



News Release | [www.linear.com](http://www.linear.com)

## **10A DC/DC Military Plastic uModule Regulator Guarantees Performance from -55°C to 125°C**

MILPITAS, CA – July 25, 2007 – Linear Technology Corporation introduces the LTM4600HVMPV, a complete and encapsulated 10A switching DC/DC regulator system, the first device in a new family of uModule™ (micromodule) DC/DC regulators designed for rugged military and avionics applications. The LTM4600HVMPV is fully tested over the temperature range of -55°C to 125°C. This device is offered in a 15mm x 15mm x 2.8mm Military Plastic LGA (Land Grid Array) package. The compact LGA package has been qualified by military system designers as the preferred package for high power DC/DC solutions because of its lower thermal impedance when compared to a similar size BGA (Ball Grid Array) package. Comprised entirely of Linear Technology silicon and supported by our rigorous in-house testing, the LTM4600HVMPV brings component-level reliability and industry-leading performance to demanding applications such as military and aerospace systems.

The LTM4600HVMPV is a synchronous switchmode DC/DC step-down regulator with built-in inductor, supporting power components and compensation circuitry. The device operates from an input supply range of 4.5V to 28V and regulates an output voltage from 0.6V to 5V. This DC/DC uModule regulator can deliver 10A continuous load current (14A peak) and achieve efficiencies as high as 92%. A DC/DC uModule regulator such as the LTM4600HVMPV simplifies power supply design and construction, requiring only input and output bulk capacitors and a resistor to set the output voltage.

The LTM4600HVMPV DC/DC uModule regulator weighs only 1.7g and is housed in a surface-mount package that can be handled and assembled like a standard integrated circuit. Moreover, its low profile design permits the device to be soldered onto the back side of a printed circuit board, freeing valuable board space for sophisticated digital ICs. The LTM4600HVMPV is self-protected against output overvoltage and short circuit conditions. 1,000-piece pricing starts at \$36.95 each.

For a complete review of Linear Technology's uModule DC/DC regulator systems visit  
[www.linear.com/micromodule](http://www.linear.com/micromodule)


**Photo Caption:** Military Plastic DC/DC uModule Regulator

**Summary of Features: LTM4600HVMPV**

- Complete 10A DC/DC Power Supply System
- Tiny & Thin 15mm x 15mm x 2.8mm Military Plastic LGA Package
- Tested over the -55°C to 125°C Operating Temperature Range
- Guaranteed Start-up at -55°C
- 4.5V to 28V Input Voltage Range; 0.6V to 5V Output

**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](http://www.linear.com)

LT, LTC, LTM, and  are registered trademarks and uModule is a trademark of Linear Technology Corp.

**Press Contacts:**

John Hamburger, Director Marketing Communications  
[jhamburger@linear.com](mailto:jhamburger@linear.com)  
Tel: 408-432-1900 ext 2419

Doug Dickinson, Media Relations Manager  
[ddickinson@linear.com](mailto:ddickinson@linear.com)  
Tel: 408-432-1900 ext 2233