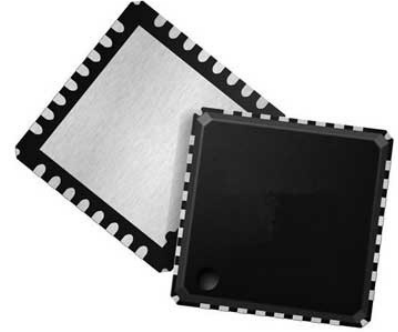


DC/DC Cntrlr Dual-OUT Step Down 590kHz Automotive 32-Pin QFN EP Tube

Manufacturers	Analog Devices, Inc
Package/Case	QFN-32
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3728LXCUIH#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC3728L/LTC3728LX are dual high performance step-down switching regulator controllers that drive all N-channel synchronous power MOSFET stages. A constant-frequency, current mode architecture allows phase lockable frequency of up to 550kHz. Power loss and noise due to the ESR of the input capacitors are minimized by operating the two controller output stages out of phase.

OPTI-LOOP compensation allows the transient response to be optimized over a wide range of output capacitance and ESR values. The precision 0.8V reference and power good output indicator are compatible with future microprocessor generations, and a wide 4.5V to 28V (30V maximum) input supply range encompasses all battery chemistries.

A RUN/SS pin for each controller provides both soft-start and optional timed, short-circuit shutdown. Current foldback limits MOSFET dissipation during short-circuit conditions when overcurrent latchoff is disabled. Output overvoltage protection circuitry latches on the bottom MOSFET until VOUT returns to normal. The FCB mode pin can select among Burst Mode, constant-frequency mode and continuous inductor current mode or regulate a secondary winding. The LTC3728L/LTC3728LX include a power good output pin that indicates when both outputs are within 7.5% of their designed set point.

Vin Range Vref Accy Current Limit Latch Off 3.3V LDO Available LTC3728 3.5V to 36V +/- 1% Yes LTC3728L 4.5V to 28V +/- 1% Yes Yes LTC3728LX 4.5V to 28V +/- 1.5% Yes Yes LTC3728L-14.5V to 28V +/- 1.5% Foldback only Yes

Features

Dual, 180° Phased Controllers Reduce Required Input Capacitance and Power Supply Induced Noise

OPTI-LOOP® Compensation Minimizes COUT

Power Good Output Voltage Indicator

Phase-Lockable Fixed Frequency 250kHz to 550kHz

Dual N-Channel MOSFET Synchronous Drive

Wide VIN Range: 4.5V to 28V Operation

Very Low Dropout Operation: 99% Duty Cycle

Adjustable Soft-Start Current Ramping

Foldback Output Current Limiting

Latched Short-Circuit Shutdown with Defeat Option

Output Overvoltage Protection

Low Shutdown IQ: 20µA

5V and 3.3V Standby Regulators

3 Selectable Operating Modes: Constant-Frequency, Burst Mode® Operation and PWM

5mm × 5mm QFN and 28-Lead Narrow SSOP Packages

Application

Notebook and Palmtop Computers

Telecom Systems

Portable Instruments

Battery-Operated Digital Devices

DC Power Distribution Systems

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