

***LTC News for Immediate Release***

For more information, tel. 408-432-1900  
Afshin Odabae, Product Mktg. Eng., ext. 2593  
Doug Dickinson, Media Relations Mgr., ext. 2233  
[www.linear.com](http://www.linear.com)

**NiMH/NiCd Battery Charger Requires  
No Microcontroller or Firmware**

MILPITAS, CA – September 22, 2004 – Linear Technology Corporation introduces the LTC4060, an autonomous 1- to 4-cell, 0.4A to 2A linear NiMH and NiCd battery charger. The LTC4060 includes all the functions required for a battery charger circuit, operating without the aid of a microcontroller or firmware. The design is simple and needs only three passive components. The LTC4060 also eliminates the need for a sense resistor and blocking diode, which increases efficiency and lowers the solution cost. This IC is targeted at applications including portable medical equipment, automotive diagnostic systems and industrial/telecom test devices.

The LTC4060 is offered in two packages, a 16-lead TSSOP and a 5mm x 3mm DFN. It uses an external PNP transistor to supply current to the battery or battery pack. The operating voltage ranges from 4.5V to 10V. The LTC4060 provides three options for terminating the charge cycle: negative deltaV, maximum voltage or maximum time. Moreover, the IC permits the use of a thermistor for temperature. The charge current is adjustable with a resistor and has  $\pm 5\%$  accuracy. The LTC4060 also has automatic battery detection, charge and AC present status output, pre-charge qualification, automatic recharge, reverse current protection and manual shutdown. Battery drain current is less than 1microAmp during sleep mode.

The LTC4060 is rated for operation from  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ . Pricing starts at \$3.80 each in 1,000-piece quantities.

(more...)

## Summary of Features: LTC4060

- Complete Fast Charger for 1- to 4-cell NiMH & NiCd Batteries
- No Firmware or Microcontroller Required
- Termination by Negative DeltaV, Maximum Voltage or Maximum Time
- Programmable Charge Current from 0.4A to 2A with  $\pm 5\%$  Accuracy
- Automatic Recharge Keeps Batteries Charged
- $< 1\mu\text{A}$  Battery Drain in Sleep Mode

COMPANY BACKGROUND: Linear Technology Corporation was founded in 1981 as a manufacturer of high performance linear integrated circuits. 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, contact:

Doug Dickinson, Media Relations Manager


**Linear Technology Corporation**

1630 McCarthy Boulevard

Milpitas, CA 95035-7417

408-432-1900

READER SERVICE: Call toll-free 1-800-4-LINEAR (for literature only), or go to the company's web site: **<http://www.linear.com>**

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