

*LTC News For Immediate Release*  
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## **200mA, Synchronous Buck-Boost DC/DC Converter Offers Extended Battery Run-Time for Handheld Applications**

MILPITAS, CA – December 29, 2005 – Linear Technology announces the LTC3531/-3.3/-3.0, a synchronous buck-boost converter that delivers up to 200mA of output current to a fixed regulated output with inputs above, below or equal to the output voltage. The topology incorporated in the LTC3531/-3.3/-3.0 provides continuous transitions through all of the operating modes, making it ideal for single cell Li-Ion or dual cell alkaline/NiCad/NiMH applications that must maintain a constant output voltage even as the battery voltage declines below the output. In many cases this can add up to 25% more battery run-time. The combination of only three tiny externals and a 3mm x 3mm DFN or ThinSOT™ package provide a small and low profile solution footprint, typically required in battery powered handheld applications.

The LTC3531/-3.3/-3.0 implements a four switch, single inductor architecture to deliver efficiencies over 90%. Burst Mode® operation delivers quiescent current of only 16uA and shutdown current is less than 1uA, further extending battery run-time. Other features include current limiting, thermal shutdown and output disconnect.

LTC3531 is available from stock in an 8-Lead DFN package. The LTC3531-3.0 or LTC3531-3.3 is available in either an 8-Lead DFN or 6-Lead ThinSOT package. Pricing for all versions is \$1.95 each for 1,000-piece quantities.

(more...)

## Summary of Features: LTC3531/-3.0/-3.3

- Regulated Output with Input Above, Below or Equal to the Output
- Single Inductor
- Up to 90% Efficiency
- $V_{IN}$  Range: 1.8V to 5.5V
- 200mA at 3.3V<sub>OUT</sub> from 3.6V Input
- 125mA at 3V<sub>OUT</sub> from 2.5V Input
- Fixed  $V_{OUT}$  Versions (TSOT, DFN): 3.3V, 3.0V
- Adjustable  $V_{OUT}$  Version (DFN): 2V to 5V
- Burst Mode Operation
- No External Compensation Required
- Ultra Low Quiescent Current: 16uA, Shutdown Current <1uA
- Only 3 External Components Required
- Short-Circuit Protection
- Output Disconnect in Shutdown
- Available in 6-Pin ThinSOT and 3mm x 3mm DFN Packages

## About Linear Technology Corporation

Linear Technology Corporation, a manufacturer of high performance linear integrated circuits, was founded in 1981, became a public company in 1986 and joined the S&P 500 index of major public companies in 2000. Linear Technology products include high performance amplifiers, comparators, voltage references, monolithic filters, linear regulators, DC-DC converters, battery chargers, data converters, communications interface circuits, RF signal conditioning circuits, and many other analog functions. Applications for Linear Technology's high performance circuits include telecommunications, cellular telephones, networking products such as optical switches, notebook and desktop computers, computer peripherals, video/multimedia, industrial instrumentation, security monitoring devices, high-end consumer products such as digital cameras and MP3 players, complex medical devices, automotive electronics, factory automation, process control, and military and space systems. For more information, visit [www.linear.com](http://www.linear.com)

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