Test Procedure for the NCV12711FLOATGEVB Evaluation board

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Required Equipment:
DC source (able to provide 40 V / 3 A)……...……...……..... 1pc
DC Amp-Meter able to measure up to 3 A..…….…… 1pc
DC Volt-Meter able to measure up to 50 V…….…… 1pc
DC Electronic Load (max 20 V / 1 A) …… 1pc

Figure 1: Test Setup

The following steps describe the test procedure for all boards. Please connect the boards and equipment based on Figure 1.

Test Procedure:
1. Apply an input voltage V_{IN} = 4.5 V, output is no-loaded, i.e. I_{OUT} = 0 A.
2. Check that V_{OUT} = 12 V (note 1).
3. Increase the input voltage V_{IN} = 6 V and set the output current to I_{OUT} = 1 A.
4. Verify that the output voltage V_{OUT} is still present (note 2).
5. Increase the input voltage up to V_{IN} = 38 V. The output is still loaded by 1 A. Run the board in this condition for 30 sec at least.
6. Verify that the output voltage is still present (note 2).
7. Turn off DC source, set the load current to I_{OUT} = 0 A.
8. End of the test.

Note 1: The unloaded output voltage Vout can be up to 14.5 V.
Note 2: The loaded output voltage Vout can drop up to 11 V.