

3A, 4MHz Monolithic Synchronous Step-Down DC/DC Converter; Package: 20-TSSOP;
Temperature Range: -40°C to 125°C

Manufacturers	Analog Devices, Inc
Package/Case	TSSOP20
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3612EFE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC3612 is a low quiescent current monolithic synchronous buck regulator using a current mode, constant frequency architecture. The no-load DC supply current in sleep mode is only 70µA while maintaining the output voltage (Burst Mode operation) at no load, dropping to zero current in shutdown. The 2.25V to 5.5V input supply voltage range makes the LTC3612 ideally suited for single Li-Ion as well as fixed low voltage input applications. 100% duty cycle capability provides low dropout operation, extending the operating time in battery-powered systems.

The operating frequency is externally programmable up to 4MHz, allowing the use of small surface mount inductors. For switching noise-sensitive applications, the LTC3612 can be synchronized to an external clock at up to 4MHz.

Forced continuous mode operation in the LTC3612 reduces noise and RF interference. Adjustable compensation allows the transient response to be optimized over a wide range of loads and output capacitors.

The internal synchronous switch increases efficiency and eliminates the need for an external catch diode, saving external components and board space. The LTC3612 is offered in a leadless 20-pin 3mm × 4mm QFN or a thermally enhanced 20-pin TSSOP package.

Features

3A Output Current

2.25V to 5.5V Input Voltage Range

Low Output Ripple Burst Mode® Operation,>

Output Voltage Down to 0.6V

High Efficiency: Up to 95%

Low Dropout Operation: 100% Duty Cycle

Shutdown Current: $\leq 1\mu\text{A}$

Adjustable Switching Frequency: Up to 4MHz

Optional Active Voltage Positioning (AVP) with Internal Compensation

Selectable Pulse-Skipping/Forced Continuous/Burst Mode Operation with Adjustable Burst Clamp

Programmable Soft-Start

Inputs for Start-Up Tracking or External Reference

DDR Memory Mode,>

Available in Thermally Enhanced 20-Pin (3mm × 4mm) QFN and TSSOP Packages

Application

Point-of-Load Supplies

Distributed Power Supplies

Portable Computer Systems

DDR Memory Termination

Handheld Devices

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



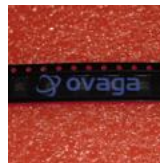
[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EY#PBF](#)

Analog Devices, Inc
BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN