

LTC News for Immediate Release

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**Synchronous Buck-Boost High Power White LED Driver Delivers
Up to 1A from a 3mm x 3mm DFN**

MILPITAS, CA – January 12, 2006 – Linear Technology announces the LTC3454, a synchronous buck-boost DC/DC converter optimized for driving a single high current white LED at up to 1A from a single Li-Ion battery input. The regulator operates automatically in either a synchronous buck, synchronous boost or buck-boost mode, depending on input voltage and LED maximum forward voltage. This is of particular importance in high current LED applications, as the LED forward voltage can vary from 2.7V to 4.9V depending on current level.

Using a proprietary architecture, efficiency of 90% can be achieved over the entire usable range of a Li-Ion battery (2.7V to 4.2V). Furthermore, the LED current is programmable to one of four levels (including shutdown) with dual current setting resistors and dual enable pins. In shutdown, the supply current is less than 1uA.

A high constant operating frequency of 1MHz allows the use of a small inductor. The LTC3454 is offered in a low profile (0.75mm) thermally enhanced 10-lead (3mm x 3mm) DFN package.

The LTC3454EDD is available from stock in a 3mm x 3mm DFN package. Pricing starts at \$1.95 each for 1,000-piece quantities.

(more...)

Summary of Features: LTC3454

- High Efficiency: >90% Typical in Torch Mode, >80% in Flash Mode
- Wide V_{IN} Range: 2.7V to 5.5V
- Up to 1A Continuous Output Current
- 3.5% LED Current Programming Accuracy
- Internal Soft-Start
- Open/Shorted LED Protection
- Constant Frequency 1MHz Operation
- Shutdown Current < 1uA
- Overtemperature Protection
- Small Thermally Enhanced 10-Lead (3mm x 3mm) 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

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<http://www.linear.com>

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