Test Procedure for the NCP5106 – Synchronous Buck

Necessary Equipment:
2 DC Source
3 DC Volt-Meter
2 DC Amp-Meter
1 DC Electronic Load
1 Oscilloscope

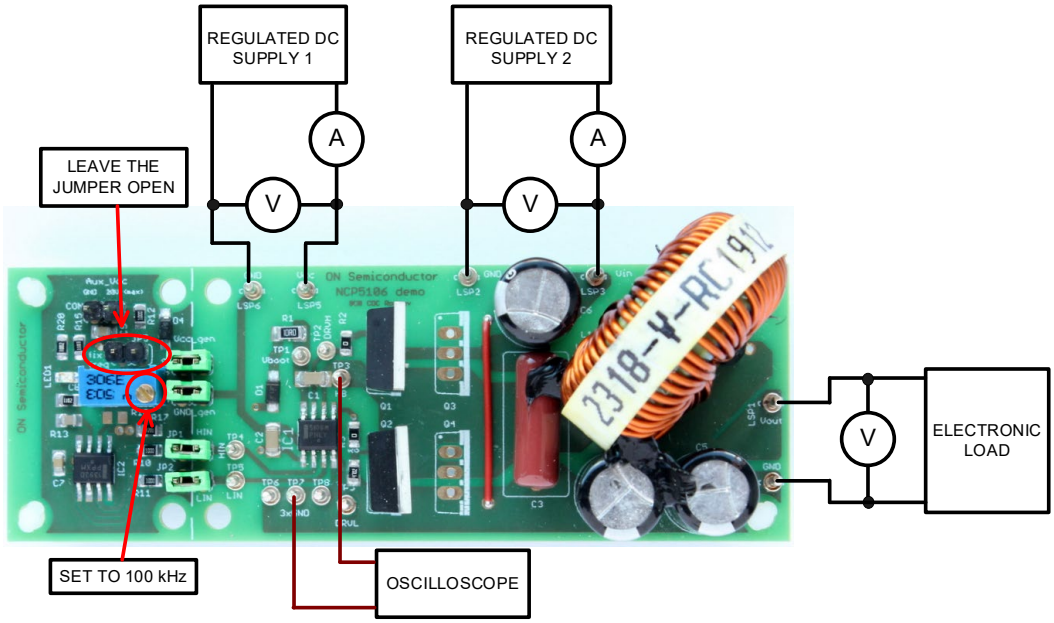

Figure 1: Test Setup

Test Procedure:

1. **Connect the test setup as shown in Figure 1.**
2. **Connect electronic load. Set current to 0.1 A**
3. **Apply input voltage 1, Vin = 15 Vdc (14.7 mA)**
4. **Apply input voltage 2, Vin = 100 Vdc (52 mA)**
5. **Set the frequency to 100 kHz**
6. **the output voltage should be 50 V**
7. **Set electronic load to 1 A (do not keep the high current for more than 60 sec)**
8. **Input current supply 1 = 15.8 mA**
9. **Input current supply 2 = 502 mA**
10. **The output voltage should be 46 V**
11. **Turn off supply 2 then turn off supply 1**
12. **End of test**