

Test Procedure for the NCP5005 Evaluation Board

ON Semiconductor®



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Equipment:

- 1 – DC power supply, 3.60V / 500mA is a minimum. Preferred: TEKTRONIX = PS2520G
- 2 – Oscilloscope, 100MHz bandwidth, two channels minimum. Preferred: TEKTRONIX = TDS784
- 3 – Analog probes 100MHz bandwidth minimum. Preferred: TEKTRONIX = P6139A
- 4 – Current probe TEKTRONIX = TCP202
- 5 – Digital voltmeter, FLUKE

Procedure:

1. Make sure the power supply is OFF.
2. Make sure the power supply is preset to 3.60V.
3. Make sure the power supply is current limited to 500mA.
4. Connect the power supply to the banana plugs, positive supply to Vbat, negative supply to GND.
5. If current monitor is necessary, connect a short jumper (5 cm) across JP1 to read current and connect the current sense.
6. Connect one analogue probe to pin Vout to read the output voltage.
7. Connect a short DVM cable to pin FB to read the feedback voltage.

Note: since this pin is internally connected to a very high impedance circuit, care must be taken to minimize noise pick - up as such noise will downgrade the operating performances. In case there is doubt with the waveforms captured with the current probe, remove the DVM probe from the FB pin and double check the operation.

8. Turn ON the power supply: LED should turn on and you can observe the waveforms as depicted in the NCP5005 data sheet.