

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

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 (1k Ω resistor to GND)
 2. The current draw on the 5V rail should now be: 135 mA \pm 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 \pm 0.3 V
 2. TP403: -6.8 V \pm 0.3 V
 3. TP408: +6 V \pm 0.25 V
 4. TP409: -6 V \pm 0.25 V
 5. TP411: +2.5 V \pm 0.1 V
 6. TP410: -2.5 V \pm 0.1 V
 7. TP407: +5 V \pm 0.15 V
 8. TP406: -5 V \pm 0.15 V
6. Check the compensation test points
 1. TP404: +400 mV \pm 50 mV
 2. TP405: -400 mV \pm 50 mV
7. Disable and disconnect the power supplies