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Test Procedure for the NCV887701BSTGEVB Evaluation Board

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.

The DISB pin is rated 6 V maximum and is TTL compatible.

- A '0' state disables the power supply.
- A '1' state enables the power supply.

Notes:

Limit time spent with the power supply operating at minimum input voltage (PCB VIN = 2.6 V) to avoid overheating the power semiconductors.

Test Procedure:

- 1. Connect a DC source voltage (15 A capable) set to a voltage of 12-13 V as shown in Fig. 1.
- 2. Connect the DISB TTL control signal as shown in Fig. 1. The initial DISB state should be set to logic-'0'.
- 3. Connect a 3.6 A constant current load on the output.
- 4. Decrease the DC input voltage until the PCB VIN voltage is $5.5V \pm 0.5V$.
- 5. Set the DISB control signal to a TTL high state (i.e. 5 V).
- 6. Verify that the unit is regulating at VOUT = 6.8 V.
- 7. 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