

Test Procedure for the NCP8675 Evaluation Board

ON Semiconductor



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Required Equipment:

- Resistive Load
- 2 Multimeters
- One NCV8675 Demo Board
- DC Power Supply

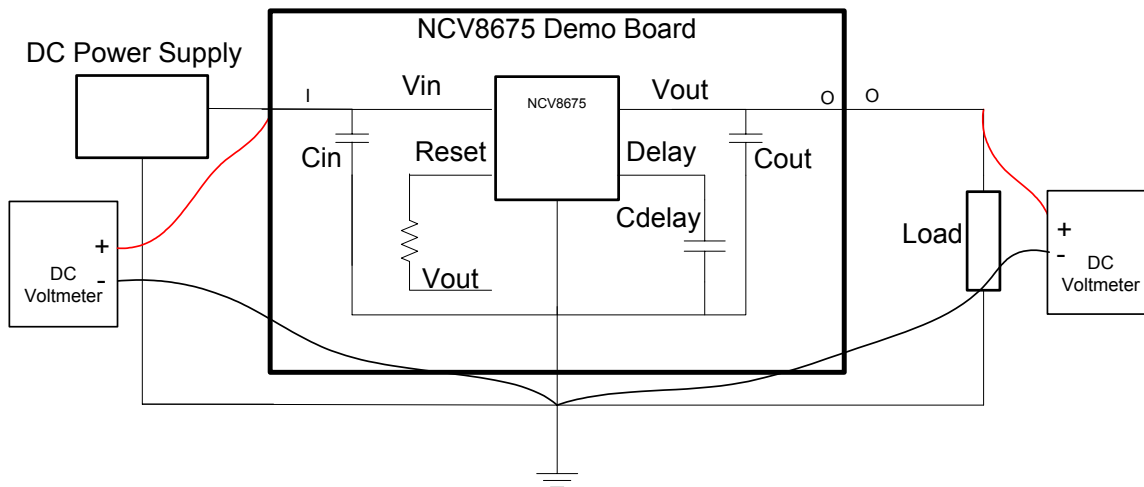
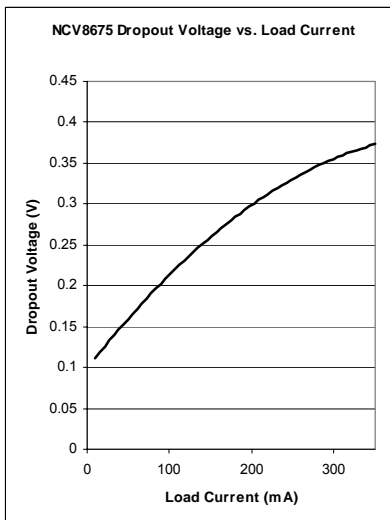


Figure 1- Dropout Voltage Test Setup

Dropout Voltage Verification Steps

1. Connect circuit as shown in Figure 1.
2. Set $V_{in} = 13.5\text{ V}$, Record V_{out} .
3. Reduce V_{in} until V_{out} has dropped by 100mV.
4. Subtract V_{out} from V_{in} . Resulting Voltage is Dropout Voltage.



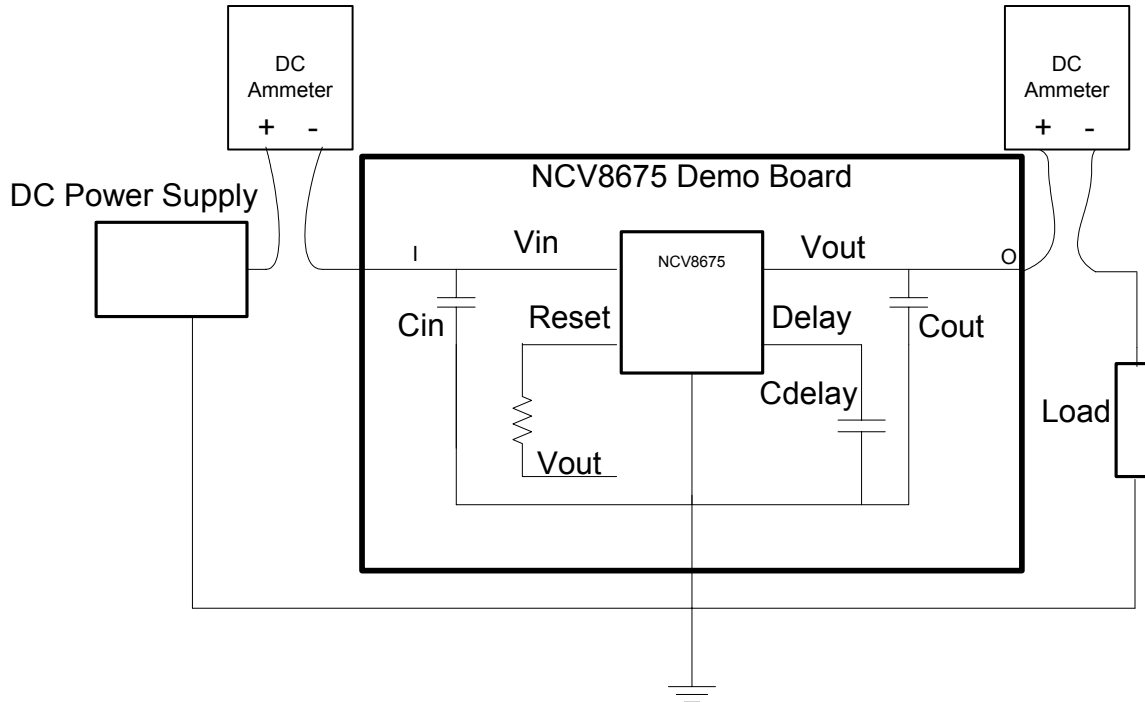
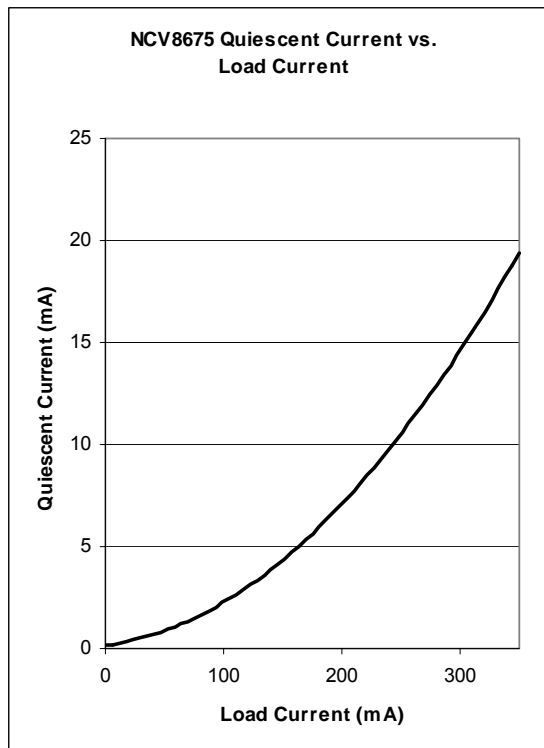


Figure 2. Quiescent Current Verification Setup

Quiescent Current Verification Steps

1. Connect circuit as shown in Figure 2.
2. Set $V_{in} = 13.5\text{ V}$.
3. Subtract Output Current from Input Current.



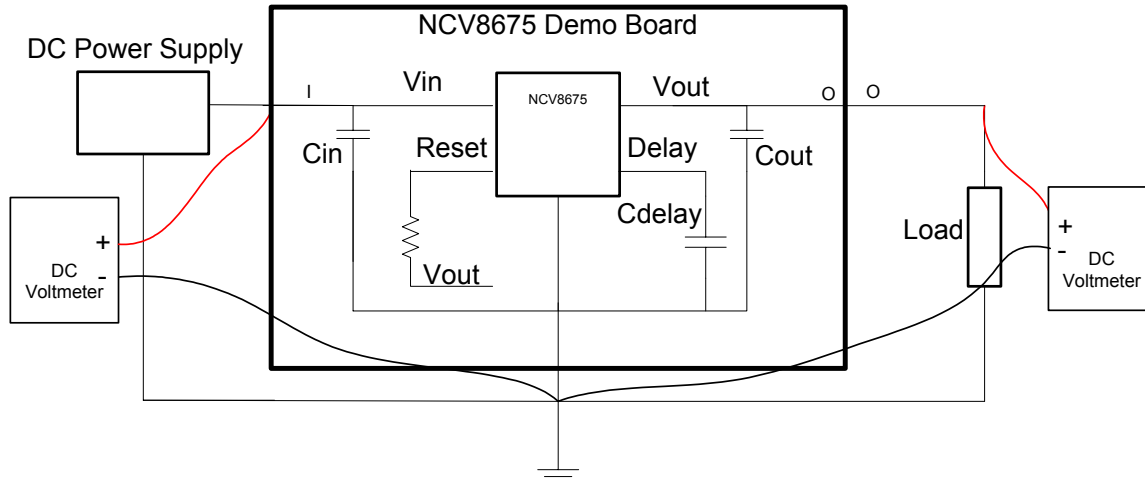
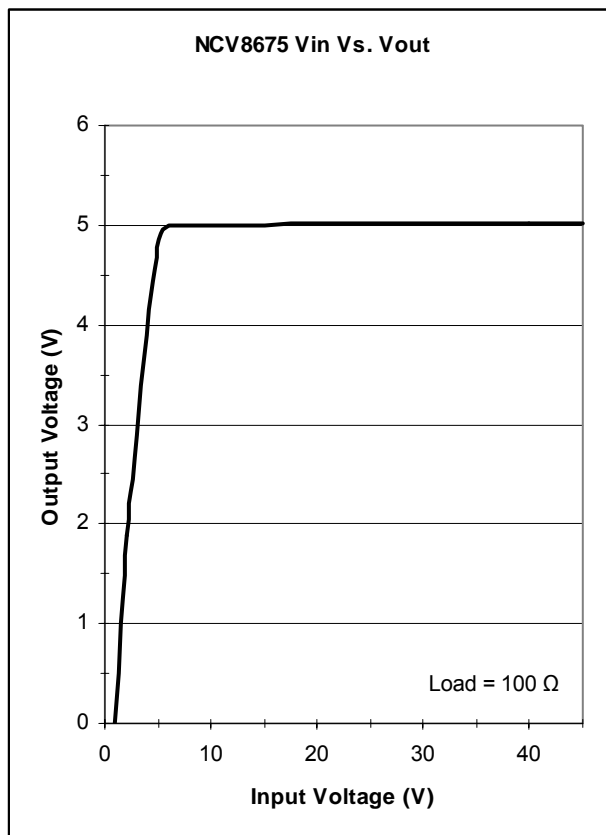


Figure 3. Output Voltage Verification Setup

Output Voltage Verification Steps

1. Connect circuit as shown in Figure 3.
2. Set output load to 100 Ohms, Set $V_{in} = 0$ V, Record V_{out} .
3. Increase V_{in} , measure V_{out} .



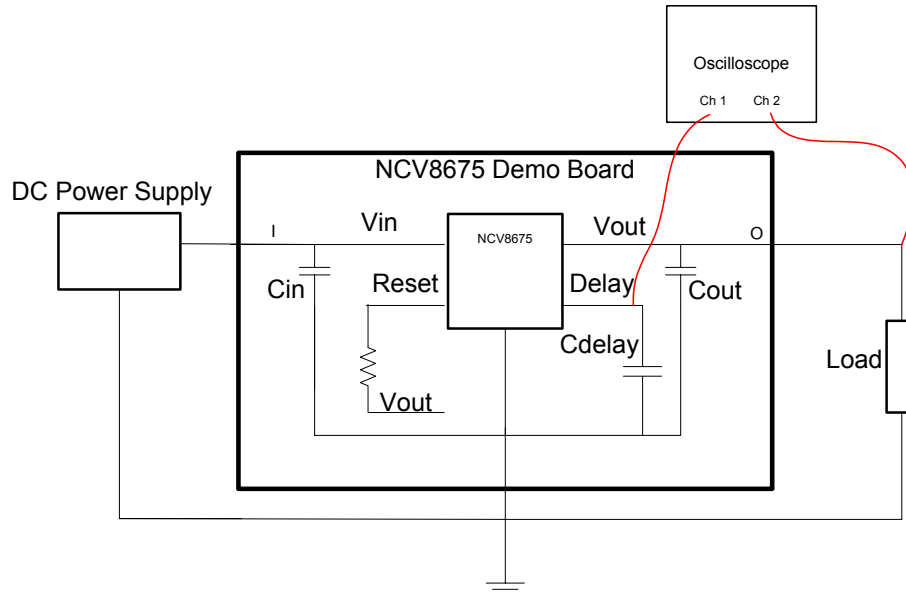


Figure 4: Reset Delay Verification Setup

Reset Delay Verification Steps

1. Connect circuit as shown in Figure 4.
2. Set $V_{in} = 0$ V.
3. Increase V_{in} from 0 V to 14 V.

