



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

## **45V, 2.3A LED Driver for Boost, Buck or Buck-Boost High Current LED Applications Offers Maximum Junction Temperature of 150°C & QFN Package**

MILPITAS, CA – August 22, 2012 – Linear Technology announces the H-grade version of the [LT3518](#). The LT3518 is a 45V, high-side current sense DC/DC converter designed to drive high current LEDs at constant current. Its 3V to 30V input voltage range with transient protection to 40V makes the LT3518 ideal for a wide variety of applications, including automotive, industrial and architectural lighting.

The H-grade version operates with a junction temperature up to 150°C, compared to the E- and I-grade versions' 125°C maximum junction temperature. All electrical specifications are identical for the E, I and H. The H-grade parts are tested and guaranteed to the maximum junction temperature of 150°C. They are ideal for automotive and industrial applications, which are subjected to high ambient temperatures.

The LT3518 can drive up to eight 300mA white LEDs from a nominal 12V input, making it well suited for applications such as automotive display backlighting. The LT3518 senses output current at the high side of the LED, enabling buck, buck-boost or boost configurations. It can deliver efficiencies up to 90% in boost mode from a 4mm x 4mm QFN package. The LT3518 offers True Color PWM™ dimming, delivering constant LED color with dimming ranges of up to 3,000:1. For less demanding dimming requirements, the CNTRL pin can be used to offer 10:1 analog dimming. Its fixed frequency, current-mode architecture ensures 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 LT3518HUF is available from stock in 16-pin QFN package, priced starting at \$3.79 each in 1,000-piece quantities. For more information, visit [www.linear.com/product/LT3518](http://www.linear.com/product/LT3518)


**Photo Caption:** 45V, 2.3A LED Driver Offers Maximum Junction Temperature of 150°C

### Summary of Features: LT3518H

- 150°C Maximum Junction Temperature
- 3,000:1 True Color PWM™ Dimming Ratio
- 2.3A, 45V Internal Switch
- 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 & Buck-Boost Mode
- Gate Driver for PMOS LED Disconnect
- Constant-Current & Constant-Voltage Regulation
- CTRL Pin Provides 10:1 Analog Dimming
- Low Shutdown Current: <1µA
- Tiny (4mm × 4mm) 16-Pin QFN Package

### About Linear Technology

Linear Technology Corporation, a member of the S&P 500, has been designing, manufacturing and marketing a broad line of high performance analog integrated circuits for major companies worldwide for three decades. The Company's products provide an essential bridge between our analog world and the digital electronics in communications, networking, industrial, automotive, computer, medical, instrumentation, consumer, and military and aerospace systems. Linear Technology produces power management, data conversion, signal conditioning, RF and interface ICs, µModule® subsystems, and wireless sensor network products. For more information, visit [www.linear.com](http://www.linear.com)

LT, LTC, LTM, µModule and  are registered trademarks and True Color PWM is a trademark of Linear Technology Corp. All other trademarks are the property of their respective owners.

#### Press Contacts:

##### North America / Worldwide

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

##### UK & Nordic

Alan Timmins  
[alan@ezwire.com](mailto:alan@ezwire.com)  
Tel: +44-1-252-629937