

## Test Procedure for the NCV8664 Evaluation Board

ON Semiconductor®



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Table of required equipment:

<b>Measurement equipment description</b>	<b>Concrete example</b>	<b>Quantity</b>
Resistive Load	Agilent 6060B	1
Multimeters	Keithley 2000	2
NCV8664 Demo Board	-	1
DC Power Supply	Agilent 6812B	1

Please follow these steps during the first start of the NCV8664 evaluation board:

### Dropout Voltage Verification Steps

1. Connect circuit as shown in Figure 1.
2. Set  $V_{in}$  = 13.5 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.

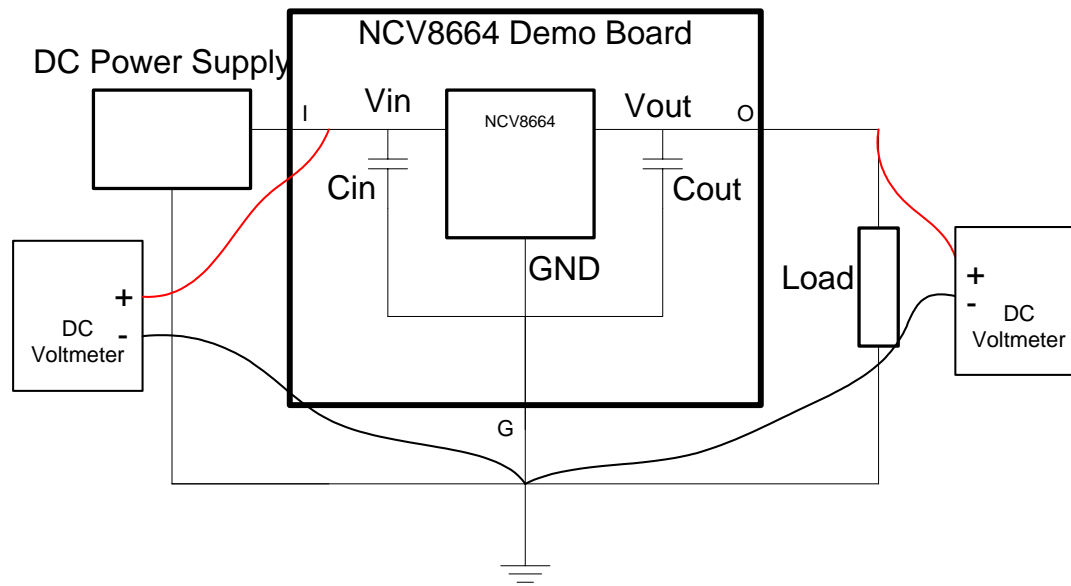
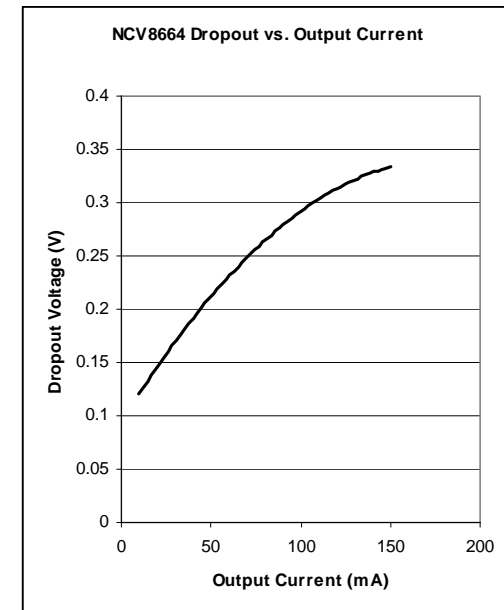


Figure 1- Dropout Voltage Test Setup



### Quiescent Current Verification Steps

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

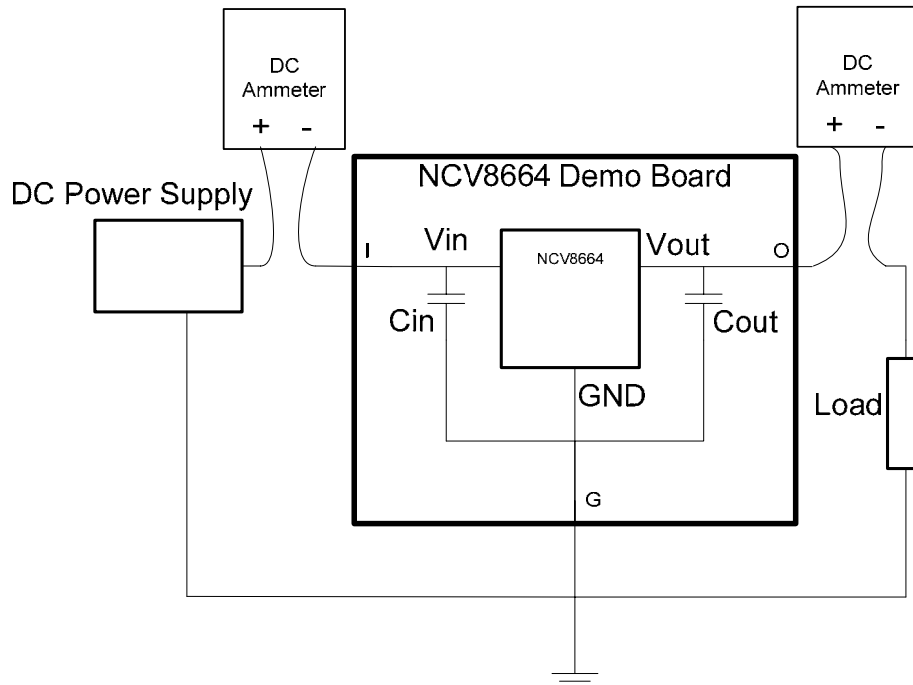
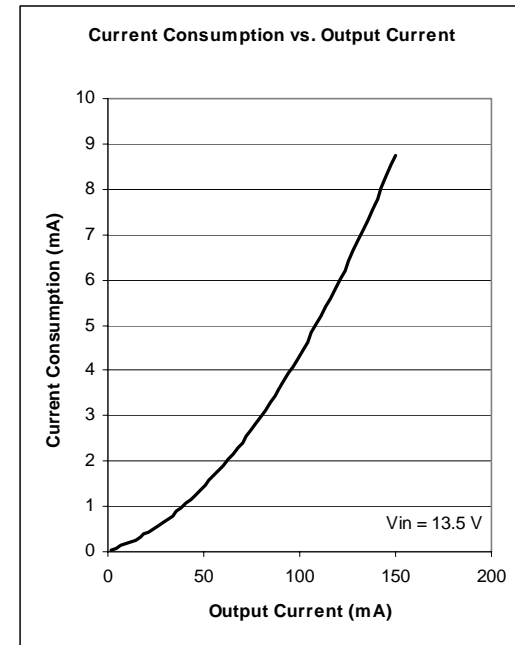
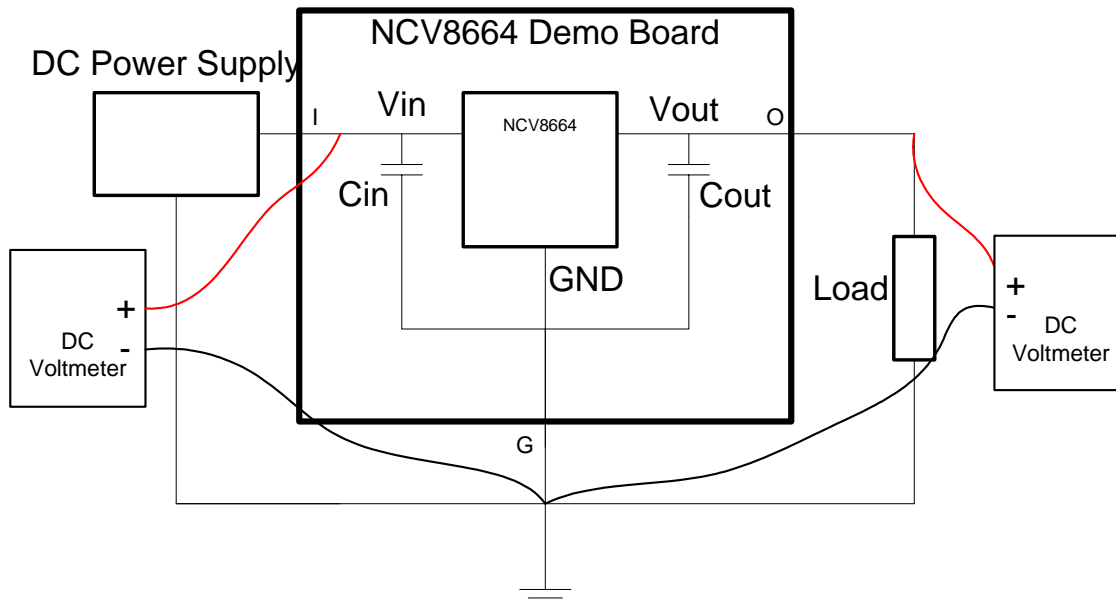


Figure 3. Quiescent Current Verification Setup



### Output Voltage Verification Steps

1. Connect circuit as shown in Figure 4.
2. Set output load to 100 Ohms, Set  $V_{in} = 0$  V, Record  $V_{out}$ .
3. Increase  $V_{in}$ , measure  $V_{out}$ .



**Figure 4. Quiescent Current Verification Setup**

