

Boost Converter Enables Solar and Micro-Fuel Cell Innovation in Portables



Texas Instruments introduced what is said to be the industry's lowest input voltage DC/DC boost converter, which will enable portable electronic end-equipment to draw power from new energy sources such as solar and micro-fuel cells. This power circuit can operate with input voltages lower than 0.3V with high efficiency, allowing designers to overcome the low-voltage design barrier of incorporating these alternative energy sources in applications, such as mobile phones, portable medical devices and media players. The TPS61200 step-up converter with integrated 1.5A switch supports input voltages of 0.3V to 5.5V during normal operation, and continues to manage power down to 0.0V if the under-voltage lockout pin is connected directly to the output voltage. The converter provides a low 0.5V start-up capability in any load condition, and can operate with more than 90 percent efficiency. The TPS61200's ability to operate from a single solar cell eliminates the need for multiple solar cells in series, and eliminates the required protection circuitry associated with series connection.

Texas Instruments

800-477-8924, www.ti.com [1]

Source URL (retrieved on 01/26/2015 - 11:13pm):

<http://www.ecnmag.com/products/2007/05/boost-converter-enables-solar-and-micro-fuel-cell-innovation-portables>

Links:

[1] <http://www.ti.com/>