

## NCP13992AIOGEVB

1. Prepare and interconnect test equipment and device under test (DUT) – use schematics below



2. Set AC Power Supply to 115 V AC, with current limit approximately 2.5 A – to avoid any unwanted damage. Set Electronic Load to disabled state or to loading current 0 A
3. Allow output voltage of AC Power Supply and check DUT output voltage, it should be very close to 12 V – stable without any visible cycling/ drops. (If there is no output voltage or different value check assembly for visible defects)
4. Check input power, should be very low under 0.2 – 0.3 W and time to time DUT consummates power peak up to 60 W depends on acquisition/ display speed of Power analyzer – if it looks OK process to next step.
5. Allow Electronic load and slowly increase loading current from 0 A to 20 A, check output voltage – it should not have significant drop, approximately 12 V – 50 mV @ 11.95 V, compare to voltage @ 0 A load.
6. Measure input power of DUT should be around 257 – 259 W for 20 A load – higher input power signifies some issue. If input power is OK process to next step.
7. Gradually decrease loading current to 0 A and change AC Power Supply output voltage from 115 to 230 V AC and check output voltage of DUT, again should be around 12 V – stable without any visible cycling or drops – if it looks OK process to next step.
8. Slowly increase loading current from 0 A to 20 A, check output voltage – there should not be significant drop 12 V – 50 mV à 11.95 V – same as step 5
9. Measure input power of DUT should be about 253 – 255 W for 20 A load – higher input power signify some issue
10. If it's possible run DUT for 10 minutes at 20 A load to partly format electrolytic capacitors.
11. As everything is done, cut-off loading current to 0 A then disable AC Power Supply.

12. Discharge bulk capacitor for further safe manipulation