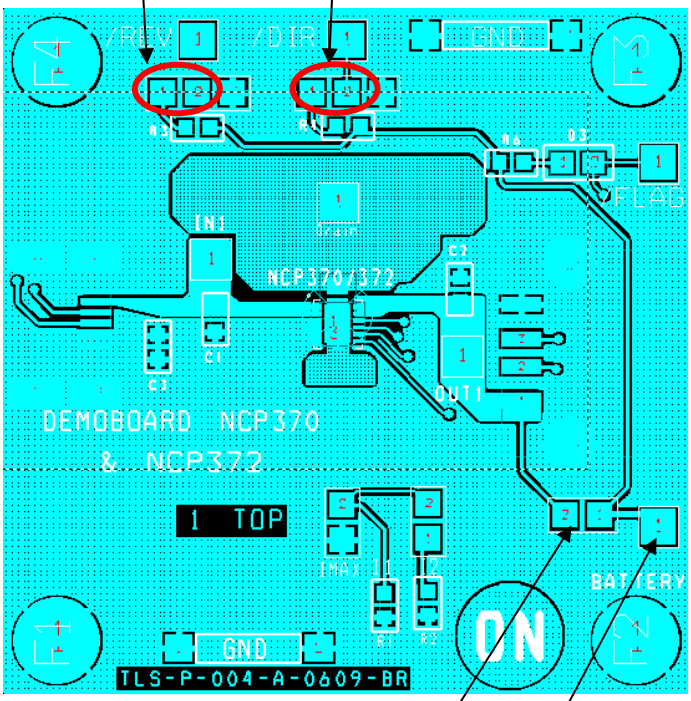
ON Semiconductor

Test Procedure for the NCP370GEVB Evaluation Board

Test Procedure:

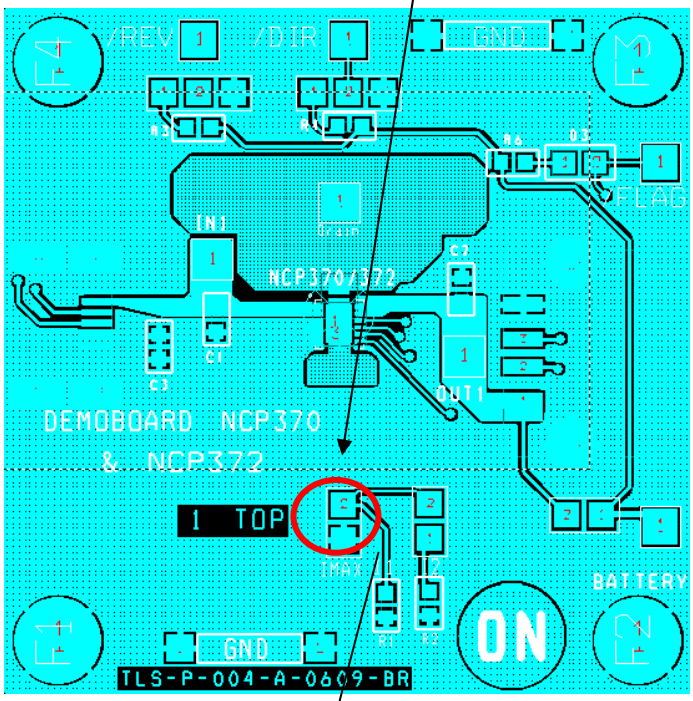
1. Place /REV strap and /DIR strap on left side (“1” logic) (connected to Vbat, through pull up resistor)

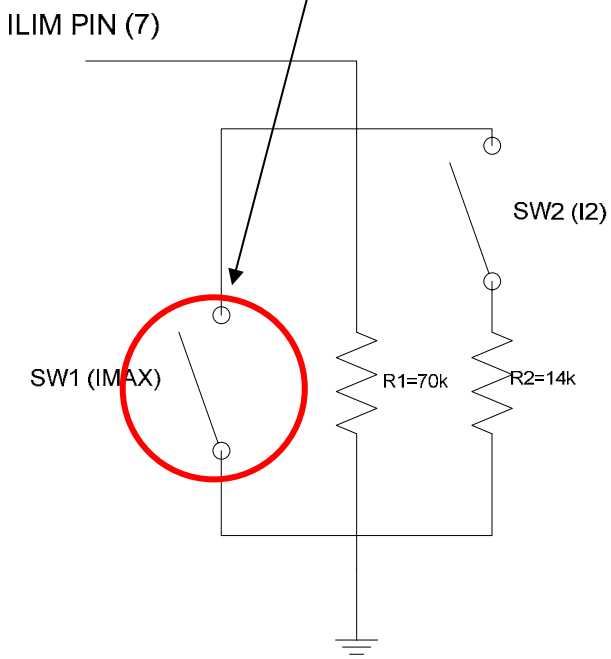


2. Let Battery strap opened.

3. Connect a Battery or power supply (4.2V) on Battery test point. (min 2A capability)

4. Connect strap on Ilim.





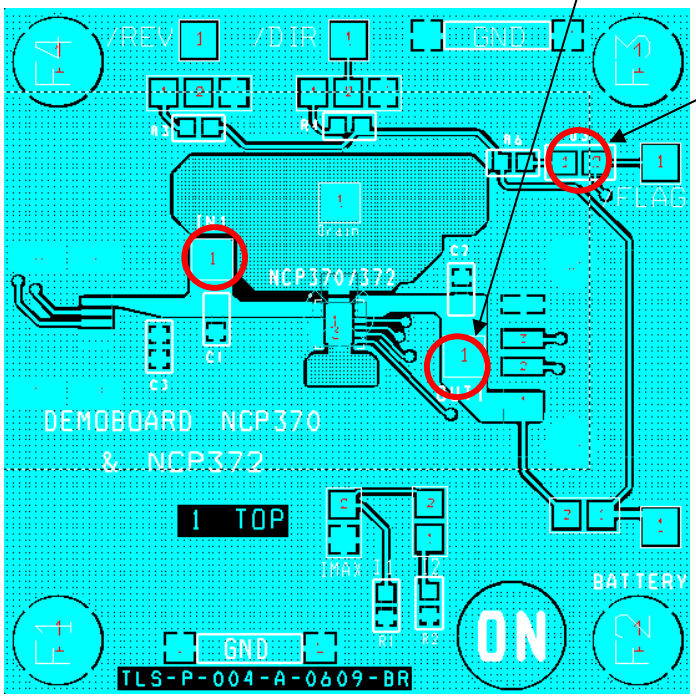
5. Select I limit threshold with pull down resistors connected on pin 7:

SW1	SW2	I OCP
0	0	500mA
0	1	1A
1	0	1.5A
1	1	1.5A

R1= 70K
R2= 14K

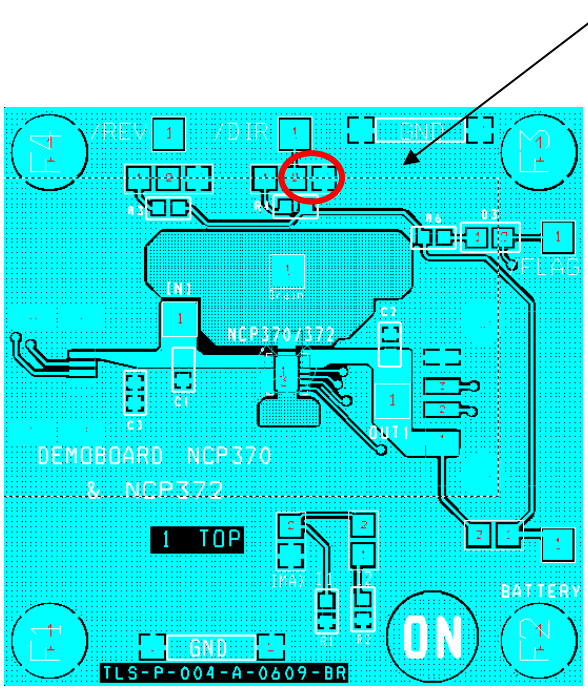
Disable Mode:

6. Connect 10 V capability Vin Supply on IN1 test point.
   a. Set power supply to 5V ⇨ Check Vout = 0V and LED = off

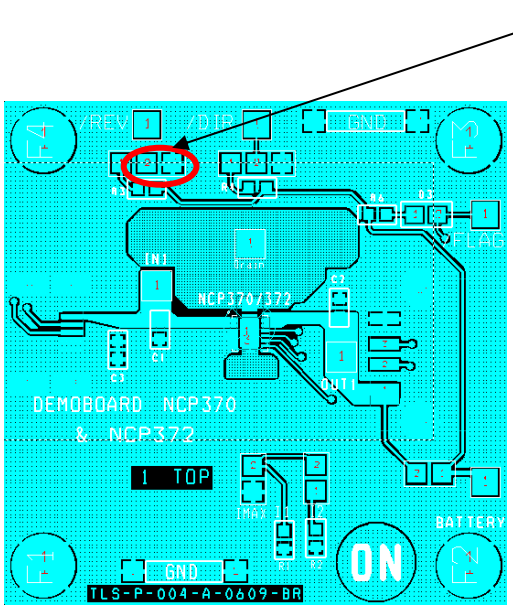


Direct Mode:

7. Switch /DIR from left to right, 1 logic level to 0 logic level



8. Check Vout=5V and Flag LED is still off
9. Set Vin=7V
10. Check Flag LED = on, and Vout is 0V.
11. Switch /REV from left to right, 1 logic level to 0 logic level

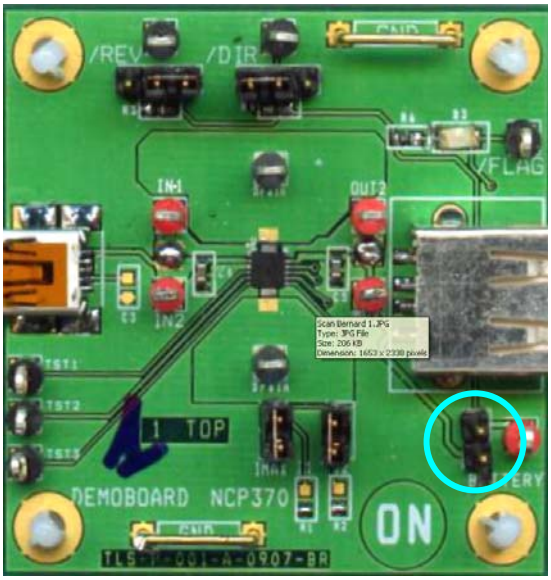


12. Check Flag LED = off, and Vout = Vin = 7V.

Disconnect Vin supply

Reverse Mode:

13. Connect Set /DIR=1, /REV=1
    Disconnect Vin Power Supply from IN test points.
    Connect accessory on IN1 or IN2 test points.



Put strap to connect Battery to Vout

14. Set /DIR=1, /REV=0: Vout= Vin

    If I accessory < I limit then Vin = Vout – Rdson x I

    If I accessory > I limit then Vin = 0 (Current regulation)

Power off.

15. Set /DIR=1, /REV=1
16. Disconnect accessory
17. Disconnect Battery