



Small 9mm x 11.25mm, Dual 4A μ Module Regulator Operates from Wide 2.375V to 20V Input Voltage Range

MILPITAS, CA – April 26, 2016 – Linear Technology Corporation introduces the [LTM4642](#), a dual 4A or single 8A step-down μ Module[®] (power module) regulator in a compact 9mm x 11.25mm x 4.92mm BGA package. The device operates from a wide input voltage range of 2.375V to 20V and regulates two output voltages adjustable from 0.6V to 5.5V. Each output is a synchronous buck converter operating at high efficiency. The operating efficiencies for delivering full current at a 1.8V load from input supplies of 12V, 5V and 3.3V are 88%, 91% and 93%, respectively.

The two 4A outputs can be current shared as a single 8A output with precision voltage regulation of $\pm 1.5\%$ over line and load variations and is guaranteed from -40°C to 125°C . The LTM4642's small footprint, high efficiency and dual-regulator design enables system designers to reduce PCB area or fit this point-of-load regulator into tight spaces on densely populated boards. Applications for the LTM4642 include industrial, robotic, medical, instrumentation and telecom systems.

The LTM4642 can be synchronized to a supplied clock with a frequency ranging from 600kHz to 1.4MHz. Output ripple voltage is reduced because of the device's 180° out-of-phase operation. Low package thermal impedance enables full load current up to 95°C ambient temperature with no airflow and 100°C with 200LFM when converting 12V to a 1V output.

The LTM4642 operates from -40°C to 125°C . The 1,000-piece price is \$19.43 each. For more information, visit www.linear.com/product/LTM4642.

Photo Caption: Small Footprint Dual 4A μ Module Regulator


Summary of Features: LTM4642

- Small Footprint Dual 4A or Single 8A Complete Point-of-Load Regulator
- Wide 4.5V to 20V Input; 2.375V with 5V Bias
- High Precision $\pm 1.5\%$ 0.6V-5.5V Output Voltage
- High Efficiency Synchronous Regulator
- Out-of-Phase Operation with 600kHz to 1.4MHz Synchronization Frequency
- 9mm x 11.25mm x 4.92mm BGA Package

Pricing shown is for budgetary use only and may differ due to local duties, taxes, fees and exchange rates.

About Linear Technology

Linear Technology Corporation, a member of the S&P 500, has been designing, manufacturing and marketing a broad line of high performance analog integrated circuits for major companies worldwide for over three decades. The Company's products provide an essential bridge between our analog world and the digital electronics in communications, networking, industrial, automotive, computer, medical, instrumentation, consumer, and military and aerospace systems. Linear Technology produces power management, data conversion, signal conditioning, RF and interface ICs, μ Module[®] subsystems, and wireless sensor network products. For more information, visit www.linear.com

 , LT, LTC, LTM, Linear Technology, the Linear logo and μ Module are registered trademarks of Linear Technology Corp. All other trademarks are the property of their respective owners.

Press Contacts:

North America / Worldwide

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

UK & Nordic

Alan Timmins
alan@ezwire.com
Tel: +44-1-252-629937