

LTC1265/LTC1265-3.3/LTC1265-5

1.2A, High Efficiency Step-Down DC/DC Converters

FEATURES

- **High Efficiency: Up to 95%**
- Current Mode Operation for Excellent Line and Load Transient Response
- **Internal 0.3Ω Power Switch ($V_{IN} = 10V$)**
- Short-Circuit Protection
- Low Dropout Operation: 100% Duty Cycle
- Low-Battery Detector
- Low 160μA Standby Current at Light Loads
- Active-High Micropower Shutdown: $I_Q < 15\mu A$
- Peak Inductor Current Independent of Inductor Value
- Available in 14-pin SO Package

APPLICATIONS

- Distributed Power Systems
- Stepdown Converters
- Inverting Converters
- Memory Backup Supply
- Portable Instruments
- Battery-Powered Equipment
- Cellular Telephones

DESCRIPTION

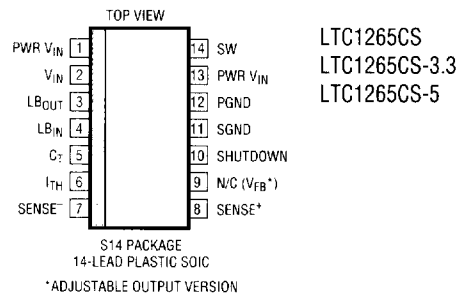
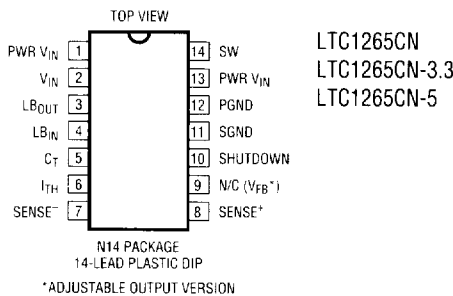
The LTC[®]1265 is a monolithic step-down current mode DC/DC converter featuring Burst Mode™ operation at low output current. The LTC1265 incorporates a 0.3Ω switch ($V_{IN} = 10V$) allowing up to 1.2A of output current.

Under no load condition, the converter draws only 160μA. In shutdown it typically draws a mere 5μA making this converter ideal for current sensitive applications. In dropout the internal P-channel MOSFET switch is turned on continuously, maximizing the life of the battery source. The LTC1265 incorporates automatic power saving Burst Mode operation to reduce gate charge losses when the load currents drop below the level required for continuous operation.

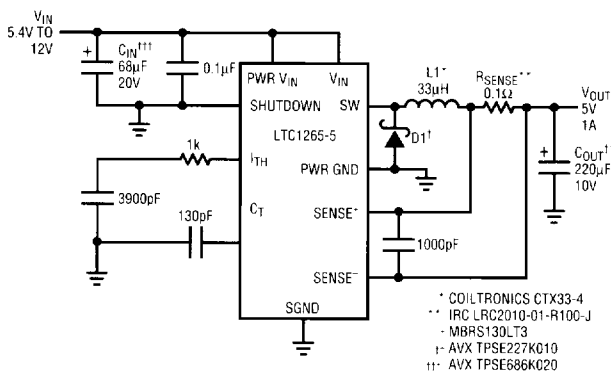
The inductor current is user-programmable via an external current sense resistor. Operation up to 700kHz permits the use of small surface mount inductors and capacitors.

For applications requiring higher output currents, see the LTC1148 data sheet. For applications requiring less than 450mA, see the LTC1174 data sheet.

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High Efficiency Step-Down Converter



LTC1265-5 Efficiency

