



20A μ Module Regulator with Guaranteed 1.5% Total V_{OUT} Accuracy from -40°C to 125°C Is Housed in Low Profile LGA Package

MILPITAS, CA – May 7, 2013 – Linear Technology Corporation introduces the [LTM4637](#), a 20A DC/DC step-down μ Module[®] (micromodule) regulator with onboard precision differential remote sense amplifier. This enables automatic correction of voltage errors caused by droop across PCB traces, which is valuable for powering loads such as FPGAs requiring high currents at low voltages. Total output DC voltage accuracy is guaranteed at $\pm 1.5\%$ from -40°C to 125°C. The LTM4637 includes the inductor, MOSFETs, DC/DC controller and compensation circuitry. It is housed in a low height (profile) 4.32mm LGA package with a 15mm x 15mm footprint. With a V_{IN} range of 4.5V to 20V, the device's operating efficiency is optimized for 5V and 12V input systems (88%, 12V_{IN}, 1.8V_{OUT} @ 20A). The output voltage can be set with one resistor from 0.6V to 5.5V. Four devices in parallel can deliver 80A of load current. Applications include industrial and medical equipment, and networking and telecom systems.

A main feature of the LTM4637 is its drop-in and pin compatibility with the LTM4627 15A output μ Module regulator. Systems designers value pin compatibility since they can interchange these products without layout changes at any stage from development to production. [Linear offers a series of pin-compatible \$\mu\$ Module devices.](#)

The LTM4637 features protection functions for overcurrent and overvoltage conditions. The internal temperature of the device can be monitored via an internal temperature sensing

diode. The LTM4637 is rated for operation from -40°C to 125°C. The 1000-piece price is \$22.10 each. For more information, visit www.linear.com/product/LTM4637


Photo Caption: 20A μ Module Regulator in small 4.32mm Footprint Profile LGA Package

Summary of Features: LTM4637

- 20A Regulator System in a 15mm x 15mm x 4.32mm LGA Package
- Differential Remote Sense Amplifier for Precise Regulation
- +/-1.5% V_{OUT} DC Accuracy from -40°C to 125°C
- Parallel 4 Devices for up to 80A Output Current
- Overvoltage & Current Protection

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 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

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