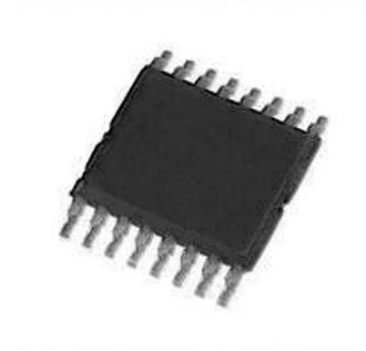


Linear Technology, LT1976IFE#PBF DC-DC Converter 1.5A 16-Pin, TSSOP

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	TSSOP-16
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT1976IFE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT1976/LT1976B are 200kHz monolithic step-down switching regulators that accept input voltages up to 60V. A high efficiency 1.5A, 0.2Ω switch is included on the die along with all the necessary oscillator, control and logic circuitry. Current mode topology is used for fast transient response and good loop stability.

Innovative design techniques along with a new high voltage process achieve high efficiency over a wide input range. Efficiency is maintained over a wide output current range by employing Burst Mode operation at low currents, utilizing the output to bias the internal circuitry, and by using a supply boost capacitor to fully saturate the power switch. The LT1976B does not shift into Burst Mode operation at low currents, eliminating low frequency output ripple at the expense of efficiency. Patented circuitry maintains peak switch current over the full duty cycle range.\* Shutdown reduces input supply current to less than 1μA. External synchronization can be implemented by driving the SYNC pin with logic-level inputs. A single capacitor from the CSS pin to the output provides a controlled output voltage ramp (soft-start). The devices also have a power good flag with a programmable threshold and time-out and thermal shutdown protection.

The LT1976/LT1976B are available in a 16-pin TSSOP package with Exposed Pad leadframe for low thermal resistance.

## Features

Wide Input Range: 3.3V to 60V

1.5A Peak Switch Current (LT1976)

100 $\mu$ A Quiescent Current (LT1976)\*\*

1.6mA Quiescent Current (LT1976B)

Low Shutdown Current:  $I_Q < 1\mu$ A

Power Good Flag with Programmable Threshold

Load Dump Protection to 60V

200kHz Switching Frequency

Saturating Switch Design: 0.2 $\Omega$  On-Resistance

Peak Switch Current Maintained Over Full Duty Cycle Range\*

1.25V Feedback Reference Voltage

Easily Synchronizable

Soft-Start Capability

Small 16-Pin Thermally Enhanced TSSOP Package

## Application

High Voltage Power Conversion

14V and 42V Automotive Systems

Industrial Power Systems

Distributed Power Systems

Battery-Powered Systems

## 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