



250mA Wide V_{IN} Range Buck-Boost Charge Pump with Low Noise Now Offered in High Reliability, MP-Grade Temperature Range

MILPITAS, CA – August 20, 2013 – Linear Technology Corporation announces a new high reliability MP-grade, wider temperature range version of the [LTC3245](#), a versatile 250mA high voltage buck-boost charge pump. The MP grade has an operating junction temperature range of -55°C to +150°C. The LTC3245 uses switched capacitor fractional conversion to maintain regulation over a wide range of input voltage from 2.7V to 38V and produces a regulated output of 3.3V, 5V or adjustable (2.5V to 5V). Internal circuitry automatically selects a conversion ratio of 2:1, 1:1 or 1:2 to optimize efficiency as input voltage and load conditions vary. Low operating current (18µA with no load, 4µA in shutdown) and low external device count (three small ceramic capacitors and no inductors) make the LTC3245 ideally suited for low power, space constrained automotive/ applications such as ECU/CAN transceiver supplies, industrial housekeeping supplies and efficient low power 12V to 5V conversion.

The LTC3245's unique constant frequency architecture with reduced switching edge rates provides lower conducted and radiated noise compared to conventional switching regulators. The device has pin selectable Burst Mode[®] operation, enabling the user to trade off low output ripple for better efficiency and lower quiescent current. Other features include low external parts count with ceramic capacitor stability, soft-start circuitry to prevent excessive current flow during startup, plus short circuit and thermal protection.

The LTC3245 MP grade is available in a compact 12-lead MSOP package with a backside thermal pad. 1000-piece pricing starts at \$7.55 each and devices are available from stock. For more information, visit www.linear.com/product/LTC3245


Photo Caption: Low Noise High Voltage Buck-Boost Charge Pump MP Grade

Summary of Features: LTC3245 – MP Grade

- 2.7V to 38V V_{IN} Range
- Operating Junction Temperature Range: -55°C to +150°C (MP Grade Only)
- $I_Q = 18\mu A$ Operating; 4 μA in Shutdown
- 12V to 5V Efficiency = 81%
- Multimode Operation (2:1, 1:1, 1:2) with Automatic Mode Switching
- Low Noise, Constant Frequency Operation
- $I_{OUT} = 250mA$ (Maximum)
- Pin-Selectable Burst Mode® Operation
- V_{OUT} : Fixed 3.3V, 5V or Adjustable
- Over-Temperature & Short-Circuit Protection
- Thermally Enhanced 12-Pin MSOP Package

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

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