

LTC News for Immediate Release

For more information, tel. 408-432-1900
Doug Dickinson, Media Relations Mgr., ext. 2233
www.linear.com

**Fixed 3.3V and 5V Low Noise Regulated
Charge Pump Doubler in 2mm x 2mm DFN Package**

MILPITAS, CA – January 31, 2005 – Linear Technology Corporation announces the LTC3204 charge pump doubler in the 2mm x 2mm DFN package. Featuring low-noise constant-frequency (1.2MHz) operation, the LTC3204-3.3 generates a regulated boosted output voltage of 3.3V from a minimum input voltage of 1.8V (2 AA cell alkaline or NiMH) at output currents up to 50mA, while the LTC3204-5 produces 5V output from a minimum 2.7V (Li-Ion battery) input at currents up to 150mA.

The LTC3204 features automatic Burst Mode® operation at light loads, which provides a low supply current of 48uA and helps extend battery run time. A patented constant-frequency architecture offers both low input and low output ripple to minimize switching noise. Other features include automatic soft start circuitry to prevent excessive inrush current during startup, load disconnect from the input during shutdown, plus current limit and thermal shutdown circuitry.

The LTC3204's high 1.2MHz switching frequency enables the use of tiny external ceramic capacitors, saving size and cost. Low external parts count of one flying capacitor and two bypass capacitors, in addition to the low profile DFN package make the LTC3204 an extremely compact solution for space-constrained applications.

The LTC3204EDC-3.3 and LTC3204EDC-5 are available in the 6-lead DFN (2mm x 2mm x 0.75mm) package. 1,000-piece pricing starts at \$1.50 each.

(more...)

Summary of Features: LTC3204

- **Fixed Outputs:**
 - 3.3V for LTC3204-3.3
 - 5V for LTC3204-5
- **Output Currents:**
 - 50mA for LTC3204-3.3
 - 150mA for LTC3204-5
- **Wide V_{IN} Ranges:**
 - 1.8V to 4.5V for LTC3204-3.3
 - 2.7V to 5.5V for LTC3204-5
- **Automatic Burst Mode Operation with $I_Q=48\mu A$**
- Low Noise Constant Frequency (1.2MHz) Operation
- Low Input and Output Ripple
- Automatic Soft-Start Limits Inrush Current
- Low Shutdown Current $<1\mu A$
- 6-Pin DFN (2mm x 2mm x 0.75mm) 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.

For more information, contact:

Doug Dickinson, Media Relations Manager

Linear Technology Corporation

1630 McCarthy Boulevard

Milpitas, CA 95035-7417

ddickinson@linear.com

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>

Note: LT, LTC, Burst Mode and  are registered trademarks of Linear Technology Corp.