

LTC7151SIV#PBF

Data Sheet

RFO

20V, 15A Synchronous Step-Down Silent Switcher 2 Regulator

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

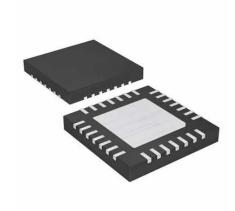
Package/Case 28-Lead LQFN (4mm x 5mm x 0.74mm w/ EP)

Product Type Power Management ICs

RoHS

Lifecycle

Please submit RFQ for LTC7151SIV#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

General Description

The LTC7151S is a high efficiency monolithic synchronous buck regulator capable of delivering 15A to the load. It uses a phase lockable controlled on-time constant frequency, current mode architecture. PolyPhase operation allows multiple LTC7151S regulators to run out-of-phase, which reduces the amount of input and output capacitors required. The operating supply voltage range is from 3.1V to 20V.

The operating frequency is programmable from 400kHz to 3MHz with an external resistor. The high frequency capability allows the use of physically smaller inductor and capacitor sizes. For switching noise sensitive applications, the LTC7151S can be externally synchronized from 400kHz to 3MHz. The PHMODE pin allows the user control of the phase of the outgoing clock signal. The unique constant frequency/controlled on-time architecture is ideal for high step-down ratio applications that operate at high frequencies while demanding fast transient response. The LTC7151S uses second generation Silent Switcher 2 technology including integrated bypass capacitors to deliver a highly efficient solution at high frequencies with excellent EMI performance.

Features

VIN Range: 3.1V to 20V

VOUT Range: 0.5V to 5.5V

Differential VOUT Remote Sense

Adjustable Frequency: 400kHz to 3MHz

PolyPhase® Operation: Up to 12 Phases

Output Tracking and Soft-Start

Reference Accuracy: ±1% Overtemperature

Current Mode Operation for Excellent Line and Load Transient Response

Accurate 1.2V Run Pin Threshold

Supports Forced Continuous/Discontinuous Modes

28-Lead Thermally Enhanced 4mm \times 5mm \times 0.74mm LQFN Package

Silent Switcher®2 Architecture for Low EMI

Automotive and Industrial Power Supplies

Server Power Applications

Application

Distributed Power Systems

Point-of-Load Supply for ASIC, FPGA, DSP, µP, etc.

Related Products



LT3763EFE Analog Devices, Inc

TSSOP28

QFN-24



LTC4417IUF Analog Devices, Inc



LTC1966CMS8#PBF

Analog Devices, Inc MSOP-8P



LTM8045EY#PBF

Analog Devices, Inc

BGA40



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LT4295IUFD#PBF

Analog Devices, Inc

28-WFQFN