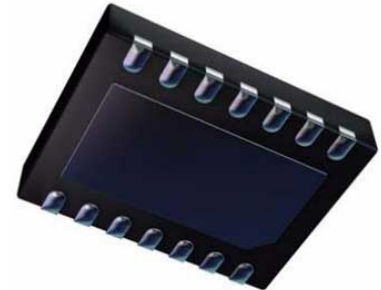


Conv DC-DC 3.6V to 36V Step Down Single-Out 0.8V to 20V 1A Micropower Automotive 12-Pin DFN EP Tube

Manufacturers	Analog Devices, Inc
Package/Case	DFN-14
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3682EDD#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT3682 is an adjustable frequency (250kHz to 2.2MHz) monolithic buck switching regulator that accepts input voltages up to 36V. A high efficiency 0.5Ω switch is included on the device along with a boost diode and the necessary oscillator, control, and logic circuitry. Current mode topology is used for fast transient response and good loop stability. A SYNC pin allows the user to synchronize the part to an external clock, and to choose between Low Ripple Burst Mode operation and standard PWM operation.

The Low Ripple Burst Mode maintains high efficiency at low output currents while keeping output ripple below 15mV in typical applications. 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 90% of the programmed output voltage. Protection circuitry senses the current in the power switch and external Schottky catch diode to protect the LT3682 against short-circuit conditions. Frequency foldback and thermal shutdown provide additional protection.

The LT3682 is available in a 12-Pin 3mm × 3mm DFN with exposed pad for low thermal resistance.

Features

Wide Input Range:

Operation from 3.6V to 36V

Overvoltage Lockout Protects Circuits through 60V Transients

1A Output Current

Low Ripple Burst Mode®

Output Ripple < 15mVP-P

Adjustable Switching Frequency: 250kHz to 2.2MHz

Short-Circuit Protected

Synchronizable Between 300kHz and 2.2MHz

0.8V Feedback Reference Voltage

Output Voltage 0.8V to 20V

Soft-Start Capability

Power Good Flag

Small 12-Pin Thermally Enhanced 3mm × 3mm DFN Package

Application

Automotive Battery Regulation

Automotive Entertainment Systems

Industrial Supplies

Power for Portable Products

Distributed Supply 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