

LTC News for Immediate Release

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**Integrated Power Management IC for Wall Input,
USB and 2-Cell Alkaline Applications**

MILPITAS, CA. – January 17, 2005 – Linear Technology Corporation announces the LTC3456, a complete power management system IC optimized for portable applications powered by dual cell alkaline/NiCad/NiMH batteries, USB, or wall adapter. The LTC3456 delivers up to 150mA to a fixed 3.3V Main output and up to 200mA to an adjustable (V_{BATT} to 0.8V) Core output to power microprocessors, microcontrollers and their peripheral circuitry. In addition, the LTC3456 provides a 3.3V 50mA Hot SwapTM output for flash memory cards and an always-alive V_{MAX} to power a real-time clock. The LTC3456 is available in a tiny low profile (4mm x 4mm x 0.75mm) 24-pin QFN package making it ideal for space-sensitive packaged portable devices.

The LTC3456 has onboard voltage detectors to monitor the status of the wall adapter and USB voltages, as well as a unique control scheme, ensuring seamless transition between battery, USB and wall adapter input power sources. Integrated power sequencing ensures that the Main and Hot Swap outputs always come up after the Core output. The Main and Core 1MHz switching regulators employ synchronous rectification to deliver efficiencies over 90%. The LTC3456 has a low battery indicator and a feature to ensure that all outputs are discharged to ground in shut down mode.

The LTC3456 packaged in a 4mm x 4mm QFN-14, is available from stock. Pricing starts at \$3.95 each for 1,000 quantities.

(more...)

Summary of Features: LTC3456

- Seamless Transition Between 2-Cell Battery, USB and AC Wall Adapter Input Power Sources
- Main Output: Fixed 3.3V Output
- Core Output: Adjustable from 0.8V to VBATT(MIN)
- Hot Swap Output for Memory Cards
- Outputs Discharged to Ground During Shutdown
- Power Supply Sequencing: Main and Hot Swap Outputs Come Up After Core Output
- Accurate 100mA/500mA USB Current Limiting
- High Frequency Operation: 1MHz
- High Efficiency: Up to 92%
- Small (4mm x 4mm x 0.75mm) 24-Pin QFN Package

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.

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READER SERVICE: Call toll-free 1-800-4-LINEAR (for literature only)

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