

The purpose of the telemetry transmitter board before flight is to communicate and provide power to other boards on the CAN bus to initiate rocket launch. The purpose of the telemetry transmitter board during flight is to supply power and take in data from the CAN bus and transmit this data to the telemetry receiver board. The telemetry transmitter board will transmit this data via a RF module.

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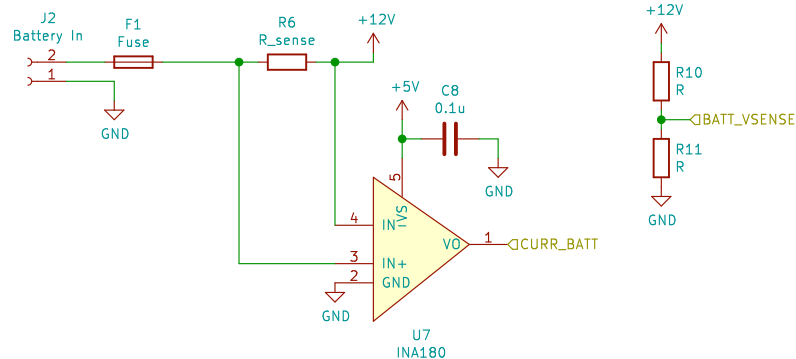
File: telemetry_transmitter.sch

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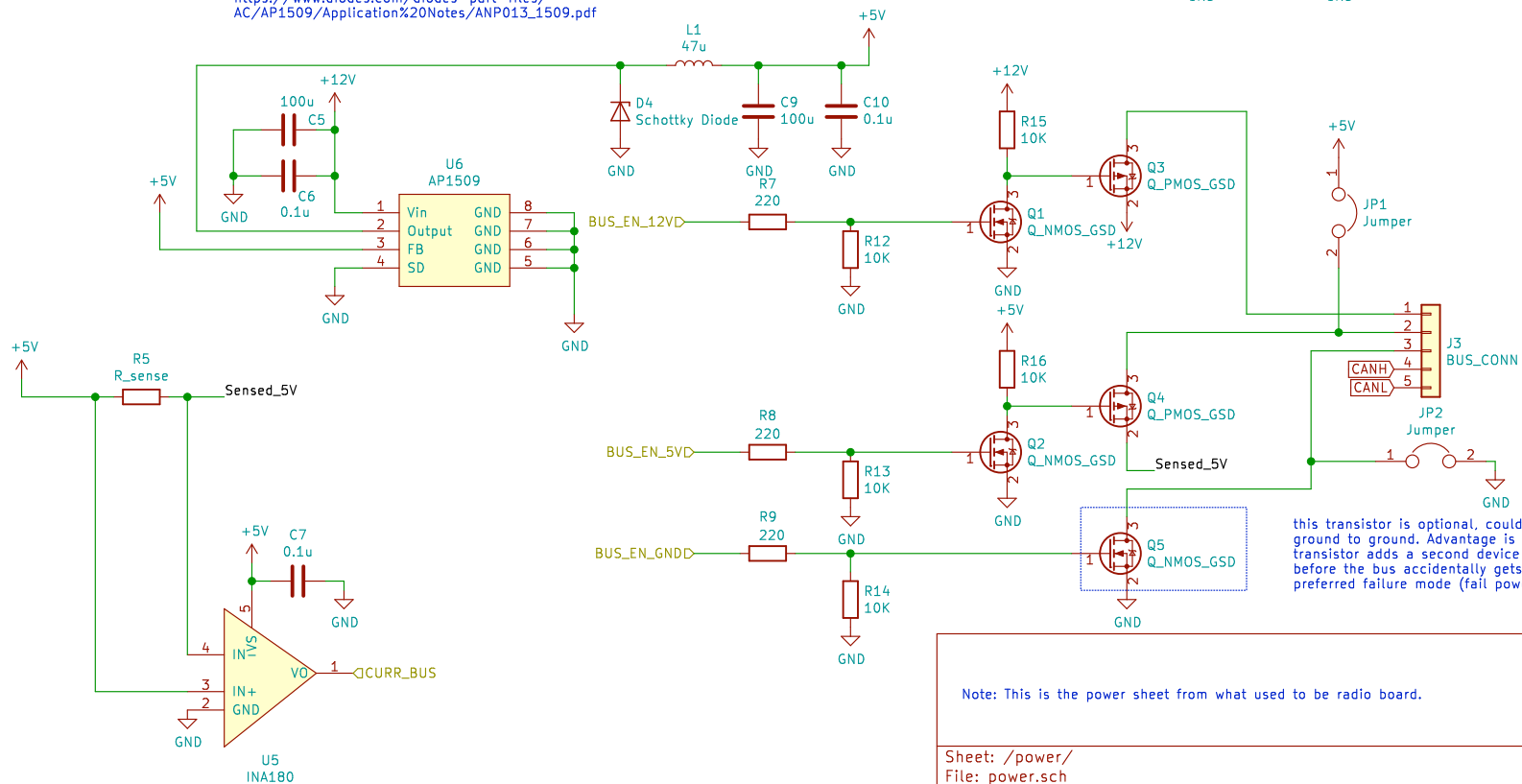
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Voltage divider must map battery input voltage of 10–13V down to 0–2.048 volts with output impedance less than 10k. Output range allows voltage compare against pic's fixed reference instead of potentially unstable VDD. Output impedance is as specified in datasheet.

Part values taken from https://www.diodes.com/diodes-part-files/AC/AP1509/Application%20Notes/ANP013_1509.pdf



this transistor is optional, could just tie bus ground to ground. Advantage is that this transistor adds a second device that needs to fail before the bus accidentally gets power. Need to discuss preferred failure mode (fail powered or unpowered)

Note: This is the power sheet from what used to be radio board.

Sheet: /power/
File: power.sch

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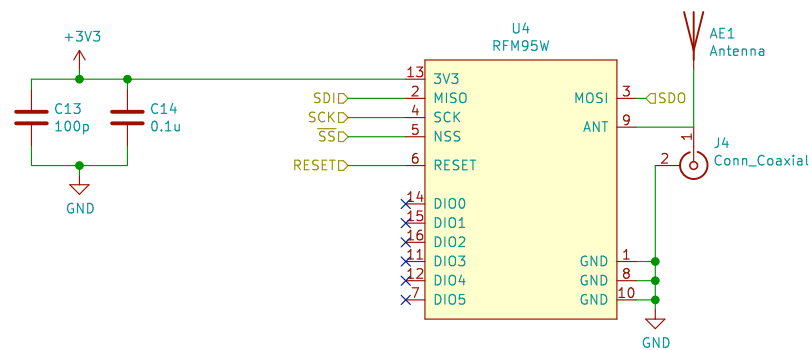
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Sheet: /radio/ File: radio.sch		
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