

LTC3115IFE-1#PBF

Data Sheet

Conv DC-DC 2.7V to 40V Synchronous Step Down/Step Up Single-Out 2.7V to 40V 2A Automotive 20-Pin TSSOP EP Tube

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

Package/Case 20-TSSOP

Product Type Power Management ICs

RoHS Pb-free Halide free

Images are for reference only

Please submit RFQ for LTC3115IFE-1#PBF or Fmailto:sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LTC3115-1 is a high voltage monolithic synchronous buck-boost DC/DC converter. Its wide 2.7V to 40V input and output voltage ranges make it well suited to a wide variety of automotive and industrial applications. A proprietary low noise switching algorithm optimizes efficiency with input voltages that are above, below or even equal to the output voltage and ensures seamless transitions between operational modes.

Programmable frequency PWM mode operation provides low noise, high efficiency operation and the ability to synchronize switching to an external clock. Switching frequencies up to 2MHz are supported to allow use of small value inductors for miniaturization of the application circuit. Pin selectable Burst Mode operation reduces standby current and improves light load efficiency which, combined with a 3μ A shutdown current, make the LTC3115-1 ideally suited for battery-powered applications. Additional features include output disconnect in shutdown, short-circuit protection and internal soft-start. The LTC3115-1 is available in thermally enhanced 16-lead 4mm \times 5mm \times 0.75mm DFN and 20-lead TSSOP packages.

FeaturesLTC3115-1-LTC3115-2Optimized for applications subject to fast (<1ms) input voltage transients

Features

Wide VIN Range: 2.7V to 40V

Wide VOUT Range: 2.7V to 40V

1A Output Current for VIN \geq 3.6V,>

2A Output Current in Step-Down Operation for VIN \geq 6V

Programmable Frequency: 100kHz to 2MHz

Synchronizable Up to 2MHz with an External Clock

Up to 95% Efficiency

30µA No-Load Quiescent Current in Burst Mode® Operation

Ultralow Noise Buck-Boost PWM

Internal Soft-Start

3µA Supply Current in Shutdown

Programmable Input Undervoltage Lockout

Small 4mm × 5mm × 0.75mm DFN Package

Thermally Enhanced 20-Lead TSSOP Package

AEC-Q100 Qualified for Automotive Applications

Application

24V/28V Industrial Applications

Automotive Power Systems

Telecom, Servers and Networking Equipment

FireWire Regulator

Multiple Power Source Supplies

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



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



Analog Devices, Inc 10MSOP

LTC2990IMS#PBF



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN