ON Semiconductor

Test Procedure for the NCP2823BGEVB Evaluation Board

A power supply set to 3.6 V and current limit set to at least 1.5 A must be connected to J15 connector to powering the NCP2823EVB/D. Also to compensate for parasitic inductance of wires between the power supply and the evaluation board it is highly recommended to connect a 470 µF electrolytic capacitor to bypass J11 terminal. Like this the device can be evaluate under powering condition very similar that battery power supplies.

These tests are provided in order to guarantee a good assembly of the NCP2823 on its dedicated board, it do not consist in parametric test which is already done at chip level.

1. SHUTDOWN TEST

Jumper setup for shutdown test:

Symbol	Switch Descriptions
J1	Must be connected to ground (low side) (off position)

All other switches must be kept floating.

Tests:

1. Set the switches in the configuration
2. Power the board with a 3.6V power supply limited at 1.5A and bypassed by a 470µF electrolytic capacitor.
3. Measure the current on the power supply (must be inferior to 1µA)

2. Wake up test

Switches setup for wire mode test:

Symbol	Switch Descriptions
J1	**Must be connected to VDD (high side)**

All other switches must be kept floating.

Tests:

4. Set the switches in the configuration.
5. Power the board with a 3.6V power supply limited at 1.5A and bypassed by a 470µF electrolytic capacitor.
6. Measure DC Output voltage on J12 on J13 and GND. DC Voltage must be equal to 1.8V
7. Measure DC input voltage on J5-2 on J6-2 and GND. DC Voltage must be equal to 1.26V

SUMMARY:

Test	Measurement	Results of successful test
Shutdown test	**I Supply**	**I<1µA**
Wake up test	**VOUTP, VOUTN** **VJ9,J10**	**VDC=1.8V** **VDC=1.26V**