



76V, 1A Buck Converter Has Only 12 μ A Quiescent Current

MILPITAS, CA – March 24, 2014 – Linear Technology announces the [LTC3637](#), a 76V input-capable high efficiency buck converter that delivers up to 1A of continuous output current. It operates from an input voltage range of 4V to 76V, making it ideal for telecom, industrial, avionic and automotive applications. The LTC3637 utilizes a programmable peak current-mode design to optimize efficiency over a broad range of output currents. It delivers efficiencies as high as 90% and requires only 12 μ A of quiescent current, maximizing battery run time. A user-programmable output current limit can set output current from 100mA to 1A as required by the application. The LTC3637 can be programmed with fixed output voltages of 1.8V, 3.3V or 5V or a resistor divider can be used to program outputs from V_{IN} to 0.8V. The LTC3637's thermally enhanced MSOP or 3mm x 5mm DFN packages offer additional pin spacing required for high voltage inputs. The combination of its MSOP or DFN package and only four tiny externals provide a highly compact solution footprint for a wide array of applications.

The LTC3637 utilizes an internal 350m Ω power MOSFET that draws only 12 μ A at no load while maintaining output voltage regulation, making it ideal for always-on battery-powered applications. Due to the inherent stability of the converter, no external compensation is required, thereby simplifying design and minimizing the solution footprint. Additional features include a precise 0.8V \pm 1% feedback voltage reference and internal or external soft-start.

Pricing for the 16-Lead TSSOP version, the LTC3637EMSE and the DFN version, the LTC3637EDHC, starts at \$3.20 each. Industrial temperature versions, the LTC3637IMSE and

LTC3637IDHC, are tested and guaranteed to operate from a -40°C to 125°C operating junction temperature, priced starting at \$3.52 each. Automotive temperature versions, the LTC3637HMSE and LTC3637HDHC, are tested and guaranteed to operate from a -40°C to 150°C operating junction temperature, priced starting at \$3.77 each. Finally high reliability versions, the LTC3637MPMSE and LTC3637MPDHC, are tested and guaranteed to operate from a -55°C to 150°C operating junction temperature, priced starting at \$9.50 each. All pricing is in 1,000-piece quantities and all versions are available from stock. For more information, visit

www.linear.com/product/LTC3637


Photo Caption: 76V, 1A Buck Converter with Adjustable Output Current Limit

Summary of Features: LTC3637

- Wide Operating Input Voltage Range: 4V to 76V
- Internal 350m Ω Power MOSFET
- No Compensation Required
- Adjustable 100mA to 1A Maximum Output Current
- Low Dropout Operation: 100% Duty Cycle
- Low Quiescent Current: 12 μ A
- Wide Output Range: 0.8V to V_{IN}
- 0.8V \pm 1% Feedback Voltage Reference
- Precise RUN Pin Threshold
- Internal & External Soft-Start
- Programmable 1.8V, 3.3V, 5V or Adjustable Output
- Few External Components Required
- Programmable Input Overvoltage Lockout
- Low Profile (0.75mm) 3mm \times 5mm DFN & Thermally Enhanced MSE16 Packages

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, µModule® subsystems, and wireless sensor network products. For more information, visit www.linear.com

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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