

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

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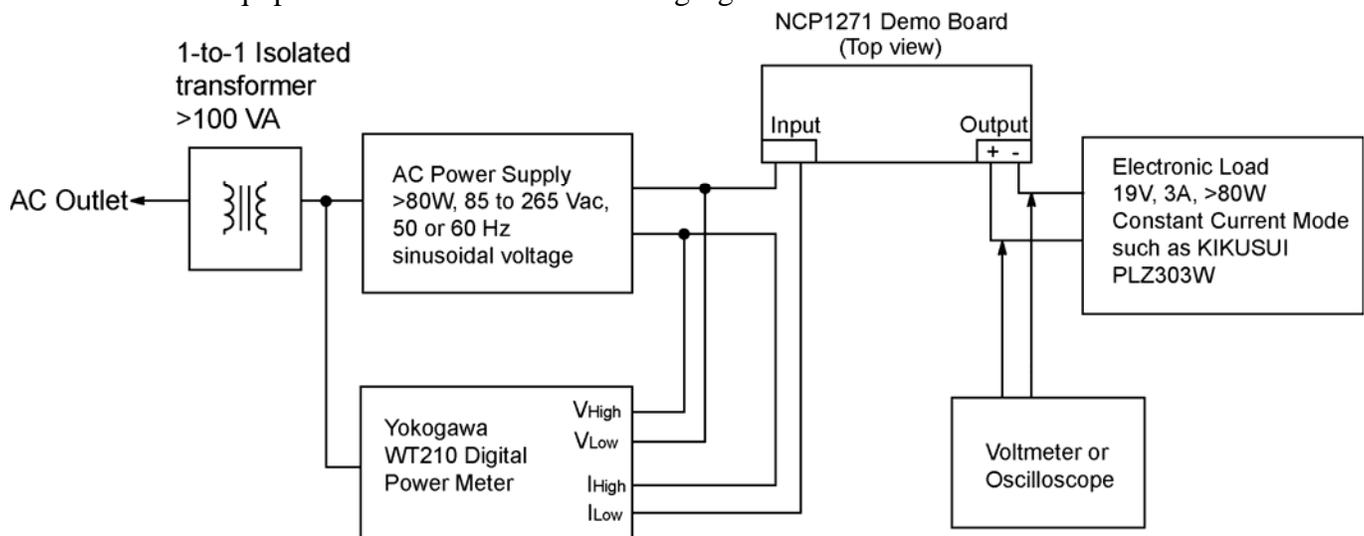
1/4/2007

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.**