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## **600mA, 1.5MHz Synchronous Step-Down Regulator Now Offered in -55°C to 125°C Temperature Range**

MILPITAS, CA – March 11, 2008 – Linear Technology announces the -55°C to 125°C grade (MP-grade) version of the LTC3404 in a plastic MSOP-8 package. The LTC3404 is a high efficiency, 1.4MHz synchronous buck regulator using a constant frequency, current mode architecture. It can deliver up to 600mA of continuous output current at voltages as low as 0.8V. It operates from an input voltage of 2.65V to 6V, making it ideal for both single cell Li-Ion, or NiMH applications, as well as general purpose fixed rail systems. With up to 95% efficiency and only 10uA of quiescent current, the LTC3404 is ideal for handheld applications which require maximum battery run-time.

The MP grade version operates over a -55°C to 125°C operating junction temperature range, and is guaranteed and tested across the full temperature range. All electrical specifications are identical to the E and I grade versions of this part. The MP versions are ideal for military and aerospace applications which are subjected to extreme ambient temperatures.

The LTC3404MPMS8 is available in an MSOP-8 package. Pricing starts at \$4.89 each for 1,000-piece quantities.


**Photo Caption:** 600mA, 1.4MHz Synchronous Step-Down DC/DC Converter in -55°C to 125°C Temperature Range

## Summary of Features: LTC3404MPMS8

- Performance Guaranteed Over the -55°C to 125°C Temperature Range
- High Efficiency: Up to 95%
- Very Low Quiescent Current: Only 10uA During Operation
- 600mA Output Current at  $V_{IN} = 3.3V$
- 2.65V to 6V Input Voltage Range
- 1.4MHz Constant Frequency Operation
- No Schottky Diode Required
- Low Dropout Operation: 100% Duty Cycle
- Synchronizable from 1MHz to 1.7MHz
- Selectable Burst Mode<sup>®</sup> Operation or Pulse Skipping Mode
- 0.8V Reference Allows Low Output Voltages
- Shutdown Mode Draws < 1uA Supply Current
- $\pm 2\%$  Output Voltage Accuracy
- Current Mode Control for Excellent Line & Load Transient Response
- Overcurrent & Overtemperature Protected
- Available in 8-Lead MSOP 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, uModule<sup>™</sup> products, 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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