

LTC News for Immediate Release

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**1.7A, 1.5MHz Synchronous Step-Up DC/DC
Converter with Output Disconnect**

MILPITAS, CA – June 9, 2005 – Linear Technology Corporation announces the LTC3458L, a 1.7Amp, 6V, 1.5MHz synchronous step-up DC/DC converter with inrush current limiting and output disconnect. Its wide 1.5V to 6V input voltage range enables the LTC3458L to operate from dual cell alkaline/NiMH/NiCd to single cell Li-Ion batteries. It can deliver outputs up to 6V with efficiencies up to 95%. Its switching frequency is programmable up to 1.5MHz, allowing designers to keep switching noise out of noise-sensitive circuitry and enabling the use of tiny capacitors and inductors. The combination of the LTC3458L's internal switches and a tiny 4mm x 3mm DFN package provide high efficiency boost capability in a very compact form factor.

The LTC3458L's 200mOhm (N-Channel) MOSFET switch and 300mOhm (P-Channel) MOSFET synchronous rectifier provide high efficiency operation. For light load efficiency, the part utilizes programmable Burst Mode[®] operation to reduce quiescent current to less than 15uA. The current threshold at which Burst Mode operation begins is user programmable, enabling designers to optimize battery run-time. Switching frequency is also programmable from 400kHz to 1.5MHz via a single resistor. Alternatively the part will synchronize to an external clock. Other features include current mode operation, programmable soft-start and a programmable current limit.

The LTC3458LEDE is available from stock in a 4mm x 3mm DFN package. Pricing starts at \$3.20 each for 1,000-piece quantities.

(more...)

Summary of Features: LTC3458L

- High Efficiency: Up to 95%
- Inrush Current Limiting and Output Disconnect
- Programmable Output Voltages up to 6V
- 1.5V to 6V Input Range
- Programmable/Synchronizable Fixed Frequency Operation up to 1.5MHz
- Programmable Automatic Burst Mode Operation
- Current Mode Control with Programmable Soft-Start Period and Peak Current Limit
- 1A at 5V from Li-Ion Input
- 0.20Ω N-Channel and 0.30Ω P-Channel 1.7A Switches
- Ultralow Quiescent Currents: 15uA Sleep, <1uA in Shutdown
- 4mm x 3mm DFN-12 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), or go to the company's web site: **<http://www.linear.com>**

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