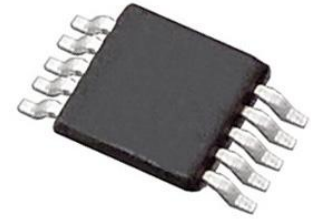


42V, 2A/3A Peak Synchronous Step-Down Regulator with 2.5 $\mu$ A Quiescent Current

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP-10
Product Type	Power Management ICs
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for LT8609AEMSE#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT8609/LT8609A/LT8609B is a compact, high efficiency, high speed synchronous monolithic step-down switching regulator that consumes only 1.7 $\mu$ A of nonswitching quiescent current. The LT8609/LT8609A/LT8609B can deliver 3A of continuous current. Burst Mode operation enables high efficiency down to very low output currents while keeping the output ripple below 10mVP-P. A SYNC pin allows synchronization to an external clock, or spread spectrum modulation for low EMI operation. Internal compensation with peak current mode topology allows the use of small inductors and results in fast transient response and good loop stability. The EN/UV pin has an accurate 1V threshold and can be used to program VIN UVLO or to shut down the part. A capacitor on the TR/SS pin programs the output voltage ramp rate during start-up while the PG flag signals when VOUT is within  $\pm 8.5\%$  of the programmed output voltage as well as fault conditions. The LT8609A has slower switch edges for lower EMI emissions. The LT8609B APPLICATIONS operates in pulse-skipping mode only.

Pulse-Skipping Mode, Burst Mode Operation Switch Edge Speed LT8609BothFast LT8609ABothMedium LT8609BPulse-SkippingFast

## Features

Wide Input Voltage Range: 3.0V to 42V

Output Ripple <10mVP-P

High Efficiency 2MHz Synchronous Operation:

3A Maximum Continuous Output

Fast Minimum Switch-On Time: 45ns

Adjustable and Synchronizable: 200kHz to 2.2MHz

Spread Spectrum Frequency Modulation for Low EMI

Allows Use of Small Inductors

Low Dropout

Peak Current Mode Operation

Accurate 1V Enable Pin Threshold

Internal Compensation

Output Soft-Start and Tracking

Small 10-Lead or 16-Lead MSOP Package

## Application

GSM Transceivers

General Purpose Step Down

Low EMI Step Down

## 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