

LT1976BEFE#PBF

Data Sheet

IC REG BUCK ADJ 1.5A 16TSSOP

Manufacturers	Analog Devices, Inc	
Package/Case	TSSOP16	• 19768 EFE N4785 33
Product Type	Power Management ICs	Images are for reference only
RoHS		
Lifecycle		
Please submit RFQ for LT1976BEFE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.		

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 1 µA. 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)
- 100µA Quiescent Current (LT1976)**
- 1.6mA Quiescent Current (LT1976B)
- Low Shutdown Current: $IQ < 1\mu A$
- Power Good Flag with Programmable Threshold
- Load Dump Protection to 60V
- 200kHz Switching Frequency
- Saturating Switch Design: 0.2Ω 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

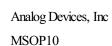
MSOP-8P



LTM8045EY#PBF Analog Devices, Inc BGA40







LT1038CK

Analog Devices, Inc





Analog Devices, Inc 10MSOP

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LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN