

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

**Low Voltage Input DC/DC Controller Drives N-Channel MOSFETs,
Delivering up to 20A**

MILPITAS, CA – July 27, 2006 – Linear Technology Corporation introduces the LTC3822, a 2.75V to 4.5V input synchronous step-down DC/DC controller that drives N-channel MOSFETs without requiring an external supply for gate drive. In addition, the LTC3822 eliminates the need for a sense resistor by using MOSFET $R_{DS(ON)}$ sensing current, which improves efficiency and reduces solution cost. Although the LTC3822 drives N-channel MOSFETs, it is capable of operation at 99% duty cycle for very low dropout regulation. An adjustable operating frequency from 300kHz to 750kHz allows designers to size their systems, minimize noise interference and optimize efficiency. Applications include point-of-load conversion from $3.3V_{IN}$ and portable devices with single Li-Ion batteries for up to 20A load current requirements.

The LTC3822 provides excellent line and load regulation as well as fast transient response with its constant frequency current mode operation. The output is adjustable from 0.6V to 99% of the input voltage. Internal soft-start circuitry guarantees controlled startup to minimize inrush current and ensure proper regulation. The LTC3822 consumes only 340uA during operation and only 7.5uA in shutdown.

The LTC3822 is offered in two packages a 10-lead MSOP and a smaller 3mm x 3mm DFN. It is rated for operation from -40°C to 85°C. 1,000-piece pricing is set at \$2.10 each.

Photo Caption: 1.8V/8A High Efficiency Step Down Converter

Summary of Features: LTC3822

- Low V_{IN} Operation: 2.75V to 4.5V
- No Sense Resistor Required
- Current Mode Operation
- Drives N-Channel MOSFETs
- 99% Duty Cycle (Low Dropout Operation)
- Supplies Up to 20A

About Linear Technology

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>

Note: LT, LTC, LTM and  are registered trademarks of Linear Technology Corp.