



Test Procedure for the NCP1532 Evaluation Board

Test Procedure:

1. Jumpers ENABLE1 and ENABLE2 should be closed to GND (Low).
2. Connect the MODE jumper to PFM (GND).
3. Set the power supply to 3.6 V and the current limit of at least 1.5 A.
4. Connect Vin+ to power supply and Vin- to ground. The DC current measurement on Vin+ line should be around 0.3 μ A.
5. Switch the ENABLE1 connector to High (Power).
6. Modify P2 potentiometer to get Vout to 1.2 V. Output voltage value is defined by: $V_{out} = 0.6 \times (1 + R1/R2)$. Verify that Vout2 = 0 V.
7. The DC current measurement on Vin+ line should be around 45 μ A. The part operates in PFM mode for Vout1:

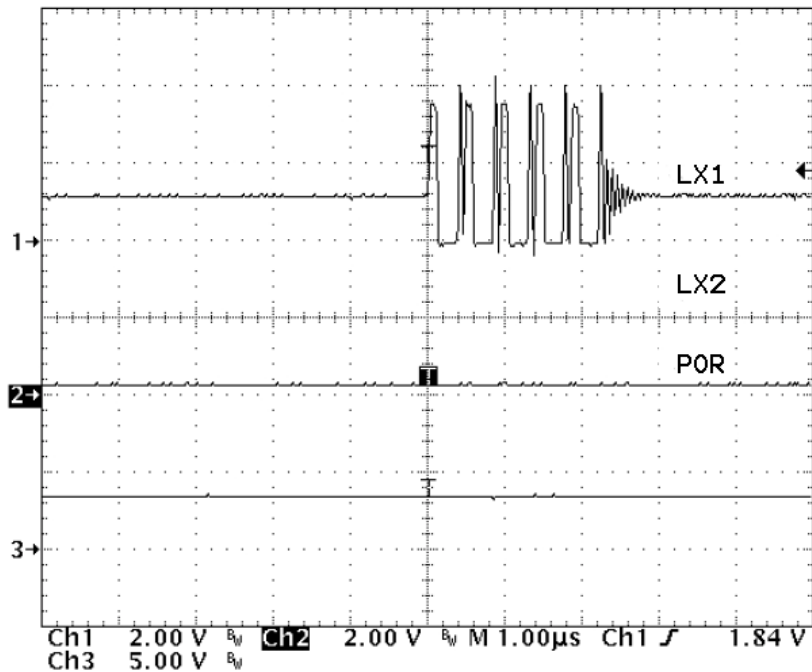


Figure 1: LX1 and LX2 in PFM mode (B1 on & B2 off)

8. The POR is "on" ("1" logic level).
9. Switch the ENABLE2 connector to High (Power).
10. Modify P4 potentiometer to get Vout1 to 1.2 V. Output voltage value is defined by: $V_{out} = 0.6 \times (1 + R3/R4)$.
11. The DC current measurement on Vin+ line should be around 60 μ A. The part operates in PFM mode for Vout1 & Vout2:

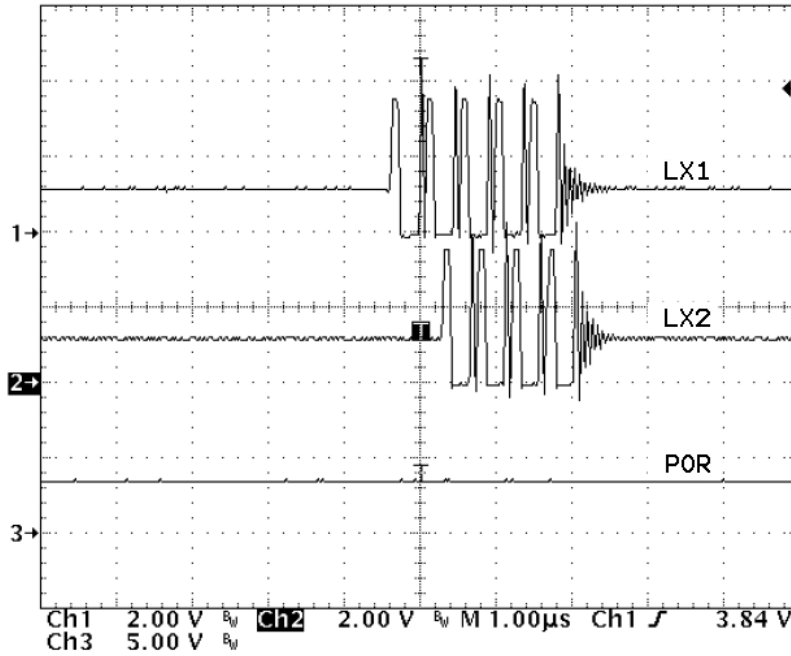


Figure 2: LX1 and LX2 in PFM mode (B1 & B2 on)

12. The POR is “on” (“1” logic level).
13. . Connect the MODE jumper to PWM (Power).
14. The DC current measurement on Vin+ line should be around 6.3 mA. The part operates in PWM mode for Vout1 & Vout2:

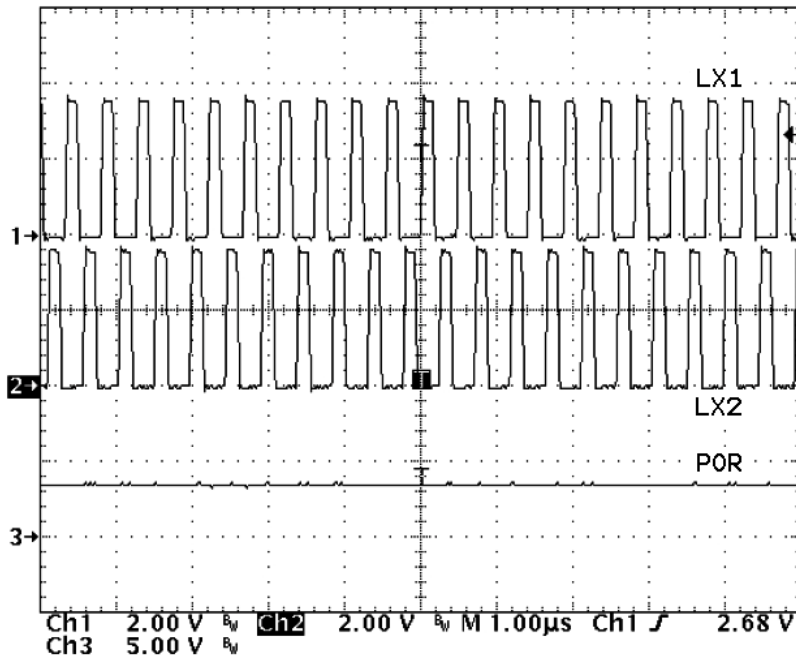


Figure 3: LX1 and LX2 in PWM mode (B1 and B2 on)



15. Switch the ENABLE1 connector to Low (GND).
16. The DC current measurement on Vin+ line should be around 3.3 mA. The part operates in PWM mode for Vout1 & Vout2:

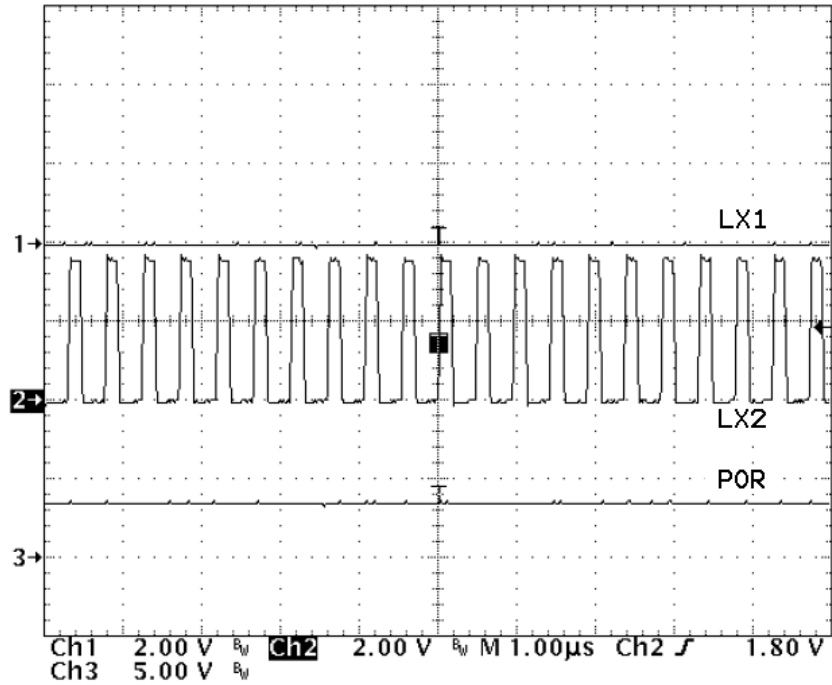


Figure 4: LX1 and LX2 in PWM mode (B1 Off & B2 on)

17. Switch the ENABLE2 connector to Low (GND). The DC current measurement on Vp line should be around 7.3 µA
18. Connect the MODE jumper to PFM (GND). The DC current measurement on Vp line should be back around 0.3 µA.