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 \div 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)

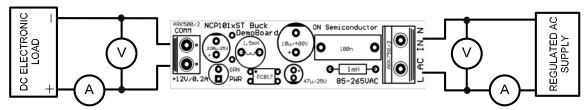


Figure 1: Test Setup

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.