RocketLogger Assembly Test

Required Hardware

- One or two power supplies with current limiting and measuring capability
- Multimeter or similar to measure voltages at specified test points

Instructions

Note: This testing may be done before the headers (P8, P9, and J1) and the SMA connectors are assembled.

1. Connect GND (P9 pins 1, 2 / TP413), all voltages are referenced to this connection
2. Connect 3.3 V (P9 pins 3, 4 / TP415)
    1. Current limit: 20 mA
    2. The idle current draw should be less than 10 mA (measured: 0.27 mA)
    3. The 3.3 V rail may be disconnected
3. Connect 5 V (P9 pins 7, 8 / TP412) using a lab PSU
    1. Current Limit: 1000 mA
    2. The current draw should be close to 0 mA
    3. Keep this rail connected for the remainder of the tests
4. Connect 5 V or 3.3 V to PowerEnable (P9 pin 13 / TP414)
    1. The current draw should be 5mA or 3.3mA respectively (1kΩ resistor to GND)
    2. The current draw on the 5V rail should now be: 135 mA ± 20 mA
    3. Keep the PowerEnable connection for the remainder of the tests
5. Check all the voltage supply test points
    1. TP402: +6.8 V ± 0.3 V
    2. TP403: -6.8 V ± 0.3 V
    3. TP408: +6 V ± 0.25 V
    4. TP409: -6 V ± 0.25 V
    5. TP411: +2.5 V ± 0.1 V
    6. TP410: -2.5 V ± 0.1 V
    7. TP407: +5 V ± 0.15 V
    8. TP406: -5 V ± 0.15 V
6. Check the compensation test points
    1. TP404: +400 mV ± 50 mV
    2. TP405: -400 mV ± 50 mV
7. Disable and disconnect the power supplies