



## **Isolated Flyback Regulator Eliminates Opto-Coupler & Delivers up to 6 Watts**

MILPITAS, CA – March 6, 2014 – Linear Technology Corporation announces the [LT8301](#), a monolithic flyback regulator that significantly simplifies the design of isolated DC/DC converters. By sampling the isolated output voltage directly from the primary-side flyback waveform, the part requires no opto-isolator or third winding for regulation. The LT8301 operates over a 2.7V to 42V input voltage range, has a 1.2A/65V power switch and delivers up to 6 watts of output power, making it well suited for a wide variety of industrial, medical, datacom, military and automotive applications.

The LT8301 operates in boundary mode, which is a variable frequency current-mode control switching scheme, typically resulting in  $\pm 5\%$  regulation over the full line, load and temperature range. The output voltage is easily set by a single resistor and the transformer turns ratio. Several off-the-shelf transformers, identified in the data sheet, can be used for numerous applications. The high level of integration, boundary mode and the use of low ripple BurstMode<sup>®</sup> operation result in a simple to use, low component count highly efficient solution. Additional features included overload protection, a 380 $\mu$ A no load quiescent current with the output voltage in regulation, internal soft start, internal loop compensation, and output diode temperature compensation.

The LT8301 is available in a small TSOT-23 package. Extended and industrial versions operate over a junction temperature range of  $-40^{\circ}\text{C}$  to  $125^{\circ}\text{C}$ . A high temperature automotive grade operates from  $-40^{\circ}\text{C}$  to  $150^{\circ}\text{C}$  and a military grade operates from  $-55^{\circ}\text{C}$  to  $150^{\circ}\text{C}$ . Pricing starts at \$2.76 each in 1000-piece quantities. For more information, visit [www.linear.com/product/LT8301](http://www.linear.com/product/LT8301)

## **Photo Caption: Isolated Flyback Regulator**

### **Summary of Features: LT8301**

- $V_{IN}$  Range from 2.7V to 42V
- Onboard 1.2A, 65V Integrated Power Switch
- No Opto-Coupler, Transformer or Third Winding Required for Feedback
- 380 $\mu$ A Quiescent Current
- Boundary-Mode Operation
- $V_{OUT}$  Set with One External Resistor
- Off-the-Shelf Transformers
- Output Voltage Temperature Compensation
- TSOT-23 Package
- Extended & Industrial Grades: -40°C to 125°C Operating Junction Temp
- Automotive Temp Grade: -40°C to 150°C Operating Junction Temp
- Military Temp Grade: -55°C to 150°C Operating Junction Temp

### **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,  $\mu$ Module<sup>®</sup> subsystems, and wireless sensor network products. For more information, visit [www.linear.com](http://www.linear.com)

 , LT, LTC, LTM, Linear Technology, the Linear logo, Burst Mode and  $\mu$ 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](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

##### **UK & Nordic**

Alan Timmins  
[alan@ezwire.com](mailto:alan@ezwire.com)  
Tel: +44-1-252-629937

