



Triple Output High Current LED Driver Controller Drives over 250W of LED Power

MILPITAS, CA – November 21, 2013 – Linear Technology Corporation announces the [LT3797](#), a triple output DC/DC controller designed to drive three independent channels of LEDs. Its fixed frequency, current-mode architecture delivers constant, accurately regulated LED current over a wide range of supply and output voltages. Its 2.5V to 40V input voltage range with transient ride through to 60V makes it ideal for automotive applications, which must operate through cold crank, stop/start and load dump scenarios as well as a wide range of industrial applications. Each of the LT3797's channels can drive a wide range of LED power in either step-up, step-down or SEPIC topologies. In a boost configuration, it powers three channels of up to 90V of LEDs with LED currents in excess of 1A, delivering over 250W of power from a nominal 12V input with efficiencies as high as 93%. Each of the three channels is operated by an independent True Color PWM™ signal, enabling each channel to be dimmed to ratios as high as 3000:1. Each channel also offers both robust open-LED and short-circuit protection in boost mode, providing high safety and reliability designs required in automotive applications. A frequency adjust pin enables the user to program the frequency between 100kHz and 1MHz to optimize efficiency while minimizing external component size. Its thermally enhanced 7mm x 8mm QFN package provides a highly compact solution footprint for 20W to 250W LED applications.

The LT3797 is designed so that each channel can use the most suitable configuration to drive its LED string, whether step-up, step-down, and SEPIC or a combination of these. Its high-side current sense enables each channel to be used in the same or different

configurations while rail-to-rail current sense enables outputs from 0V to 100V, offering a wide range of design flexibility. Other features include overvoltage and undervoltage lockout, 20:1 analog dimming via the CTRL pin and external synchronization.

The LT3797EUKG is available from stock in a thermally enhanced 52-lead 7mm x 8mm QFN package. 1,000-piece pricing starts at \$4.95 each and it is available from stock. The LT3797IUKG is tested and guaranteed to operate from a -40°C to 125°C operating junction temperature. It's priced at \$5.54 each in 1,000-piece quantities and is also available from stock. For more information, visit www.linear.com/product/LT3797

Photo Caption: High Current Triple Output LED Driver

Summary of Features: LT3797

- Three Independent LED Driver Channels
- Wide Input Voltage Range: 2.5V to 40V with V_{IN} Transient Ride-Through up to 60V
- Rail-to-Rail LED Current Sense: 0V to 100V
- 3,000:1 True Color PWM™ Dimming
- TG Drivers for PMOS LED Disconnection
- Operates in Boost, Buck, Buck-Boost, SEPIC or Flyback Topology
- Open-LED Protection
- Short-Circuit Protected Boost Capable
- Fault Flags for Independent Channels
- Programmable V_{IN} Undervoltage & Overvoltage Lockout
- Adjustable Switching Frequency: 100kHz to 1MHz
- Synchronizable to an External Clock
- CTRL Pins Provide Analog Dimming
- Programmable Soft-Start
- 52-Lead 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 over 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, μ Module[®] subsystems, and wireless sensor network products. For more information, visit www.linear.com

 , LT, LTC, LTM, Linear Technology, the Linear logo and μ Module are registered trademarks 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
Tel: 408-432-1900 ext 2419

Doug Dickinson, Media Relations Manager
ddickinson@linear.com
Tel: 408-432-1900 ext 2233

UK & Nordic

Alan Timmins
alan@ezwire.com
Tel: +44-1-252-629937