

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

**600mA Cell Phone Camera LED Driver Features
Low Noise and 92% Efficiency**

MILPITAS, CA – December 21, 2005 – Linear Technology Corporation announces the LTC3217, a 850kHz, high efficiency 1x/1.5x/2x multimode charge pump for driving multiple high current LEDs in cellular phone camera applications. Utilizing constant-frequency operation for low noise, it can drive up to 4 LED current sources at up to 600mA total output current, all from a compact 3mm x 3mm QFN package. Shutdown mode and current output levels are selected via two logic input pins. The LTC3217's voltage range of 2.9V to 4.5V is optimized for single cell Li-Ion inputs. Efficiencies when driven from a Li-Ion battery (3.6V nominal) reach 92%, maximizing battery run-time. It only requires four small capacitors and two resistors to create a tiny, low profile (<20mm², 0.75mm high) solution footprint.

The LTC3217 charge pump automatically optimizes efficiency based on V_{IN} and LED forward voltage conditions. The device powers up in 1x mode and automatically switches to boost mode (1.5x) when any enabled LED current source approaches dropout; a subsequent dropout switches the part into 2x mode. High and low LED current levels are programmed via resistors. Brightness is controlled by selecting each or both current set resistors via the enable inputs. Brightness can also be controlled by pulse width modulation of the EN2 pin. Internal circuitry prevents inrush current and excessive input noise during start-up and mode switching; in addition the device has open/short LED protection.

The LTC3217EUD is available from stock in a 16-lead QFN (3mm x 3mm) package. Pricing starts at \$1.70 each for 1,000-piece quantities.

(more...)

Summary of Features: LTC3217

- Up to 92% Efficiency without Inductors
- Multimode, Automatic Switching 1x/1.5x/2x Charge Pump for Optimal Efficiency
- Up to 600mA Total Output Current
- 4 Low-Dropout Current Sources Available as High Current Camera LED Drivers
- PWM Brightness Control via the EN2 Pin
- Low Noise, Constant Frequency Operation
- Internal Soft-Start Limits Inrush Current During Start-Up and Mode Switching
- Open/Short LED Protection
- 2.9V to 4.5V Input Voltage Range
- 3mm x 3mm x 0.75mm QFN-16 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>

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