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## **500mA, 140V Boost/SEPIC/Flyback/Inverting DC/DC Converter with $I_Q = 6\mu A$**

MILPITAS, CA – November 2, 2015 – Linear Technology Corporation announces the [LT8331](#), a current mode step-up DC/DC converter with an internal 500mA, 140V switch. It operates from an input voltage range of 4.5V to 100V, making it suitable for use with a wide range of input sources found in industrial, transportation and avionic applications. The LT8331 can be configured as either a boost, SEPIC, flyback or inverting converter. Its switching frequency is programmable from 100kHz to 500kHz, enabling designers to minimize external component sizes. Burst Mode<sup>®</sup> operation reduces quiescent current to only 6 $\mu A$  while keeping output ripple below 20mV<sub>P-P</sub>. The combination of a high voltage MSOP-16E package and tiny externals ensures a very compact footprint while minimizing solution cost.

The LT8331's internal high efficiency 0.5A switch delivers efficiencies of up to 90%. A single feedback resistor sets the output voltage whether the output is positive or negative, minimizing external components. The LT8331's SYNC/MODE pin enables synchronization to an external clock or it can be used to select between Burst Mode operation for ultralow  $I_Q$  or pulse-skipping mode for the lowest possible noise. Other features include programmable under-voltage lockout (UVLO), internal soft-start, frequency foldback and thermal shutdown protection.

The LT8331EMSE is available in a high voltage MSOP-16E package. An industrial temperature (-40°C to 125°C) version, the LT8331IMSE, is also available. Pricing starts at \$2.95

each for 1,000 piece quantities and both versions are available from stock. For more information, visit [www.linear.com/product/LT8331](http://www.linear.com/product/LT8331).

**Photo Caption:** 140V Multitopology DC/DC Converter


### Summary of Features: LT8331

- Wide Input Voltage Range: 4.5V to 100V
- Ultralow Quiescent Current & Low Ripple Burst Mode<sup>®</sup> Operation:  $I_Q = 6\mu A$
- 0.5A, 140V Power Switch
- Positive or Negative Output Voltage Programming with a Single Feedback Pin
- Programmable Frequency (100kHz to 500kHz)
- Synchronizes to an External Clock
- BIAS Pin for Higher Efficiency
- Programmable Undervoltage Lockout (UVLO)
- Thermally Enhanced High Voltage MSOP Package

The USA list pricing shown is for budgetary use only. International prices 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,  $\mu$ Module<sup>®</sup> subsystems, and wireless sensor network products. For more information, visit [www.linear.com](http://www.linear.com)

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