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## **Micropower, Low Noise Boost Converters with Integrated Schottky Diode in 3mm x 2mm DFN Package**

MILPITAS, CA – November 29, 2006 – Linear Technology Corporation announces the LT3494/A low noise boost converters with integrated power switches, Schottky diodes and output disconnect circuitry. The LT3494 uses a 180mA switch, the LT3494A uses a 350mA switch, and both parts are packaged in a 3mm x 2mm DFN-8 package. Their wide 2.3V to 16V input voltage range enables operation from single cell Li-Ion batteries up to fixed 12V input rails, delivering outputs up to 40V. The LT3494 can deliver over 17mA of current at 15V from a single Li-Ion cell, making it ideal for applications such as OLED displays. The LT3494A has higher current capability and can deliver over 27mA of current at 15V from a single Li-Ion cell. Both parts use a unique control technique that delivers both high efficiency and low output ripple over a wide load current range. This technique guarantees that the switching frequency stays above the audio band for the entire load range, making it ideal for noise-sensitive applications such as MP3 players. The combination of the LT3494/A's 3mm x 2mm DFN package and tiny, low cost ceramic capacitors and inductors provides a very compact solution footprint.

The LT3494's NPN switch achieves a  $V_{CESAT}$  of only 110mV at 100mA, offering efficiencies as high as 80%. Only 65uA of quiescent current (<1uA in shutdown) maximizes battery run-time while integrated Schottky diodes and output disconnect circuitry eliminates costly external circuitry. Finally, an integrated dimming/contrast adjustment function is included for display applications.

The LT3494EDDB and LT3494AEDDB are both available from stock in an 8-lead 3mm x 2mm DFN package. Pricing starts at \$1.45 each for 1,000-piece quantities.

## **Photo Caption:** Micropower Low Noise Boost Converts with Output Disconnect

### **Summary of Features: LT3494/A**

- Low Quiescent Current: 65 uA in Active Mode (0.1uA in Shutdown Mode)
- Switching Frequency is Non-Audible Over Entire Load Range
- Integrated Power NPN:
  - 350mA Current Limit (LT3494A)
  - 180mA Current Limit (LT3494)
- Integrated Schottky Diode
- Integrated Output Disconnect
- Integrated Output Dimming
- Wide Input Range: 2.3V to 16V
- Wide Output Range: Up to 40V
- Tiny 8-Lead 3mm x 2mm DFN 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, 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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