

Test Procedure for the NCP348G Evaluation Board

ON Semiconductor®



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Equipment

0-7V, 2A supply.

5V supply. (Low current)

2.5 ohms / 10W resistor (minimum 10 W)

Multimeter.

Test Procedure

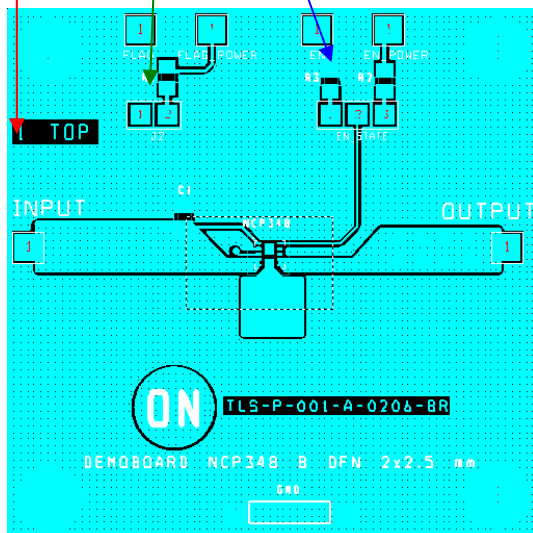
Setup

* Connect VIN supply between Vin and GND: set to 0V

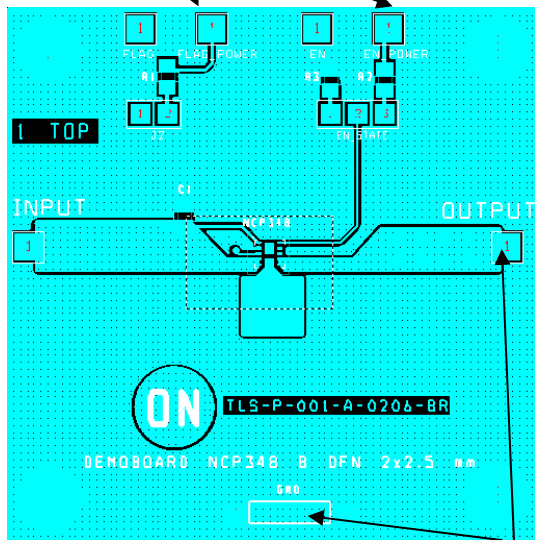
* Connect J2 shunt

* Connect EN-state shunt on the left hand

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EN_state



Connect **+5V supply** on FLAG_POWER pin and EN_POWER pin. (use same supply)



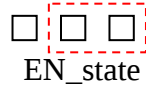
Connect 2.5 ohms load between Vout and GND.

Part 1

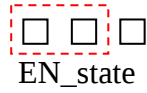
1. Set **VIN supply** at 0.5V. Check Flag level = + 5V on FLAG pin.
2. Set **VIN supply** at 1.2V. Check Flag level = + 0V on FLAG pin. Check Vout=0V
3. Set **Vin supply** = 3.0V. Measure **Vin supply** current consumption. (Typical 70μA. Max 100 μA). Check Vout = 0 V
4. Set **Vin supply** = 5V. Measure **Vin supply** current (around 2A)
5. Measure Voltage between Vin and Vout test points. Calculate Rdson to check solder.

$$R_{dson} = (V_{in} - V_{out}) / I_{vin}$$
 (typical 70m ohms. Max 120 mohms)
6. Disconnect output load. Check Vout level. Vin = Vout = 5V. Check Flag level = 5 V
7. Measure current consumption. Typical 170μA. Max 300μA.

Part 2



1. Put EN_state shunt to right hand.
Measure $V_{out} = 0V$, FLAG level = +5V



2. Put EN_state shunt to left hand.
3. Set $V_{in} = 7V$.
Measure $V_{out} = 0V$, Check FLAG level = 0 V

Turn Off

1. Decrease V_{in} level = 0V.
2. Disconnect EN and FLAG supply.
3. Disconnect V_{in} supply.