



Test Procedure for the NCP1399ADPGEVB 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 - R_{sense} (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 20 Vdc/10 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) = 8 A
5. Apply an input voltage, V_{IN} = 110 Vac
6. Check that V_{OUT} = 19.5 ± 0.3 Vdc
7. Check efficiency that $Eff > 89\%$
8. Set I_{OUT} to 4 A
9. Check efficiency that $Eff > 88\%$
10. Set I_{OUT} to 1 A
11. Check efficiency that $Eff > 75\%$
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 $P_{in} < 155$ mW
17. Turn off V_{IN}
18. *End of the test*