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| Test Writer | | Cassandra L. Noice | | | | | |
| Test Case Name | | Power Board Integration Test - Voltage | | | | Test ID# | PWR-IT-1 |
| Description | | Verify Voltage outputs 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. Turn on output of power supply. | | | | | |
| Step | Action | Expected Results | Pass | Fail | N/A | Comments | |
| 1 | Measure voltage output on the 5V output pad | Output measures 5.0V +/- 0.3V |  |  |  |  | |
| 2 | Measure voltage output on the 12V output pad | Output measures 12V +/- 0.3V |  |  |  |  | |
| 3 | Measure voltage output on the 19V output pad | Output measures 19V +/- 0.3V |  |  |  |  | |
| 4 | Measure voltage output on the 48V, 1A output pad | Output measures 48V +/- 0.3V |  |  |  |  | |
| 5 | Measure voltage output on the 48V, 0.5A output pad | Output measures 48V +/- 0.3V |  |  |  |  | |
| 6 | Turn off power supply. Set voltage output to 16V. Repeat tests 1-5. | Voltage outputs are within the same tolerance for the original test sequence |  |  |  |  | |
| 7 | Turn off power supply. Set voltage output to 12.5V. Repeat tests 1-5. | Voltage outputs are within the same tolerance for the original test sequence |  |  |  |  | |
| 8 | Turn off and disconnect power supply from the board. Turn off multimeter. | None | --- | --- | --- |  | |
| Overall Results | | |  |  |  |  | |