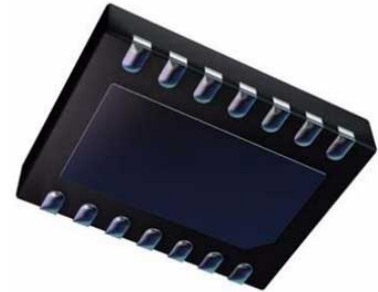


–36V, 1.5A Negative Linear Regulator with Programmable Current Limit

Manufacturers	Analog Devices, Inc
Package/Case	14-Lead DFN (4mm x 3mm w/ EP)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3091EDE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT3091 is a 1.5A, low dropout negative linear regulator that is easily paralleled to increase output current or spread heat on surface mounted boards. Designed with a precision current reference followed by a high performance rail-to-rail voltage buffer, this regulator finds use in applications requiring precision output, high current with no heat sink, output adjustability to zero and low dropout voltage. The device can also be configured as a 3-terminal floating regulator.

The LT3091 features fast transient response, high PSRR and output noise as low as 18 μ VRMS. The LT3091 generates a wide output voltage range (0V to –32V) while maintaining unity gain operation. This yields virtually constant bandwidth, load regulation, PSRR and noise, independent of the programmed output voltage.

The LT3091 supplies 1.5A at a typical dropout voltage of 300mV. Operating quiescent current is nominally 1.2mA and drops to \ll 1 μ A in shutdown. A single resistor adjusts the LT3091's precision programmable current limit. The device's positive or negative current monitor either sources a current (0.25mA/A) or sinks a current (0.5mA/A) proportional to output current. Built-in protection includes reverse output protection, internal current limit with foldback and thermal shutdown with hysteresis.

Features

Output Current: 1.5A

Single Resistor Sets Output Voltage

50 μ A SET Pin Current: \pm 1% Initial Accuracy

Programmable Current Limit

Positive or Negative Output Current Monitor

Parallelable for Higher Current and Heat Spreading

Low Dropout Voltage: 300mV

Low Output Noise: 18 μ VRMS (10Hz to 100kHz)

Configurable as a 3-Terminal Floating Regulator

Wide Input Voltage Range: -1.5V to -36V

Rail-to-Rail Output Voltage Range: 0V to -32V

Positive/Negative Shutdown Logic or UVLO

Programmable Cable Drop Compensation

Load Regulation: 1.2mV (1mA to 1.5A)

Stable with 10 μ F Minimum Output Capacitor

Stable with Ceramic or Tantalum Capacitors

Thermally Enhanced 14-Lead 4mm \times 3mm DFN, 16-Lead TSSOP, 7-Lead TO-220 and DD Packages

Application

Post Regulator for Switching Supplies

Low Noise Instrumentation and RF Supplies

Rugged Industrial Supplies

Precision Power Supplies

Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EY#PBF](#)

Analog Devices, Inc
BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN