

LT3032IDE#PBF

Data Sheet

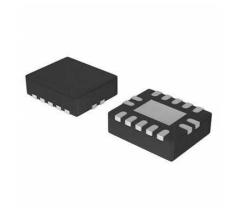
LDO Regulator Neg/Pos ± 1.22 V to ± 20 V ± 0.15 A Automotive 14-Pin DFN EP Tube

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

Package/Case QFN14

Product Type Power Management ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LT3032IDE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LT3032 is a dual, low noise, positive and negative low dropout voltage linear regulator. Each regulator delivers up to 150mA with a typical 300mV dropout voltage. Each regulator's quiescent current is low (30 μ A operating and <3 μ A in shutdown) and well-controlled in dropout, making it an excellent choice for battery-powered circuits.

Another key feature of the LT3032 is low output noise. Adding an external 10nF bypass capacitor to each regulator reduces output noise to $20\mu VRMS/30\mu VRMS$ over a 10Hz to 100kHz bandwidth. The LT3032 is stable with minimum output capacitors of $2.2\mu F$. The regulators do not require the addition of ESR as is common with other regulators.

The regulators are offered as adjustable output devices with an output voltage down to the ± 1.22 V reference voltage or in fixed voltages of ± 3.3 V, ± 5 V, ± 12 V and ± 15 V. Internal protection circuitry includes reverse-output protection, current limiting and thermal limiting.

The LT3032 is available in a unique low profile 14-lead $4\text{mm} \times 3\text{mm} \times 0.75\text{mm}$ DFN package with exposed backside pads for each regulator, allowing optimum thermal performance.

Features

Low Noise: 20µVRMS (Positive) and 30µVRMS (Negative)

Low Quiescent Current: 30µA/Channel

Wide Input Voltage Range: $\pm 2.3 \text{V}$ to $\pm 20 \text{V}$

Output Current: ±150mA

Low Shutdown Current: <3 µA Total (Typical)

Low Dropout Voltage: 300mV/Channel

Fixed Output Voltages: $\pm 3.3V$, $\pm 5V$, $\pm 12V$, $\pm 15V$

Adjustable Outputs from $\pm 1.22 \text{V}$ to $\pm 20 \text{V}$

No Protection Diodes Needed

Stable with 2.2µF Output Capacitors

Stable with Ceramic, Tantalum or Aluminum Capacitors

Starts into Reverse Output Voltage

Current Limit and Thermal Limit

Low Profile 14-Lead $4mm \times 3mm \times 0.75mm$ DFN Package

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

Battery-Powered Instruments

Bipolar Power Supplies

Low Noise Power Supplies



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN