



Test Procedure for the NCP1529MUTBGEVB Evaluation Board

Equipment needed

- Power supply
- Digital Volt Meter
- Digital Amp Meter

Test

- 1) Jumper ENABLE (and SELECT for the UDFN6 package) should be open.
- 2) Set the power supply to 3.6 V and the current limit of at least 1.5A.
- 3) Connect Vin+ to power supply and Vin- to ground. The DC current measurement on Vin+ line should be around 0.3 μ A.
- 4) For the UDFN6 package, close the SELECT connector to the potentiometer.
- 5) Close EN connector.
- 6) Modify P2 potentiometer to get Vout to 1.2V. Output voltage value is defined by :

$$V_{out} = 0.6 \times (1 + R1/R2)$$
- 7) The DC current measurement on Vin+ line should be around 36 μ A. The part operates in PFM mode:

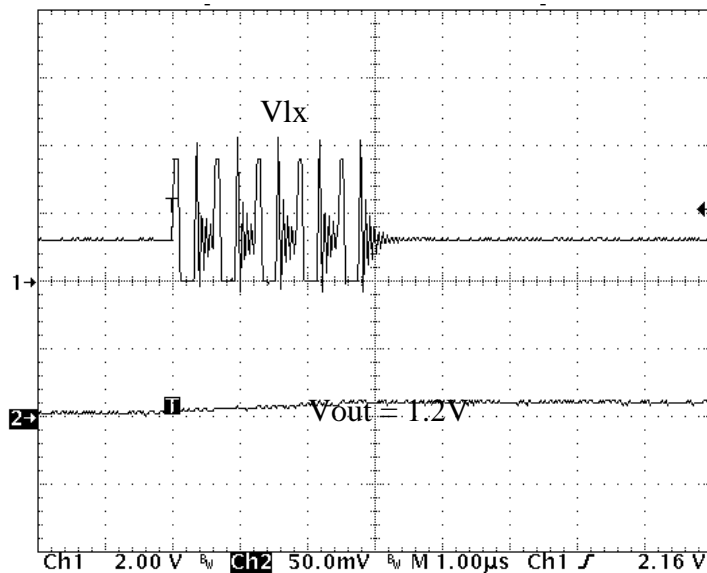


Figure 1: Vlx and Vout in PFM mode



8) Increase Output current to 1A. The part works in PWM mode with a low ripple:

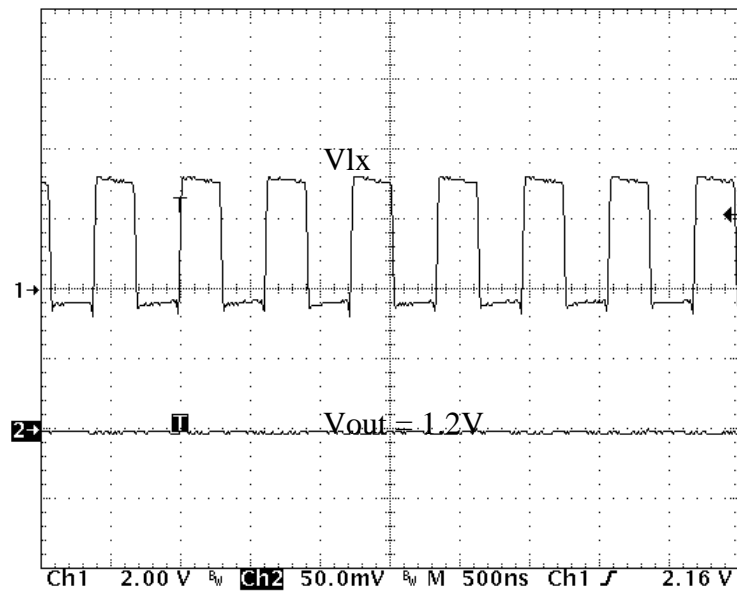


Figure 2: V_{lx} and V_{out} in PWM mode

9) Remove J5 connector. The DC current measurement on V_p line should be back around $0.3 \mu\text{A}$.