

Conv DC-DC 3.6V to 33V Synchronous Step Down Single-Out 0.79V to 30V 3.5A
Automotive 10-Pin MSOP EP Tube

Manufacturers	Analog Devices, Inc
Package/Case	MSSOP10
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3972EMSE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT3972 is an adjustable frequency (200kHz to 2.4MHz) monolithic buck switching regulator that accepts input voltages up to 33V (62V Maximum). A high efficiency 95mΩ switch is included on the die along with a boost Schottky diode and the necessary oscillator, control, and logic circuitry. Current mode topology is used for fast transient response and good loop stability. Low ripple Burst Mode operation maintains high efficiency at low output currents while keeping output ripple below 15mV in a typical application. In addition, the LT3972 can further enhance low output current efficiency by drawing bias current from the output when VOUT is above 3V Shutdown reduces input supply current to less than 1μA while a resistor and capacitor on the RUN/SS pin provide a controlled output voltage ramp (soft-start). A power good flag signals when VOUT reaches 91% of the programmed output voltage. The LT3972 is available in 10-Pin MSOP and 3mm × 3mm DFN packages with exposed pads for low thermal resistance.

Features

Wide Input Range:

Operation from 3.6V to 33V

Over-Voltage Lockout Protects Circuits Through 62V Transients

3.5A Maximum Output Current

Low Ripple (<15mVP-P) Burst Mode® Operation:>

Adjustable Switching Frequency: 200kHz to 2.4MHz

Low Shutdown Current: $I_Q < 1\mu A$

Integrated Boost Diode

Synchronizable Between 250kHz to 2MHz

Power Good Flag

Saturating Switch Design: 95mΩ On-Resistance

Output Voltage: 0.79V to 30V

Thermal Protection

Soft-Start Capability

Small 10-Pin Thermally Enhanced MSOP and (3mm × 3mm) DFN Packages

Application

Automotive Battery Regulation

Distributed Supply Regulation

Industrial Supplies

Wall Transformer Regulation



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](#)

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MSOP-8P



[LTC2990IMS#PBF](#)

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10MSOP



[LTM8045EY#PBF](#)

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BGA40



[LT4295IUFD#PBF](#)

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28-WFQFN