

LTC3780IG#PBF

Data Sheet

DC/DC Cntrlr Dual-OUT Step Down/Step Up 440kHz Automotive 24-Pin SSOP Tube

Manufacturers Analog Devices, Inc

Package/Case SSOP-2

Product Type Power Management ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC3780IG#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC3780 is a high performance buck-boost switching regulator controller that operates from input voltages above, below or equal to the output voltage. The constant frequency current mode architecture allows a phase-lockable frequency of up to 400kHz. With a wide 4V to 30V (36V maximum) input and output range and seamless transfers between operating modes, the LTC3780 is ideal for automotive, telecom and battery-powered systems.

The operating mode of the controller is determined through the FCB pin. For boost operation, the FCB mode pin can select among Burst Mode® operation, discontinuous mode and forced continuous mode. During buck operation, the FCB mode pin can select among skip-cycle mode, discontinuous mode and forced continuous mode. Burst Mode operation and skip-cycle mode provide high efficiency operation at light loads while forced continuous mode and discontinuous mode operate at a constant frequency.

Fault protection is provided by an output overvoltage comparator and internal foldback current limiting. A power good output pin indicates when the output is within 7.5% of its designed set point.

Features

Single Inductor Architecture Allows VIN Above, Below or Equal to VOUT

Wide VIN Range: 4V to 36V Operation

Synchronous Rectification: Up to 98% Efficiency

Current Mode Control

Phase-Lockable Fixed Frequency: 200kHz to 400kHz

Power Good Output Voltage Monitor

Internal LDO for MOSFET Supply

Quad N-Channel MOSFET Synchronous Drive

VOUT Disconnected from VIN During Shutdown

Adjustable Soft-Start Current Ramping

Foldback Output Current Limiting

Selectable Low Current Modes

Output Overvoltage Protection

Available in 24-Lead SSOP and Exposed Pad (5mm × 5mm) 32-Lead QFN Packages

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



Automotive Systems

Telecom Systems

DC Power Distribution Systems

High Power Battery-Operated Devices

Industrial Control



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN