Test Procedure for the NIS5232-35GEVB Evaluation Board

The demo board contains both an NIS5232 and an NIS5235 which can be used with a common enable connection, or separately. This procedure applies to the latching thermal version of the chips. Currently the auto-retry version is not being produced. If it is in the future, the short circuit test will change.

For test purposes, do not use jumpers J-E12 and J-E5. This will allow the two devices to operate independently of each other and simplify troubleshooting should there be a problem with one of the devices.

NIS5232 (12 V) test procedure:

1. ***Basic operation.*** With no load, apply 12 volts at the 12V INPUT and Gnd pins of the board. Measure the voltage at the 12V OUTPUT terminal to Gnd. It should be equal to the input voltage.
2. ***Enable pin.*** With the input power still applied, ground the J-E12 pad. The output should go approximately to zero. When the ground signal is removed the output should come back up to 12 volts.
3. ***Current limit.*** With the input voltage applied, ground the 12V OUTPUT pin and then remove the ground. The output should remain off. Remove the input power and reapply. The output should come up.
4. ***Overvoltage.*** Increase the input voltage to 18 volts. The output voltage should be limited to the range of 14 to 16.2 volts. Reduce the input voltage to 12 volts.

NIS5235 (5 V) test procedure:

5. ***Basic operation.*** With no load, apply 5 volts at the 5V INPUT and Gnd pins of the board. Measure the voltage at the 5V OUTPUT terminal to Gnd. It should be equal to the input voltage.
6. ***Enable pin.*** With the input power still applied, ground the J-E5 pad. The output should go approximately to zero. When the ground signal is removed the output should come back up to 5 volts.
7. ***Current limit.*** With the input voltage applied, ground the 5V OUTPUT pin and then remove the ground. The output should remain off. Remove the input power and reapply. The output should come up.
8. ***Overvoltage.*** Increase the input voltage to 18 volts. The output voltage should be limited to the range of 5.95 to 7.35 volts. Reduce the input voltage to 5 volts.