



## Test Procedure for the NCP1615AIOGEVB Evaluation Board



Figure 1: Test Setup

The following steps describe the test procedure for all these boards:

### Required Equipment:

Current limited AC Power Supply (e.g. AGILENT 6811B) .....	1pc
DC Volt-Meter able to measure up to 60 V DC (e.g. KEITHLEY 2000) .....	2pc
Shunt Resistor - Rsense (e.g. 150 mV/20 A) .....	1pc
DC Electronic Load (e.g. AGILENT 6060B) .....	1pc
Watt-Meter (e.g. Yokogawa WT210) .....	1pc
AC voltage Switch 260 Vac/3 A .....	2pc
DC voltage Switch 12 Vdc/20 A .....	1pc

### Test Procedure:

1. Connect the test setup as shown in Figure 1.
2. Turn on Switches SW2 and SW3
3. Turn off Switch SW1
4. Apply  $I_{OUT}$  (load) = 20 A
5. Apply an input voltage,  $V_{IN} = 110$  Vac
6. Check that  $V_{OUT} = 12 \pm 0.3$  Vdc
7. Check efficiency that  $Eff > 88\%$
8. Set  $I_{OUT}$  to 10 A
9. Check efficiency that  $Eff > 88\%$
10. Set  $I_{OUT}$  to 1 A
11. Check efficiency that  $Eff > 55\%$
12. Increase an input voltage  $V_{IN} = 230$  Vac
13. Turn off Switches SW2 and SW3
14. Turn on Switch SW1
15. Wait 30 minutes
16. Check no-load input power consumption (integrate input power for 10 minute) that  $P_{in} < 150$  mW
17. Turn off  $V_{IN}$
18. End of the test