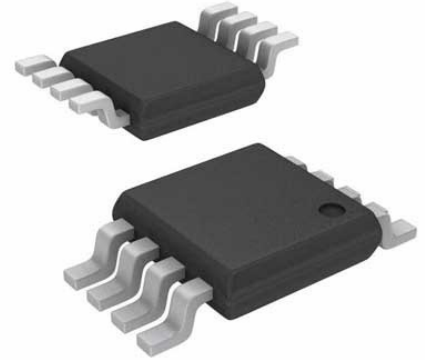


Linear Technology, LTC3642EMS8E#PBF DC-DC Converter 50mA Adjustable 8-Pin, MSOP

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP-8
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3642EMS8E#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC3642 is a high efficiency, high voltage step-down DC/DC converter with internal high side and synchronous power switches that draws only 12µA typical DC supply current at no load while maintaining output voltage regulation.

The LTC3642 can supply up to 50mA load current and features a programmable peak current limit that provides a simple method for optimizing efficiency in lower current applications. The LTC3642's combination of Burst Mode® operation, integrated power switches, low quiescent current, and programmable peak current limit provides high efficiency over a broad range of load currents.

With its wide 4.5V to 45V input range and internal overvoltage monitor capable of protecting the part through 60V surges, the LTC3642 is a robust converter suited for regulating a wide variety of power sources. Additionally, the LTC3642 includes a precise run threshold and soft-start feature to guarantee that the power system start-up is well-controlled in any environment.

The LTC3642 is available in the thermally enhanced 3mm × 3mm DFN and MS8E packages.

## Features

Wide Input Voltage Range: 4.5V to 45V

Tolerant of 60V Input Transients

Internal High Side and Low Side Power Switches

No Compensation Required

50mA Output Current

Low Dropout Operation: 100% Duty Cycle

Low Quiescent Current: 12 $\mu$ A

0.8V Feedback Voltage Reference

Adjustable Peak Current Limit

Internal and External Soft-Start

Precise RUN Pin Threshold with Adjustable Hysteresis

3.3V, 5V and Adjustable Output Versions

Only Three External Components Required for Fixed Output Versions

Low Profile (0.75mm) 3mm  $\times$  3mm DFN and Thermally-Enhanced MS8E Packages

## Application

4mA to 20mA Current Loops

Industrial Control Supplies

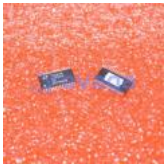
Distributed Power Systems

Portable Instruments

Battery-Operated Devices

Automotive Power Systems

## 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



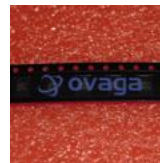
### [LTC2990IMS#PBF](#)

Analog Devices, Inc  
10MSOP



### [LTM8045EV#PBF](#)

Analog Devices, Inc  
BGA40



### [LT4295IUFD#PBF](#)

Analog Devices, Inc  
28-WFQFN