

## LTM4609EV#PBF

Data Sheet

Conv DC-DC 4.5V to 36V Non-Inv/Inv/Step Up/Step Down Single-Out 0.8V to 34V 10A uModule Automoti

Manufacturers

Analog Devices, Inc

Package/Case

LGA-141

Product Type

Power Management ICs

RoHS



Images are for reference only

Please submit RFQ for LTM4609EV#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

Lifecycle

The LTM4609 is a high efficiency switching mode buckboost power supply. Included in the package are the switching controller, power FETs and support components. Operating over an input voltage range of 4.5V to 36V, the LTM4609 supports an output voltage range of 0.8V to 34V, set by a resistor. This high efficiency design delivers up to 4A continuous current in boost mode (10A in buck mode). Only the inductor, sense resistor, bulk input and output capacitors are needed to finish the design.

The low profile package enables utilization of unused space on the bottom of PC boards for high density point of load regulation. The high switching frequency and current mode architecture enable a very fast transient response to line and load changes without sacrificing stability. The LTM4609 can be frequency synchronized with an external clock to reduce undesirable frequency harmonics.

Fault protection features include overvoltage and foldback current protection. The DC/DC  $\mu$ Module® regulator is offered in small 15mm  $\times$  15mm  $\times$  2.82mm LGA and 15mm  $\times$  15mm  $\times$  3.42mm BGA packages. The LTM4609 is available with SnPb (BGA) or RoHS compliant terminal finish.

**Features** 

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

Wide VIN Range: 4.5V to 36V

Wide VOUT Range: 0.8V to 34V

IOUT: 4A DC (10A DC in Buck Mode)

Up to 98% Efficiency

Current Mode Control

Power Good Output Signal

Phase-Lockable Fixed Frequency: 200kHz to 400kHz

Ultrafast Transient Response

Current Foldback Protection

Output Overvoltage Protection

Small Surface Mount Footprint, Low Profile(15mm  $\times$  15mm  $\times$  2.82mm) LGA and(15mm  $\times$  15mm  $\times$  3.42mm) BGA Packages

SnPb (BGA) or RoHS Compliant (LGA and BGA) Finish

## **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



Telecom, Servers and Networking Equipment

Industrial and Automotive Equipment

High Power Battery-Operated





LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN