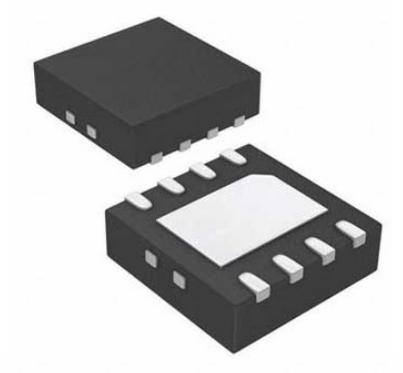


5V, 10A Synchronous Step-Down Silent Switcher 2 in 3mm x 3mm LQFN

Manufacturers	Analog Devices, Inc
Package/Case	18-Lead LQFN (3mm × 3mm × 0.94mm)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3310SIV#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC3310S is a very small, low noise, monolithic step-down DC/DC converter capable of providing up to 10A of output current from a 2.25V to 5.5V input supply. The part employs Silent Switcher 2 architecture with internal hot loop bypass capacitors to achieve both low EMI and high efficiency at switching frequencies as high as 5MHz. For systems with higher power requirements, multi-phasing parallel converters is readily implemented.

The LTC3310S uses a constant-frequency, peak current mode control architecture for fast transient response. A 500mV reference allows for low voltage outputs. 100% duty cycle operation delivers low drop out.

Other features include a power good signal when the output is in regulation, precision enable threshold, output overvoltage protection, thermal shutdown, a temperature monitor, clock synchronization, mode selection and output short circuit protection. The device is available in a compact 18-lead 3mm × 3mm LQFN package.

Features

Silent Switcher®2 Architecture: Ultralow EMI Emissions

High Efficiency: 4.5mΩ NMOS and 16mΩ PMOS

Wide Bandwidth, Fast Transient Response

Safely Tolerates Inductor Saturation in Overload

VIN Range: 2.25V to 5.5V

VOUT Range: 0.5V to VIN

VOUT Accuracy: ±1%

Peak Current Mode Control

35ns Minimum On-Time

Programmable Frequency to 5MHz

Shutdown Current: 1μA

Precision 400mV Enable Threshold

Output Soft-Start with Voltage Tracking

Power Good Output

Die Temperature Monitor

Configurable for Paralleling Power Stages

Thermally-Enhanced 3mm × 3mm LQFN Package

Application

Automotive/Industrial/Communications

Servers, Telecom Power Supplies

Distributed DC Power Systems (POL)

FPGA, ASIC, μP Core Supplies

Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EY#PBF](#)

Analog Devices, Inc

BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc

28-WFQFN