



Complete 8A DC/DC Converter in 9mm x 15mm Surface Mount Package

MILPITAS, CA – October 15, 2007 – Linear Technology Corporation introduces the LTM4608, a new member of the low voltage uModule™ DC/DC regulator family, the LTM4608 is a complete 8A DC/DC uModule regulator system with on-board DC/DC controller, power switches, inductor compensation and input/output bypass capacitors. The LTM4608 operates from a supply range of 2.375V to 5.5V (6V max) and regulates an output voltage from 0.8V to 5V. The complete circuit is housed in a light weight (1.0g) tiny 9mm x 15mm LGA package with 2.8mm profile (height). The compact size, low profile and light weight allow these devices to be mounted on the backside of a system printed circuit board, freeing room on the top side for FPGAs, ASICs, memory and other ICs. This family is used as a compact and high reliability DC/DC point-of-load solution for systems that need to convert low voltage input supplies such as 5V, 3.3V, 2.5V, or a Li-Ion battery to a lower output voltage without sacrificing space or performance.

With only 2.8mm height, LTM4608 is an ideal point-of-load DC/DC solution for systems that require low-profile packaging for more efficient air flow and easier heat removal from a circuit board. For higher power designs, multiple 8A LTM4608 uModule regulators can be easily paralleled to deliver up to 60W to a load while evenly sharing the load current. The LTM4608 features a current mode architecture for fast transient response, short-circuit protection and excellent line and load regulation. In addition, the device offers tracking for controlled ramp-up, ramp-down and sequencing of the output voltage as well as output voltage margining for system level testing. Also, a power good output signal indicates when the voltage is in regulation. Moreover, the LTM4608 offers a phase locked loop (PLL) for synchronization to an external clock to reduce undesirable frequency harmonics.

The LTM4608 is rated for operation from -40°C to 85°C temperature range and is RoHS compliant; however, it can be used with Pb-based solder paste as well as Pb-free solder paste.

1,000-piece pricing starts at \$11.30 each.


Photo Caption: 8A, Low V_{IN} , DC/DC uModule Converter

Summary of Features: LTM4608

- Complete DC/DC Regulator in a Compact 9mm x 15mm x 2.8mm LGA Package
- Input Voltage Range: 2.375V to 5.5V
- 8A (10A Peak) Output Current
- 0.6V to 5V Output
- Output Voltage Tracking & Margining
- PLL & Current Sharing Capability

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, 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

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Press Contacts:

John Hamburger, Director Marketing Communications
jhamburger@linear.com
Tel: 408-432-1900 ext 2419

Doug Dickinson, Media Relations Manager
ddickinson@linear.com
Tel: 408-432-1900 ext 2233