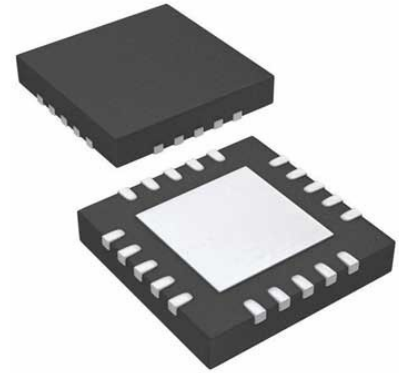


42V, 5A Synchronous Step-Down Silent Switcher with 2.5 $\mu$ A Quiescent Current

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	20-Lead LQFN (4mm x 3mm x 0.94mm)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT8636EV#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT8636 synchronous step-down regulator features Silent Switcher architecture designed to minimize EMI emissions while delivering high efficiency at high switching frequencies. Peak current mode control with a 30ns minimum on-time allows high step-down ratios even at high switching frequencies.

The LT8636's ultralow 2.5 $\mu$ A quiescent current—with the output in full regulation—enables applications requiring highest efficiency at very small load currents. A CLKOUT pin enables synchronizing other regulators to the LT8636.

Burst Mode operation enables ultralow standby current consumption, forced continuous mode can control frequency harmonics across the entire output load range, or spread spectrum operation can further reduce EMI emissions. Soft-start and tracking functionality is accessed via the TR/SS pin, and an accurate input voltage UVLO threshold can be set using the EN/UV pin.

### Applications

Automotive and Industrial Supplies

General Purpose Step-Down

## Features

Silent Switcher® Architecture

Ultralow EMI Emissions

Optional Spread Spectrum Modulation

High Efficiency at High Frequency

Up to 96% Efficiency at 1MHz, 12VIN to 5VOUT

Up to 95% Efficiency at 2MHz, 12VIN to 5VOUT

Wide Input Voltage Range: 3.4V to 42V

5A Maximum Continuous, 7A Peak Output

Ultralow Quiescent Current Burst Mode® Operation

2.5µA IQ Regulating 12VIN to 3.3VOUT

Output Ripple < 10mVP-P

Fast Minimum Switch On-Time: 30ns

Low Dropout Under All Conditions: 100mV at 1A

Forced Continuous Mode

Adjustable and Synchronizable: 200kHz to 3MHz

Output Soft-Start and Tracking

Small 20-Lead 4mm × 3mm LQFN Package

AEC-Q100 Qualification in Progress

## Application

Automotive and Industrial Supplies

General Purpose Step-Down

## Related Products



### [LT3763EFE](#)

Analog Devices, Inc  
TSSOP28



### [LT1038CK](#)

Analog Devices, Inc  
TO-3



### [LTC4417IUF](#)

Analog Devices, Inc  
QFN-24



### [LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



[LTC1966CMS8#PBF](#)

Analog Devices, Inc  
MSOP-8P



[LTC2990IMS#PBF](#)

Analog Devices, Inc  
10MSOP



[LTM8045EX#PBF](#)

Analog Devices, Inc  
BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc  
28-WFQFN