



May need to be less resistance. I need to calculate

Should I add external FB testpoint so that power can be adjusted with external resistor or analog signal?

INA180 seems to actually be very stable. It just can't handle much voltage, so a zener regulator is needed. I tried the TSC888, and it works but it loses stability above 8v input (not sure if the INA will do that though since I can't push it that far).

V1 was good. It worked and current was stable and low noise with appropriate filtering at certain input voltages.

The large decoupling capacitors are needed because I included a short across the output in the production board version.

V2 was bad. The INA180 seems to be very stable but it loses stability above 8v input (not sure if the INA will do that though since I can't push it that far).

The chip draws very little current and the maximum voltage of the buck-boost IC is 9v, so maximum power dissipation of the regulator is basically negligible (like 20mW at most) (however that could very slowly drain a battery). Could be fixed by tying regulator to EN to

V2 should also separate AGND and PGND for lower noise and higher stability hopefully. PGND and AGND will connect at one point at the bottom of the TPS630702, but only there. They will have separate ground planes for the rest of the circuit.

the INA180, zener reg, feedback resistors, INA decoupling cap, VAUX cap?, will be connected to AGND. Everything else will connect to PGND.

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Size: A4	Date:
KiCad E.D.A. kicad 7.0.9	Rev: 1/1