



ON Semiconductor

## Test Procedure for the NCP3125AGEVB Evaluation Board

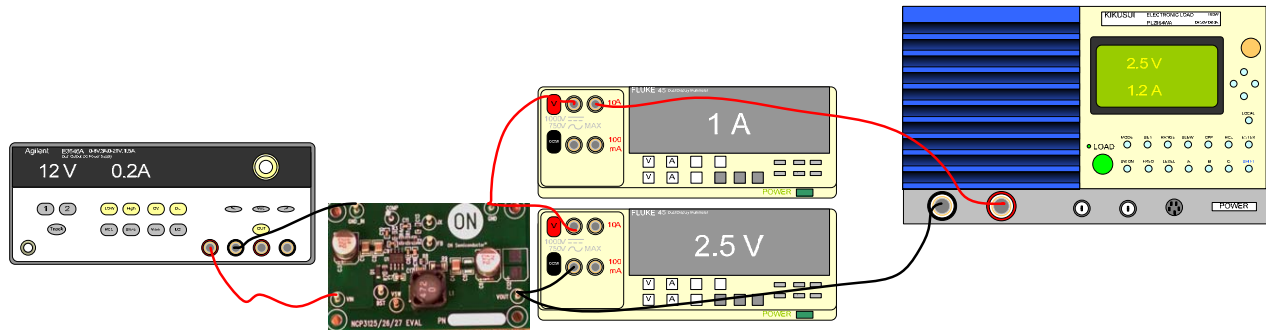


Figure 1: Test Setup

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

### Suggested Equipment:

Current limited DC Power Supply (e.g. AGILENT 6645A) .....	1pc
DC Volt-Meter able to measure up to 60 V DC (e.g. KEITHLEY 2000) .....	2pcs
DC Amp-Meter able to measure up to 2 A DC (e.g. KEITHLEY 2000) .....	1pc
DC Amp-Meter able to measure up to 5 A DC (e.g. FLUKE 89 IV).....	1pc
DC Electronic Load (e.g. AGILENT 6060B) .....	1pc

**Test Procedure:**

1. Connect the test setup as shown in Figure 1.
2. Apply an input voltage,  $V_{IN} = 5.0-13.2$  Vdc
3. Apply  $I_{OUT}(\text{load}) = 0$  A
4. Check that  $V_{OUT} = 2.5$  Vdc
5. Set  $I_{OUT}$  to desired level 0 A- 4 A
6. Check that  $V_{OUT} = 2.5$  Vdc
7. Turn off the load
8. Turn off  $V_{IN}$
9. End of the test

NCP3125 Efficiency vs. Load

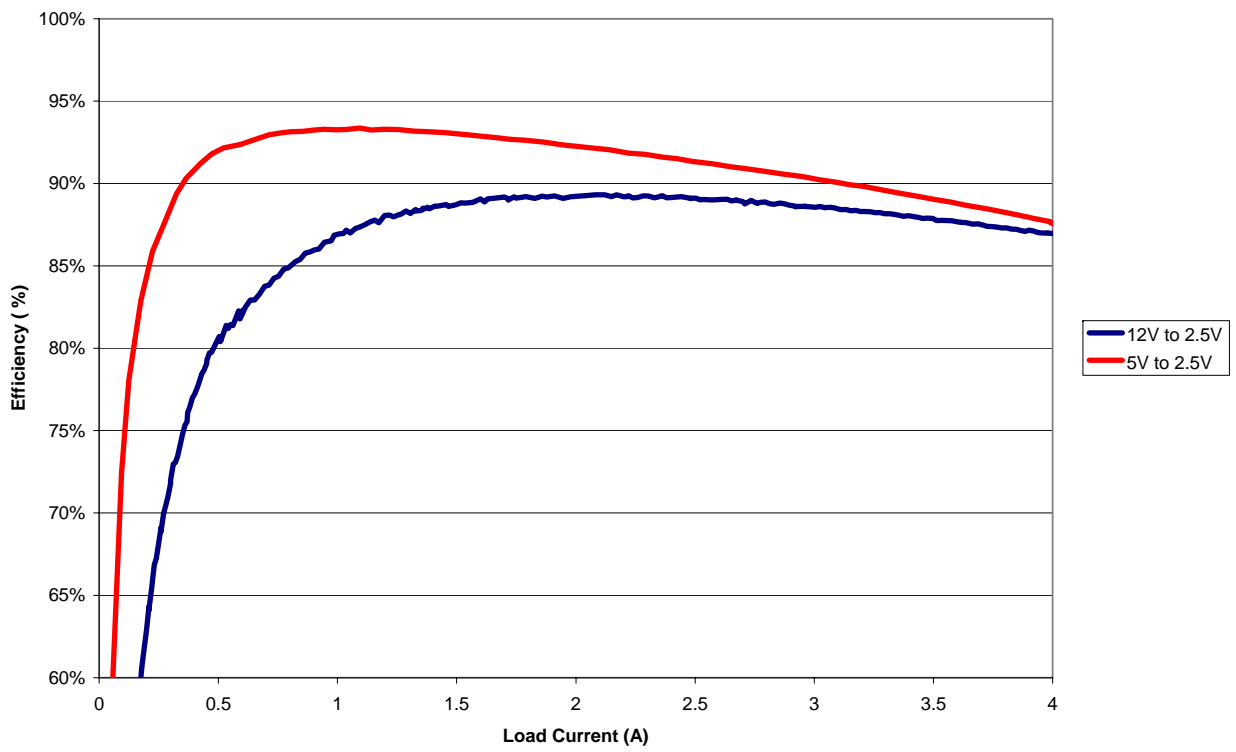


Figure 2: NCP3125 Efficiency at 4.5V-13.2V with a 2.5V Output Voltage

NCP3125 Efficiency vs. Load

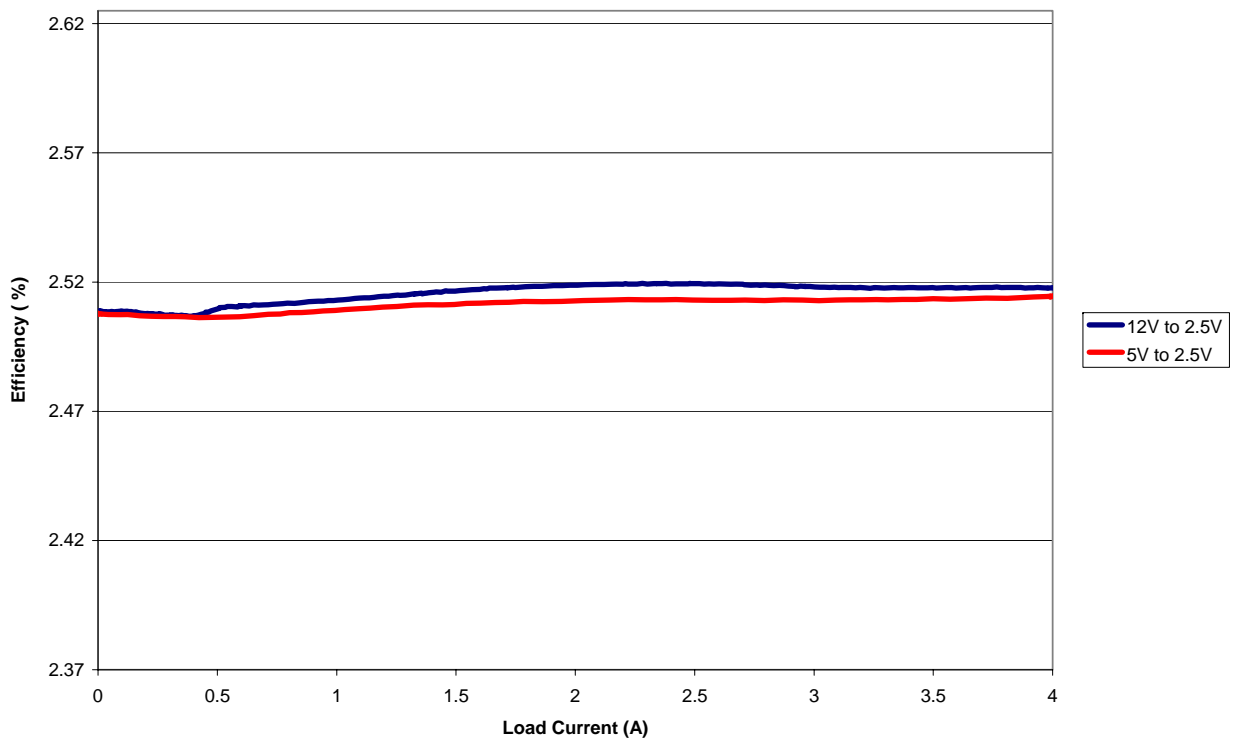


Figure 3: NCP3125 Load Regulation