Test Procedure for the NCP5603 Evaluation Board

ON Semiconductor®



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TEST CONDITIONS

Note: the demo board can operate with either an external power supply, or with two dry cell 1.5V, AA type, and battery. The mechanical switch S4 is used to select one of the two power sources. The system is not designed to run the two power sources simultaneously and such connection must be avoided.

Using an external power supply:

- 1- Select a DC power supply with 500mA output current capability (minimum), adjust the output voltage to 3.60V
- 2- Connect the positive wire to the RED socket, connect the negative wire to the BLACK socket
- 3- Toggle switch S4 to turn on the system

Using dry cell battery:

- 1 Make sure no external power supply is attached to the RED and BLACK sockets
- 2 Insert two 1.5V, AA type cell in the holder. Make sure the polarity is properly respected
- 3 Toggle switch S4 to turn on the system

System operation:

- 4- Select the Output Voltage (4.5V or 5.0V) by toggling the switch S3, B1
- 5- Select the operating frequency (260kHz or 630kHz) by toggling the switch S2, FSEL. Note: turn system off before switching frequency.
- 6- Select the Normal or PWM mode by toggling the switch S1. A RED LED turns On when the PWM mode is activated. The brightness of the LED (if necessary) can be adjusted (when the PWM mode is activated) by means of the potentiometer P1.