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Test Procedure for the NCV887601BSTGEVB

Operational Guidelines

The demo board is rated to operate full load (3.6 A) for an input voltage as low as 2.6 V at the input terminal under full power. To prevent negative impedance oscillation between the power source and the demo board, connect large value electrolytic capacitors (e.g. 220 μF + 470 μF) at the PCB VIN/GND terminals to decouple the power source from the boost demo board.

Notes:

- 1- Limit time spent with the power supply operating at minimum input voltage (PCB VIN = 2.6 V) to avoid overheating the power semiconductors.
- 2- **The use of external electrolytic capacitors at the input of the demo board (short leads) is strongly recommended for bench testing.**

Test Procedure:

1. Connect a DC source voltage (15 A capable) set to a voltage of 8.5-9.0 V as shown in Fig. 1.
2. Connect a 3.6 A load on the output.
3. Decrease the DC input voltage until the PCB VIN voltage is less than that of the output. Verify that the unit is regulating at VOUT = 6.8 V.
4. Reduce the DC input voltage until the PCB VIN = 2.6 V. Verify that the unit is regulating at VOUT = 6.8 V.

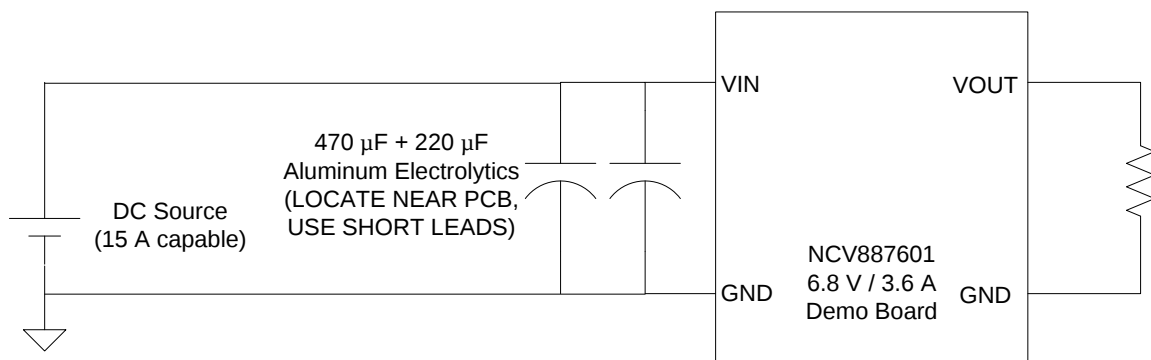


Figure 1. Demo Board Connections