

LTC7149EUFD#PBF

Data Sheet

60V, 4A Synchronous Step-Down Regulator for Inverting Outputs

Manufacturers <u>Analog Devices, Inc</u>

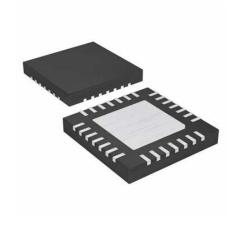
Package/Case 28-Lead QFN (4mm x 5mm x 0.75mm w/ EP)

Product Type Power Management ICs

RoHS

Lifecycle

Please submit RFQ for LTC7149EUFD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

RFO

General Description

The LTC7149 is a high efficiency 60V, 4A synchronous monolithic step-down regulator for inverting output applications. The regulator features a single resistor programmable output voltage and high efficiency over a wide VOUT range.

The inverting regulator operates from an input voltage range of 3.4V to 60V and provides an adjustable output from (–28V) to zero volts while delivering up to 4A of inductor current. The switching frequency is also set with an external resistor. A user-selectable mode input is provided to allow the user to trade off ripple noise for efficiency at light loads; Burst Mode operation provides the highest efficiency at light loads, while forced continuous mode provides low output ripple. The MODE/SYNC pin can also be used to synchronize the switching frequency to an external clock. Internal level-shift circuits allow the I/O pins (RUN, MODE/SYNC, PGOOD) to be referenced to board GND.

The LTC7149 operates with a peak current mode architecture that allows for fast transient response with inherent cycle-to-cycle current limit protection.

Features

Wide VIN Range: 3.4V to 60V

Wide VOUT Range: 0V to -28V

Single Resistor VOUT Programming

Integrated $110m\Omega$ Top N-Channel/50m Ω Bottom N-Channel MOSFETs

Regulated IQ: 440µA, Shutdown IQ: 15µA

Board GND Referenced I/O Pins (RUN, PGOOD, MODE/SYNC)

Accurate Resistor Programmable Frequency (300kHz to 3MHz) with ±50% Frequency Sync Range

92% Efficiency with 12 VIN and -5VOUT

Peak Current Mode Operation

Burst Mode® Operation, Forced Continuous Mode

Programmable Soft-Start

Overtemperature Protection

Available in 28-Lead (4mm x 5mm) QFN and TSSOP 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



Application

Industrial Applications

Telecom Power Supplies

Distributed Power Systems

LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN