikey.com/en/mylists/list/430F3M7L10>

Greater than 10MHz -3dB current bandwidth
Fixed 10A / V gain
50A max set-current
10mA max leakage when off
20mA accuracy
5V-10V DC < 1A power supply

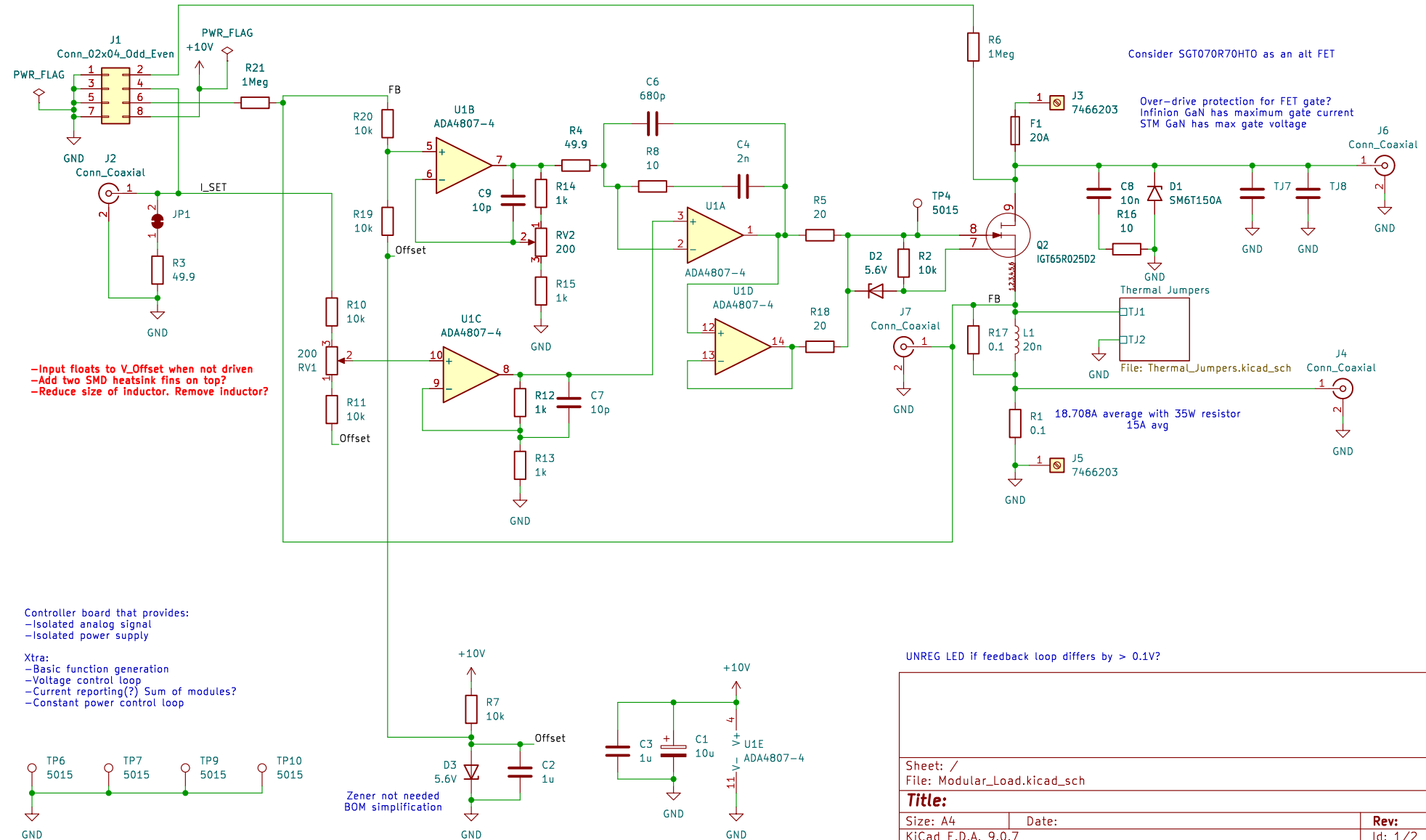
Each module report:
-Pwr
-Temp
-Voltage
-Current

IO Considerations:
-Pwr
-GND
-Set current
-UNREG
-Temp
-Fault/Protect

Thermal design:
Tjc, ~0.51C/W
Solder, ~0.025 C/W
Copper coin under FET, ~0.04 C/W
TIM: ??? Gel75, 0.2mm, ~0.14 C/W

Thermal jumpers??
TIM to heatsink, 1W/mk, 65x40mm 0.5mm, 0.19 C/W

230W abs max on FET @ 25C without external thermal impedances



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