

LTC News for Immediate Release

For more information, tel. 408-432-1900
Doug Dickinson, Media Relations Mgr., ext. 2233
John Hamburger, Dir., Mktg Comm., ext. 2419
www.linear.com

1.5A, 3MHz Step-Up DC/DC Converter with Output Disconnect in a 3mm x 3mm DFN

MILPITAS, CA – December 6, 2005 – Linear Technology announces the LTC3422, a 3MHz, current mode, synchronous boost DC/DC converter with true output disconnect, inrush current limiting and integrated soft-start. Its internal switches provide a 1.5A current limit (min) and deliver output voltages as high as 5.25V from an input voltage range of 0.5V to 4.5V, making it ideal for Li-Ion and single/multicell Alkaline/NiCd/NiMH applications. The LTC3422 delivers up to 700mA of continuous output current (at 5V) from a single cell Li-Ion input. Synchronous rectification enables efficiencies of up to 96% while Burst Mode™ operation lowers quiescent current to only 25uA, providing maximum battery run-time in handheld applications. The combination of a 3mm x 3mm DFN package and a constant switching frequency of up to 3MHz minimizes both inductor and capacitor sizes, providing a tiny solution footprint required in handheld applications.

The LTC3422 uses internal switches with an $R_{DS(ON)}$ of only 0.20 Ohm (N-Channel) and 0.24 Ohm (P-Channel) to deliver efficiencies as high as 96%. The true output disconnect feature allows the output to be completely discharged in shutdown. It also limits the inrush of current during start-up, minimizing surge currents seen by the input supply. Additional features include anti-ringing control, short-circuit protection, programmable soft-start, and thermal protection. The LTC3422 is ideal for boost applications requiring up to 700mA of output current, and where a small solution size and maximum battery run-time are essential.

LTC3422EDD is available from stock in a 10-lead DFN package, with 1,000-piece pricing starting at \$2.95 each.

(more...)

Summary of Features: LTC3422

- Synchronous Rectification: Up to 96% Efficiency
- True Output Disconnect / Inrush Current Limiting
- Adjustable Automatic Burst Mode® Operation
- Low Noise, Fixed Frequency Operation from 100kHz to 3MHz
- 0.5V to 4.5V Input Range
- 2.25V to 5.25V Adjustable Output Voltage
- Guaranteed 1V Start-Up
- Programmable Soft-Start
- Low Quiescent Current: 25uA
- Anti-Ringing Control
- Small (3mm x 3mm x 0.75mm) Thermally Enhanced 10-Pin DFN Package

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

Contact:

Doug Dickinson, Media Relations Manager

Linear Technology Corporation

1630 McCarthy Boulevard

Milpitas, CA 95035-7417

ddickinson@linear.com

408-432-1900

READER SERVICE: Call toll-free 1-800-4-LINEAR (for literature only), or go to the company's web site:
<http://www.linear.com>

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