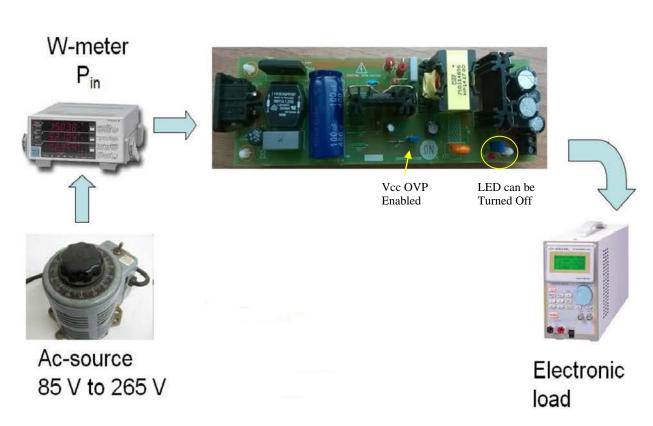


Test Procedure for the NCP1256B60WGEVB Evaluation Board

Equipment Required:

- 1. An ac source, delivering 80 V ac to 265 V ac, needed power is below 100 W. An electronic source or a simple variac can do.
- 2. An input ac watt-meter, up to 100 W
- 3. A dc load absorbing up to 100 W, $V_{in,max}$ < 30 V, $I_{out,max}$ < 5 A
- 4. Either the above load can display dc V and dc A or separated V and A-meters are necessary
- If the load does not use local Kelvin sensors, then the output voltage must be measured at the board level, <u>not at the cable ends</u>.



Test Procedure:

Test n°1:

- Apply 90 V rms
- No output current
- Read output voltage:
- $18.5 \text{ V} < V_{\text{out}} < 20 \text{ V}$
- -Apply 230 V rms
- -Repeat the above
- -Let the board warm up for 15 mn
- -Read input power, LED on

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Test n°2:

- Apply 90 V rms
- Load with 3.2 A
- Read output voltage and Pin:
- 18.5 V < V_{out} < 20 V
- **♦** $65 \text{ W} < P_{in} < 75 \text{ W}$
- -Apply 265 V rms
- -Load with 3.2A
- -Repeat the above

Test n°3:

- Apply 90 V rms
- Increase I_{out} while reading output voltage
- At a certain point, I_{out,max}, V_{out} collapses, the converter hiccups (typical is 4.2 A)
- **❖** 3.9 A < $I_{out,max}$ < 5 A
- -Apply 265 V rms
- -Repeat the above steps
- -The I_{out.max} points slightly increases

Test n°4:

- Apply 90 V rms
- Apply a short-circuit at the output, usually via the dc load
- V_{out} must collapse, the converter tries to re-start (hiccup mode). Read the input power (watt-meter in average mode)
- -Apply 265 V rms
- -Repeat the above steps

End Of Test