Test Procedure for the NCP1014STBUCGEVB demo boards
Non-isolated Positive Output Buck AC/DC Converter
AND8226-D

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

Necessary Equipment:
1 Current limited 90 ÷ 265Vrms AC source (current limited to avoid board destruction in case of a defective part) or a 380VDC source (e.g. AGILENT 681x)
1 AC Volt-Meter able to measure up to 300V AC (e.g. KEITHLEY 2000)
1 AC Amp-Meter able to measure up to 1A AC (e.g. KEITHLEY 2000)
1 DC Volt-Meter able to measure up to 20V DC (e.g. KEITHLEY 2000)
1 DC Amp-Meter able to measure up to 500mA DC (e.g. KEITHLEY 2000)
1 DC Electronic Load (e.g. AGILENT 6060B)

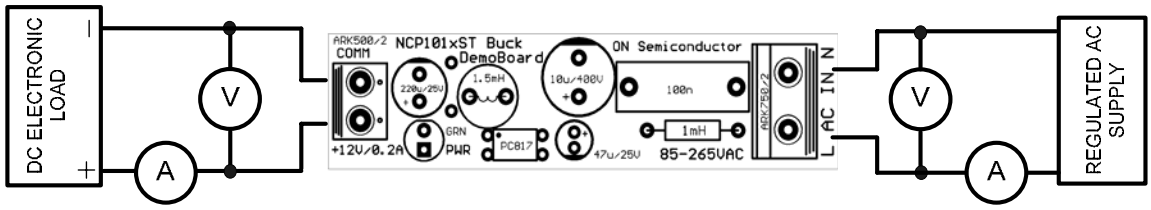

Figure 1: Test Setup

Test Procedure:

1. **Connect the test setup as shown in Figure 1.**
2. **Apply an input voltage, Uin =90 - 265Vac**
3. **Apply Iout(load) = 0A**
4. **Check that Uout is 12Vdc**
5. **Increate Iout(load) load to: 12V / 200mA**
6. **Check that Uout is 12V**
7. **Power down the load**
8. **Power down Uin**
9. **End of test**

☠ Be careful when manipulating the boards in operation, lethal voltages up to 265Vac are present on the primary side.