

LT3431IFE#PBF

Data Sheet

Conv DC-DC 5.5V to 60V Step Down Single-Out 1.2V to 48V 6.5A Automotive 16Pin TSSOP EP Tube

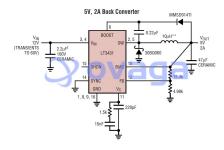
Manufacturers <u>Analog Devices, Inc</u>

Package/Case SSOP-16

Product Type Power Management ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LT3431IFE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LT3431 is a 500kHz monolithic buck switching regulator that accepts input voltages up to 60V. A high efficiency 3A, 0.1 Ω switch is included on the die along with all the necessary oscillator, control and logic circuitry. A current mode architecture provides fast transient response and good loop stability.

Special design techniques and a new high voltage process achieve high efficiency over a wide input range. Efficiency is maintained over a wide output current range by using the output to bias the circuitry and by utilizing a supply boost capacitor to saturate the power switch. Patented circuitry maintains peak switch current over the full duty cycle range. A shutdown pin reduces supply current to 30µA and the device can be externally synchronized from 580kHz to 700kHz with logic level inputs.

The LT3431 is available in a thermally enhanced 16-pin TSSOP package.

Features

Wide Input Range: 5.5V to 60V

3A Peak Switch Current

Small Thermally Enhanced 16-Pin TSSOP Package

Constant 500kHz Switching Frequency

Saturating Switch Design: 0.1Ω

Peak Switch Current Maintained Over Full Duty Cycle Range

Effective Supply Current: 2.5mA

Shutdown Current: 30µA

1.2V Feedback Reference Voltage

Easily Synchronizable

Cycle-by-Cycle Current Limiting

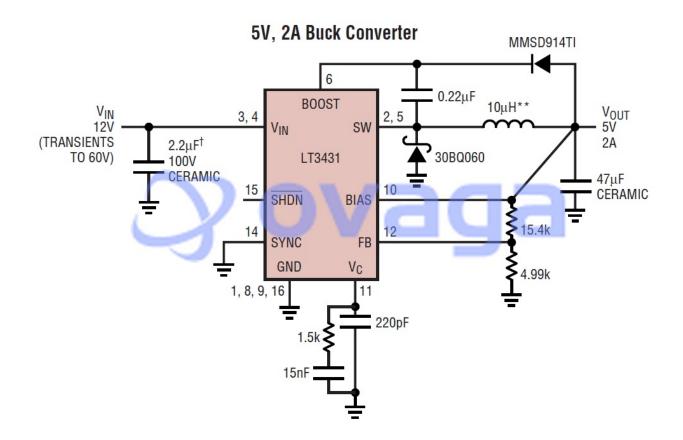
Application

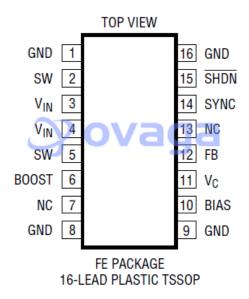
Industrial and Automotive Power Supplies

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Battery Chargers

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Related Products



LT3763EFE

Analog Devices, Inc TSSOP28



LTC4417IUF

Analog Devices, Inc QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc MSOP-8P



LTM8045EY#PBF

Analog Devices, Inc BGA40



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN