

***LTC News for Immediate Release***

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**High Efficiency White LED Driver with Integrated Schottky in SC70**

MILPITAS, CA – March 1, 2006 – Linear Technology Corporation announces the LT3491, a high efficiency, constant current white LED driver packaged in an SC70. The LT3491 features an integrated Schottky diode on-chip, eliminating both the added cost and space required with an external diode. A unique high-side LED current sense topology enables the LED cathode to be connected directly to ground, creating a single wire current source. The LT3491 is designed to drive up to six white LEDs from a single Li-Ion cell at efficiencies over 75%. It switches at 2.3MHz, allowing the use of a tiny inductor and capacitors while keeping switching noise out of critical RF frequency bands. The combination of the LT3491's high efficiency, low noise, and extremely small "total solution" footprint make it ideal for handheld applications requiring up to six white LEDs.

The LT3491 acts as a constant current source, delivering the same current to each white LED, regardless of fluctuations in the LED's forward voltage drop which varies with temperature, manufacturing tolerances and age. This ensures uniform LED brightness. The LT3491 utilizes True Color PWM<sup>TM</sup> Dimming to offer wide dimming ranges of up to 300:1. Internal over-voltage circuitry protects the part when LEDs are disconnected.

The LT3491 is available from stock in an 8-lead SC70 package. Pricing starts at \$1.25 for 1,000-piece quantities.

**Photo Caption:** White LED Driver in SC70 with Integrated Schottky

### **Summary of Features: LT3491**

- Drives Up to Six White LEDs from a 3V Supply
- High Side Sense Allows “One Wire Current Source”
- Internal Schottky Diode
- One Pin Dimming and Shutdown
- 27V Open LED Protection
- 2.3MHz Switching Frequency
- $\pm 5\%$  Reference Accuracy
- $V_{IN}$  Range: 2.5V to 12V
- Requires Only 1 $\mu$ F Output Capacitor
- Wide 300:1 True Color PWM Dimming Range
- 8-Lead SC70 Package

### **Company Background**

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](http://www.linear.com)

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