

***LTC News for Immediate Release***

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**Intel xScale™ Microprocessor Power Manager in  
a Tiny 4mm x 4mm QFN**

MILPITAS, CA – December 8, 2004 – Linear Technology Corporation announces the LTC3445, a compact, high efficiency xScale microprocessor power supply in a 4mm x 4mm QFN package. It contains a high efficiency monolithic synchronous current mode buck regulator, two LDO regulators, a PowerPath™ controller and an I<sup>2</sup>C interface in a single QFN package. Its 2.5V to 5.5V input voltage range makes the LTC3445 ideal for single Li-Ion battery-powered applications.

The synchronous buck regulator can deliver up to 600mA of output current with efficiencies of up to 93%. The user can select either a constant (1.5MHz) or a spread spectrum switching frequency. The spread spectrum option allows for a lower noise regulated output as well as low noise at the input. For processor core voltages, the onboard I<sup>2</sup>C interface controls a 6-bit programmable dynamically adjustable output voltage range of 0.85V to 1.55V and a slew rate control. The LTC3445 also contains two LDO voltage regulators to power additional xScale voltages such as V<sub>SRAM</sub> and V<sub>PLL</sub>. Both LDO output voltages are programmable with external resistors and can deliver up to 50mA of output current.

The LTC3445 contains control circuitry (PowerPath) for automatic battery back-up (typically a coin cell battery) when the main battery is disabled. Automatic Burst Mode® operation reduces light load supply current to only 360uA and drops to 27uA in shutdown for extended battery life.

(more...)

The LTC3445 packaged in a 4mm x 4mm QFN-24, is available from stock. Pricing starts at \$2.45 each for 1,000-piece quantities.

## Summary of Features: LTC3445

### Buck Regulator

- High Efficiency: Up to 93%
- 600mA Output Current (VCC1 = 3V, VOUT = 1.3V)
- Programmable Output Voltage: 0.85V to 1.55V
- 2.5V to 5.5V Input Voltage Range
- 1.5MHz Constant Frequency or Spread Spectrum Option
- Soft-Start

### LDOs

- Two LDO Regulators: 0.3V Dropout at 50mA

### PowerPath Controller

- Dynamically Regulates VCC BATT

### I2C

- Standard (100kHz) or Fast Mode (400kHz)
- 24-Lead (4mm X 4mm) 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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