

LTC3440EMS#PBF

Data Sheet

Conv DC-DC 2.5V to 5.5V Synchronous Non-Inverting/Inverting/Step Up/Step Down Single-Out 2.5V to 5.5V 0.6A Micropower 10-Pin MSOP Tube

Manufacturers <u>Analog Devices, Inc</u>

Package/Case MSOP-10

Product Type Power Management ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LTC3440EMS#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LTC3440 is a high efficiency, fixed frequency, Buck-Boost DC/DC converter that operates from input voltages above, below or equal to the output voltage. The topology incorporated in the IC provides a continuous transfer function through all operating modes, making the product ideal for single lithium-ion, multicell alkaline or NiMH applications where the output voltage is within the battery voltage range.

The device includes two 0.19Ω N-channel MOSFET switches and two 0.22Ω P-channel switches. Switching frequencies up to 2MHz are programmed with an external resistor and the oscillator can be synchronized to an external clock. Quiescent current is only 25μ A in Burst Mode operation, maximizing battery life in portable applications. Burst Mode operation is user controlled and can be enabled by driving the MODE/SYNC pin high. If the MODE/SYNC pin has either a clock or is driven low, then fixed frequency switching is enabled.

Other features include a 1μ A shutdown, soft-start control, thermal shutdown and current limit. The LTC3440 is available in the 10-pin thermally enhanced MSOP package.

Protected by U.S. Patents including 6404251, 6166527.

Features

Single Inductor

Fixed Frequency Operation with Battery Voltages

Above, Below or Equal to the Output

Synchronous Rectification: Up to 96% Efficiency

25µA Quiescent Current in Burst Mode® Operation

Up to 600mA Continuous Output Current

No Schottky Diodes Required (VOUT < 4.3V)

VOUT Disconnected from VIN During Shutdown

2.5V to 5.5V Input and Output Range

Programmable Oscillator Frequency from 300kHz to 2MHz

Synchronizable Oscillator

Burst Mode Enable Control

Small Thermally Enhanced 10-Pin MSOP and (3mm × 3mm) DFN Packages

Related Products



LT3763EFE
Analog Devices, Inc

TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



LTM8045EY#PBF
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BGA40



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LT1038CK
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TO-3



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Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
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10MSOP



LT4295IUFD#PBF
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28-WFQFN