

Test Procedure for the NCP57152MNADGEVB Evaluation Board

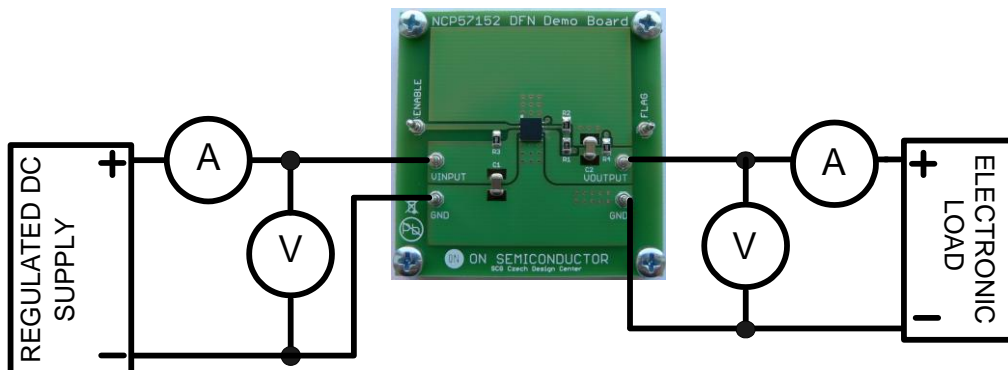


Figure 1: Output Voltage Test Setup

Test Procedure

1 Vout Test

- 1.1 Connect the test setup as shown in Figure 1.
- 1.2 Apply an input voltage, $V_{in} = 2.5\text{ V dc}$
- 1.3 Apply $I_{out} = 10\text{ mA}$ load.
- 1.4 Check that V_{out} is 1.5 V
- 1.5 Increase I_{out} load to 1.5 A
- 1.6 Check that V_{out} is 1.5 V
- 1.7 Power down the load
- 1.8 Power down V_{in}

2 Vflag Test

- 2.1 Connect the test setup as shown in Figure 2.
- 2.2 Apply an input voltage, $V_{in} = 1.8\text{ V dc}$
MUR805G diode works like Output Voltage clamp. The Output voltage is out of regulation and the NCP57152 operates in overload mode.
- 2.3 Check that V_{out} is roughly 0.7 V and V_{flag} is less than 0.2 V
- 2.4 Power down V_{in}
In Overload mode the power dissipated in NCP57152 LDO and MUR805G diode is high and the devices can get very hot in a short time. That is why run this test as fast as possible.
- 2.5 End of test

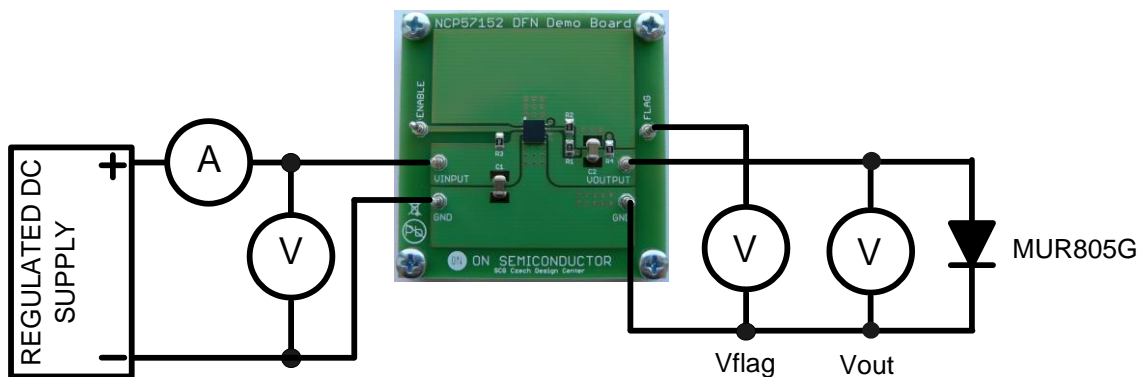


Figure 2: FLAG Voltage Test Setup