

LTC3810EG#PBF

Data Sheet

Linear Technology, LTC3810EG#PBF Switching Regulator 2A Adjustable, 0.8 100 V 28-Pin, SSOP

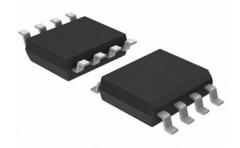
Manufacturers Analog Devices, Inc

Package/Case 28SSO

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LTC3810EG#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC3810-5 is a synchronous step-down switching regulator controller that can directly step-down voltages from up to 60V, making it ideal for telecom and automotive applications. The LTC3810-5 uses a constant on-time valley current control architecture to deliver very low duty cycles with accurate cycle-by-cycle current limit, without requiring a sense resistor.

A precise internal reference provides 0.5% DC accuracy. A high bandwidth (25MHz) error amplifier provides very fast line and load transient response. Large 10 gate drivers allow the LTC3810-5 to drive multiple MOSFETs for higher current applications. The operating frequency is selected by an external resistor and is compensated for variations in VIN and can also be synchronized to an external clock for switching-noise sensitive applications. A shutdown pin allows the LTC3810-5 to be turned off, reducing the supply current to 240µA.

Integrated bias control generates gate drive power from the input supply during start-up or when an output shortcircuit occurs, with the addition of a small external SOT23 MOSFET. When in regulation, power is derived from the output for higher efficiency.

Features Adj. UVLO, Sync & Tracking Package LTC3810Vin 6.2V to 100V, 10V Driver Voltage YesSSOP-28LTC3810-5Vin 4.35V to 60V, 5.5V Driver Voltage YesQFN-32LTC3812-5Vin 4.35V to 60V, 5.5V Driver Voltage NoTSSOP-16E

Features

High Voltage Operation: Up to 60V

Large 1Ω Gate Drivers

No Current Sense Resistor Required

Dual N-Channel MOSFET Synchronous Drive

Extremely Fast Transient Response

Programmable Output Voltage Tracking/Soft-Start

Generates 5.5V Driver Supply from Input Supply

Synchronizable to External Clock

Selectable Pulse Skip Mode Operation

Power Good Output Voltage Monitor

Adjustable On-Time/Frequency: tON(MIN) < 100ns

Adjustable Cycle-by-Cycle Current Limit

Programmable Undervoltage Lockout

Output Overvoltage Protection

Thermally Enhanced 32-Pin QFN Package

Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



Analog Devices, Inc QFN-24

LTC4417IUF



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



LTM8045EY#PBF
Analog Devices, Inc
BGA40

Application

48V Telecom and Base Station Power Supplies

Networking Equipment, Servers

Automotive and Industrial Control Systems



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



LT42951UFD#PBF

Analog Devices, Inc
28-WFQFN