Test Procedure for the NCP1271 (19 V 3 A) Evaluation Board



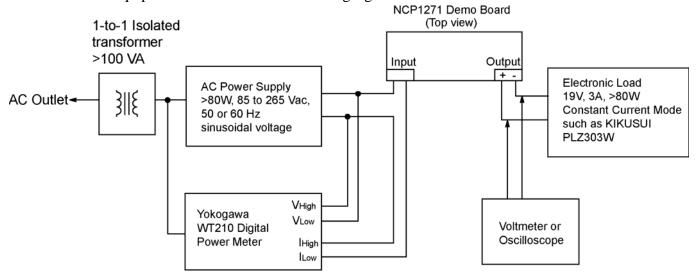
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Required Equipment

- 1. >100VA 1-to-1 Isolated Transformer at AC line voltage
- 2. AC Power Supply with sinusoidal voltage output, 50 to 60 Hz, 85 to 264 Vac, at least 80 W
- 3. Digital Power Meter with low-power-range power consumption measurement capability
- 4. Oscilloscope or Voltmeter
- 5. NCP1271EVB Demo Board
- 6. Electronic Load that can handle at least 6.4 A 19 V 57 W

Test Procedure

1. Connect the equipment as shown in the following figure.



- 2. The electronic load is will draw up to 3 A in constant current mode. Make sure that the wires connecting between the electronic load and demo board can handle 3 A current.
- 3. Set the AC Power Supply to 85 Vac. Limit the maximum input current to 2 A.
- 4. Then, turn on the system and apply an 85 Vac input to the Demo Board with no load on the output.
- 5. Check if the output voltage is close to the nominal output 19 V and stable (no bouncing around). Note that there may be significant voltage drop across the output wire.
- 6. Increase the load to 3A and check that the output voltage is 19 V.
- 7. Sweep the input voltage up to 264 Vac with 3A load on the output. Ensure that the output is 19 V and there is no noise.
- 8. Decrease the output load to 0.5 A and sweep the input voltage from 264 Vac to 85 Vac. Ensure that the output is 19 V and there is no noise.
- * High Voltage is dangerous. Please be extra careful when dealing with high voltage.