

LTC News for Immediate Release

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**Micropower No RSENSE Constant Frequency Step-Down
DC/DC Controller in 2mm x 3mm DFN**

MILPITAS, CA – April 13, 2005 – Linear Technology Corporation announces the LTC3772, a constant frequency current mode step-down DC/DC controller in 2mm x 3mm DFN and low profile 8-lead ThinSOT™ package. The device operates from an input voltage range of 2.75V to 9.8V and can deliver up to 5A of output current to voltages as low as 0.8V, making it ideal for single and dual cell Li-Ion powered applications. Its No R_{SENSE}™ architecture eliminates the need for a current sense resistor, improving efficiency and saving board space.

The LTC3772 automatically switches into Burst Mode® operation at light loads to increase efficiency at low output current. It consumes only 40uA of quiescent current under a no-load condition.

The LTC3772 incorporates an undervoltage lockout feature that shuts down the device when the input voltage falls below 2V. To maximize runtime from a battery source, the external P-channel MOSFET is turned on continuously in dropout (100% duty cycle). A high switching frequency of 550kHz allows the use of a small inductor and capacitors. Additionally an internal soft-start smoothly ramps the output voltage from zero to its regulation point.

The LTC3772EDDB is available from stock in a low profile (0.75mm) 2mm x 3mm DFN-8 package and the LTC3772ETS8 is available in an 8-lead ThinSOT package. Pricing for either device starts at \$1.85 each for 1,000 piece quantities.

(more...)

Summary of Features: LTC3772

- No Current Sense Resistor Required
- 40uA No-Load Quiescent Current
- Internal Soft-Start Ramps V_{OUT}
- Wide V_{IN} Range: 2.75V to 9.8V
- Low Dropout: 100% Duty Cycle
- Constant Frequency 550kHz Operation
- Low Ripple Burst Mode Operation at Light Load
- Output Voltage as Low as 0.8V
- $\pm 1.5\%$ Voltage Reference Accuracy
- Current Mode Operation for Excellent Line and Load Transient Response
- Low Profile (1mm) 8-Lead SOT-23 and (0.75) 2mm x 3mm DFN-8 Package

COMPANY BACKGROUND: Linear Technology Corporation was founded in 1981 as a manufacturer of high performance linear integrated circuits. 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.

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

Note: LT, LTC, Burst Mode and  are registered trademarks and ThinSOT and No R_{SENSE} are trademarks of Linear Technology Corp.