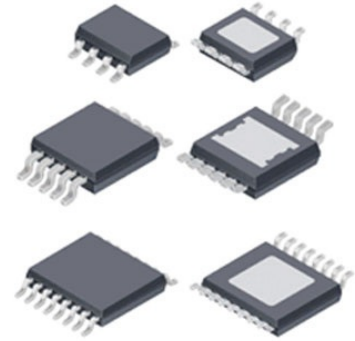


Conv DC-DC 4.1V to 60V Synchronous Step Down Dual-Out 0.75V to 59.4V 1A  
Automotive 16-Pin MSOP EP Tube

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP-16
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LT3988EMSE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT3988 is a dual, current mode, step-down, DC/DC converter that accepts two input voltages up to 60V (80V transient), which may be driven from separate supplies or can be cascaded. High efficiency switches are included on the die along with internal boost diodes and loop compensation. Both converters are capable of generating 1A outputs, are synchronized to a single oscillator programmable up to 2.5MHz, and run with opposite phases, reducing input ripple current.

The switching frequency is set with a single resistor yielding a range of 250kHz to 2.5MHz, or a clock signal can be applied to the SYNC pin. The LT3988's high switching frequency allows the use of small inductors and capacitors, resulting in a very small dual output supply. The constant switching frequency, combined with low impedance ceramic capacitors, results in low, predictable output ripple. A current mode PWM architecture provides fast transient response with cycle-by-cycle current limiting. Diode current sense and thermal shutdown provide additional protection.

The LT3988 is available in a 16-lead MSOP package with an exposed pad for low thermal resistance.

## Features

Wide Input Range:

Operation from 4.1V to 60V

Overvoltage Lockout Protects Circuit Through 80V Transients

Two 1A Output Switching Regulators with Internal Power Switches

Short Circuit Robust

Adjustable 250kHz to 2.5MHz Switching Frequency, Synchronizable Over the Full Range

Integrated Boost Diodes

Integrated Loop Compensation

Anti-Phase Switching Reduces Ripple

Low Shutdown IQ ( $<2\mu\text{A}$ )

Uses Small Inductors and Ceramic Capacitors

Thermally Enhanced, 16-Lead MSOP Package

## Application

Commercial Vehicle Battery Regulation

Industrial Supplies

Distributed Supply Regulation

## Related Products



### [LT3763EFE](#)

Analog Devices, Inc  
TSSOP28



### [LTC4417IUF](#)

Analog Devices, Inc  
QFN-24



### [LTC1966CMS8#PBF](#)

Analog Devices, Inc  
MSOP-8P



### [LTM8045EX#PBF](#)

Analog Devices, Inc  
BGA40



### [LT1038CK](#)

Analog Devices, Inc  
TO-3



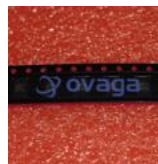
### [LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



### [LTC2990IMS#PBF](#)

Analog Devices, Inc  
10MSOP



### [LT4295IUFD#PBF](#)

Analog Devices, Inc  
28-WFQFN