

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)

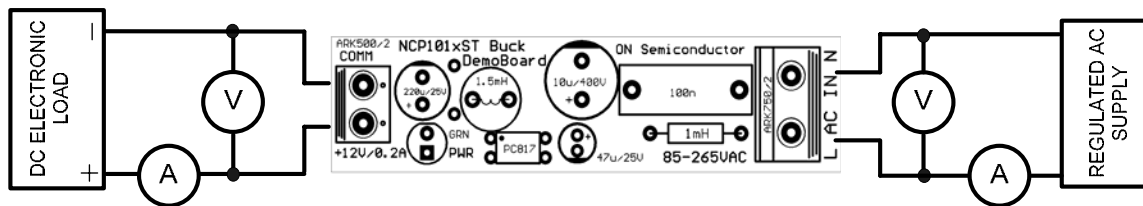


Figure 1: Test Setup

Test Procedure:

1. Connect the test setup as shown in Figure 1.
2. Apply an input voltage, $U_{in} = 90 - 265V_{ac}$
3. Apply $I_{out}(load) = 0A$
4. Check that U_{out} is 12Vdc
5. Increase $I_{out}(load)$ load to: 12V / 200mA
6. Check that U_{out} is 12V
7. Power down the load
8. Power down U_{in}
9. End of test



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