



News Release | [www.linear.com](http://www.linear.com)

## **45V, 1.3A/2.3A LED Drivers for Boost, Buck or Buck-Boost High Current LED Applications**

MILPITAS, CA – December 11, 2007 – Linear Technology announces the LT3517 and LT3518. They are both 45V, high side current sense DC/DC converters designed to drive high current LEDs. Their 3V to 30V input voltage range (with transient protection to 40V) makes them ideal for a wide variety of applications including automotive, industrial and architectural lighting. The LT3517 and LT3518 are identical except for switch current limits. The LT3517 has an internal 1.3A switch, whereas the LT3518 has an internal 2.3A switch.

The LT3518 can drive up to ten 350mA white LEDs from a 12V input, whereas the LT3517 can drive five, making them ideal for a variety of applications such as automotive display backlighting. Both parts can deliver efficiencies up to 90% in boost mode from a compact 4mm x 4mm QFN package. They utilize True Color PWM dimming to deliver constant LED color with dimming ranges of more than 3,000:1. For less demanding dimming requirements, the CTRL pin can be used to offer 10:1 analog dimming. Their fixed frequency, current mode architecture offers stable operation over a wide range of supply and output voltages. A frequency adjust pin enables the user to program the frequency between 250kHz and 2.5MHz to optimize efficiency while minimizing external component size.

The LT3517 and LT3518 sense output current at the high side of the LED, enabling buck, buck-boost or boost configurations. Other features include open LED protection, a gate driver for PMOS LED disconnect, and soft-start.

The LT3517EUF and LT3518EUF are both available from stock in 16-pin QFN package, priced starting at \$2.70 and \$2.95 each respectively in 1,000-piece quantities. Extended temperature versions, or “T” Grades, LT3517IUF and LT3518IUF, are also available from stock. Pricing starts at \$3.24 and \$3.54 each respectively in 1,000-piece quantities.


## Photo Caption: 45V LED Drivers

### Summary of Features: LT3517/LT3518

- 3000:1 True Color PWM™ Dimming
- 1.3A, 45V Internal Switch(LT3517)
- 2.3A, 45V Internal Switch(LT3518)
- 100mV High Side Current Sense
- Open LED Protection
- Adjustable Frequency: 250kHz to 2.5MHz
- Wide Input Voltage Range:
  - Operation from 3V to 30V
  - Transient Protection to 40V
- Operates in Boost, Buck Mode and Buck-Boost Mode
- Gate Driver for PMOS LED Disconnect
- Constant-Current and Constant-Voltage Regulation
- CTRL Pin Provides 10:1 Analog Dimming
- Low Shutdown Current: <1uA
- Tiny (4mm × 4mm) 16-Pin QFN 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, uModule™ products, 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](http://www.linear.com).

LT, LTC, LTM and  are registered trademarks and True Color PWM and uModule are trademarks of Linear Technology Corp.

#### Press Contacts:

John Hamburger, Director Marketing Communications  
[jhamburger@linear.com](mailto:jhamburger@linear.com)  
Tel: 408-432-1900 ext 2419

Doug Dickinson, Media Relations Manager  
[ddickinson@linear.com](mailto:ddickinson@linear.com)  
Tel: 408-432-1900 ext 2233