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| Test Writer | | Cassandra L. Noice | | | | | |
| Test Case Name | | Power Board Integration Test - Current | | | | Test ID# | PWR-IT-2 |
| Description | | Verify current draw capacities of the power board are within the listed tolerances | | | | Type | Blackbox |
| Test Information | | | | | | | |
| Name of Tester | |  | | | | Date |  |
| Hardware Version | | Power Board 1.0 | | | | Time |  |
| Setup | | Attach power supply, capable of providing up to 10A at 16V, to the high and ground terminals. Set voltage output to 14.8V, the nominal voltage for the lithium ion batteries. Prepare multimeter to measure voltages up to 50V. Prepare load to provide currents of up to 4 amps. Turn on output of power supply. | | | | | |
| Step | Action | Expected Results | Pass | Fail | N/A | Comments | |
| 1 | Measure Voltage output on the 5V output pad with 1 amp load | Output measures 5.0V +/- 0.3V |  |  |  |  | |
| 2 | Measure voltage output on the 12V output pad with 4 amp load | Output measures 12V +/- 0.3V |  |  |  |  | |
| 3 | Measure voltage output on the 19V output pad with  4 amp load | Output measures 19V +/- 0.3V |  |  |  |  | |
| 4 | Measure voltage output on the 48V, 1A output pad with 1 amp load | Output measures 48V +/- 0.3V |  |  |  |  | |
| 5 | Measure voltage output on the 48V, 0.5A output pad with 0.5 amp load | Output measures 48V +/- 0.3V |  |  |  |  | |
| 8 | Turn off and disconnect power supply from the board. Turn off multimeter. | None | --- | --- | --- |  | |
| Overall Results | | |  |  |  |  | |