1A Step-Down DC/DC Converter Plus Two 300mA VLDO Regulators in a 3mm x 4mm DFN

MILPITAS, CA – August 30, 2006 – Linear Technology Corporation announces the LTC3446, a 1A, 2.25 MHz, synchronous buck regulator with two 300mA VLDOs in a single monolithic IC. The input voltage range of 2.5V to 5.5V makes this triple output regulator ideal for single cell Li-Ion/Polymer, or multicell alkaline/NiCad/NiMH powered applications. It can generate output voltages as low as 0.8V from the buck regulator and 0.4V for each of the VLDOs, enabling it to power the latest generation of low voltage DSPs and microcontrollers. The buck regulator's 2.25MHz switching frequency and the VLDO design enable the use of tiny, low cost externals, providing a very compact solution footprint for handheld applications.

The LTC3446's synchronous buck delivers efficiencies as high as 90% while constant frequency, current mode operation minimizes noise and offers fast transient response. The VLDOs are powered from the buck regulator output to supply lower voltages while maximizing efficiency. Each supply has an independent enable pin and internal soft-start. An automatic Burst Mode® feature reduces quiescent current to only 140uA, maximizing battery run-time. For particularly noise sensitive applications, the Burst Mode operation can be disabled. Other features include a power-good output and over-temperature protection.

The LTC3446EDE is available from stock in a 14-lead 3mm x 4mm DFN package. Pricing starts at $2.75 each in 1,000-piece quantities.

Photo Caption: Monolithic 1A, 2.25MHz Buck Regulator with Dual 330mA VLDO Regulators

Summary of Features: LTC3446

- High Efficiency Triple Step-Down Outputs
- 1A Synchronous Buck Regulator Provides Main Step-Down Output & Powers Two 300mA VLDO™ Linear Regulators
- Output Voltages as Low as 400mV (VLDO Outputs)
- Power Good Output
- Input Voltage Range: 2.7V to 5.5V
- Independent Enable Pin for Each Supply
- Low (140uA Typ) No-Load Quiescent Current with all Outputs Enabled
- 2.25MHz Switching Frequency Uses Small Inductors
- Defeatable Automatic Burst Mode Operation for High Efficiency at Light Loads
- Thermally Enhanced 3mm x 4mm 14-Pin DFN Package

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

Press Contacts:

John Hamburger, Director Marketing Communications
jhamburger@linear.com
Tel 408-432-1900 ext

Doug Dickinson, Media Relations Manager
ddickinson@linear.com
408-432-1900