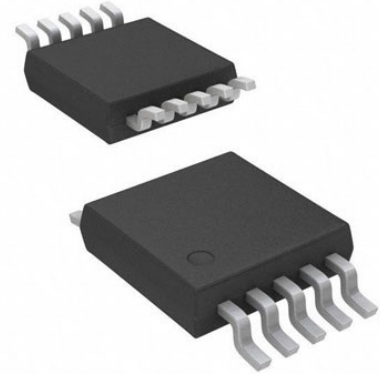


DC/DC Cntrlr Single-OUT Step Up 900kHz Automotive 16-Pin MSOP EP Tube

Manufacturers	Analog Devices, Inc
Package/Case	16-TFSOP (0.118, 3.00mm Width)
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3786EMSE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC3786 is a high performance synchronous boost converter controller that drives all N-channel power MOSFETs. Synchronous rectification increases efficiency, reduces power losses and eases thermal requirements, allowing the LTC3786 to be used in high power boost applications.

A 4.5V to 38V input supply range encompasses a wide range of system architectures and battery chemistries. When biased from the output of the boost converter or another auxiliary supply, the LTC3786 can operate from an input supply as low as 2.5V after start-up. The 55 μ A no-load quiescent current extends operating run time in battery-powered systems.

The operating frequency can be set for a 50kHz to 900kHz range or synchronized to an external clock using the internal PLL. The LTC3786 also features a precision 1.2V reference and a power good output indicator. The SS pin ramps the output voltage during start-up. The PLLIN/MODE pin selects among Burst Mode[®] operation, pulse-skipping mode or continuous inductor current mode at light loads.

Features

Synchronous Operation For Highest Efficiency and Reduced Heat Dissipation

Wide VIN Range: 4.5V to 38V (40V Abs Max) and Operates Down to 2.5V After Start-Up

Output Voltages Up to 60V

RSENSE or Inductor DCR Current Sensing

100% Duty Cycle Capability for Synchronous MOSFET

Low Quiescent Current: 55 μ A

Phase-Lockable Frequency (75kHz to 850kHz)

Programmable Fixed Frequency (50kHz to 900kHz)

Adjustable Output Voltage Soft-Start

Power Good Output Voltage Monitor

Low Shutdown Current IQ: <8 μ A

Internal 5.4V LDO for Gate Drive Supply

Thermally Enhanced 16-Pin 3mm \times 3mm QFN and MSOP Packages

Application

Industrial and Automotive Power Supplies

Automotive Start-Stop Systems

Medical Devices

High Voltage 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



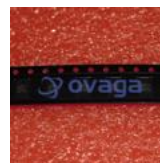
[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN