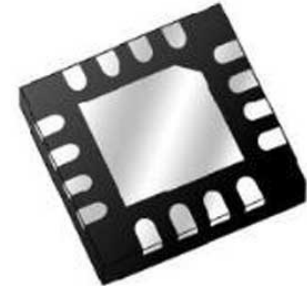


42V, 2A/3A Peak Synchronous Step-Down Regulator with 2.5 μ A Quiescent Current

Manufacturers	Analog Devices, Inc
Package/Case	16-Lead LQFN (3mm x 3mm x 0.94mm w/ EP)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT8609SIV#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT8609S is a compact, high efficiency, high speed synchronous monolithic step-down switching regulator that consumes only 1.7 μ A of non-switching quiescent current. The LT8609S can deliver 2A of continuous current with peak loads of 3A (<1sec) to support applications such as GSM transceivers which require high transient loads. Top and bottom power switches are included with all necessary circuitry to minimize the need for external components. Low ripple 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 of switching frequencies 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 undervoltage lockout or to shut down the LT8609S reducing the input supply current to 1 μ A. 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 LT8609S is available in a small 16-lead 3mm \times 3mm LQFN package.

Features

Silent Switcher® 2 Architecture

Ultralow EMI Emissions on Any PCB

Eliminates PCB Layout Sensitivity

Internal Bypass Capacitors Reduce Radiated EMI

Optional Spread Spectrum Modulation

Wide Input Voltage Range: 3.0V to 42V

Ultralow Quiescent Current Burst Mode® Operation:

Output Ripple <10mVP-P

High Efficiency 2MHz Synchronous Operation:

2A Maximum Continuous Output, 3A Peak Transient Output

Fast Minimum Switch-On Time: 45ns

Adjustable and Synchronizable: 200kHz to 2.2MHz

Allows Use of Small Inductors

Low Dropout

Peak Current Mode Operation

Internal Compensation

Output Soft-Start and Tracking

Small 16-Lead 3mm × 3mm LQFN Package

Application

General Purpose Step Down

Low EMI Step Down

Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EY#PBF](#)

Analog Devices, Inc
BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN