

TPS63001 – 96% Efficient Buck-Boost DC/DC Converter

One Page Overview

Product Description:

The TPS63001 series is a family of synchronous Buck-Boost DC/DC Converters that are ideally suited for applications powered from 1-cell Li-Ion, 2-/3-cell Alkaline/NiCd, or NiMH batteries.

Key Parameters:

- Up to 96% Efficiency over a Wide Input Voltage Range
- 1200mA Output Current at 3.3V in Step Down Mode ($V_{IN} = 3.6V$ to $5.5V$)
- 800mA Output Current at 3.3V in Boost Mode ($V_{IN} > 2.4V$)
- 1.8V to 5.5V Input Voltage Range
- Fixed and Adjustable Output Voltage Options from 1.2V to 5.5V

Nano-Evaluation Module Description:

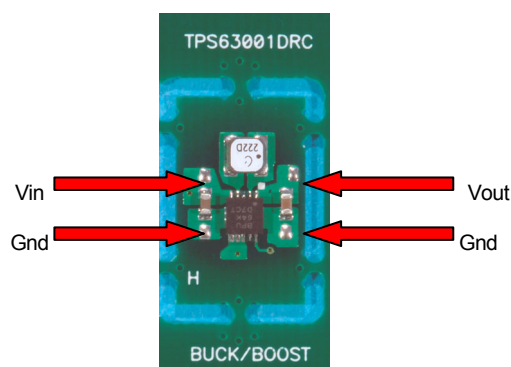
The TPS63001 NanoEVM included within this kit can easily be broken out of the main NanoEVM PCB and have been made as small as possible to be soldered onto a customer's board for evaluation of the device in the system. It contains all the external components needed for correct operation. For full evaluation, please request a standard size EVM (TPS63000EVM-148).

Nano-Evaluation Module Board Use:

Before you connect the EVM to a power supply, please check the picture below to ensure correct electrical connections.

Please note following important device limitations:

- DC Supply Voltage Range: 1.8V to 5.5V
- Fixed Output Voltage: 3.3V
- 2.5V to 5V Li-Ion battery can be used
- EN – hard-wired ON
- PS/SYNC – hard-wired high to disable power save mode



TPS63001 Nano-EVM – PR570

The Nano EVM is not designed to test the full functionality of the device. For further product information including the board schematics, BOM and the link to the product folder, please visit the following web site: www.ti.com/analogportable

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