



High Voltage, Micropower Isolated Monolithic Flyback Regulator in ThinSOT Simplifies Design

MILPITAS, CA – August 28, 2012 – Linear Technology Corporation announces the [LT8300](#), a low quiescent current monolithic flyback regulator that significantly simplifies the design of an isolated DC/DC converter. No optocoupler, third winding or signal transformer are required for feedback since the output voltage is sensed from the primary-side flyback signal. The LT8300 operates over a 6V to 100V input voltage range, has a 260mA, 150V power switch and delivers up to 2 watts of output power, ideal for a wide variety of telecom, datacom, automotive, industrial and medical applications.

The LT8300 operates in a boundary mode, a current-mode control switching scheme, resulting in better than +/-5% regulation over the full line, load and temperature range. Boundary mode, also known as critical conduction mode (CCM), permits the use of a smaller transformer compared to equivalent continuous conduction mode designs. Low output ripple Burst Mode[®] operation maintains high efficiency and helps extend battery run times at light load with its low quiescent current. The output voltage is easily set by a single external resistor and the transformer turns ratio. Several transformers identified in the data sheet can be used for numerous applications. Additional features include power, internal soft-start and adjustable undervoltage lockout. The high level of integration results in a simple, low component count, tightly regulated solution ideal for isolated power delivery.

The LT8300 is available in a small 5-lead ThinSOT[™] package. Extended and industrial versions operate over a junction temperature range from -40°C to 125°C, and a high temperature automotive grade operates from -40°C to 150°C. Pricing starts at \$2.95 each in 1000-piece quantities. For more information, visit www.linear.com/product/LT8300.


Photo Caption: Micropower Isolated Monolithic Flyback Regulator

Summary of Features: LT8300

- V_{IN} Range from 6V to 100V
- Onboard 260mA, 150V Integrated Power Switch
- No Optocoupler, Transformer or Third Winding Required for Feedback
- Low Quiescent Current 330 μ A when Active
- Low Component Count
- Boundary-Mode Operation
- V_{OUT} Set with A Single External Resistor
- Off-the-Shelf Transformers
- Programmable Undervoltage Lockout
- Internal Soft-Start

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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