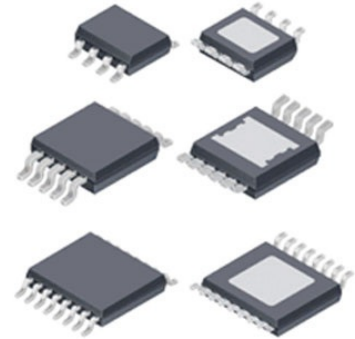


58V, 2A, 2.4MHz Step-Down Switching Regulator with 85 μ A Quiescent Current,
 Package:16-Pin MSOP, Temperature Range: -40°C to 125°C

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-16
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3980EMSE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT3980 is an adjustable frequency (100kHz to 2.4MHz) monolithic buck switching regulator that accepts input voltages up to 58V (80V transient). A high efficiency 200m Ω 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. Catch diode current sense (DA pin) protects the circuit during input voltage transients even when a high switching frequency is used. 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 LT3980 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 1 μ A 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 LT3980 is available in 16-pin MSOP and 3mm \times 4mm DFN packages with exposed pads for low thermal resistance.

Features

Wide Input Range: Operation from 3.6V to 58V

Overvoltage Lockout Protects Circuits Through 80V Transients

2A Maximum Output Current

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

Adjustable Switching Frequency: 100kHz to 2.4MHz

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

Catch Diode Current Sense Protects Circuit Through Short-Circuit and Input Overvoltage

Synchronizable Between 250kHz to 2MHz

Power Good Flag

Saturating Switch Design: 200mΩ On-Resistance

Thermal Protection

Soft-Start Capability

Small 16-Pin Thermally Enhanced MSOP and 3mm × 4mm DFN Packages

Application

Automotive Battery Regulation

Distributed Supply Regulation

Industrial Supplies

Wall Transformer Regulation

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



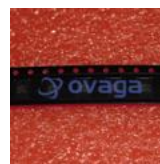
[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN