

# LT3032EDE#PBF

Data Sheet

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

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

Package/Case DFN-14P

Product Type Power Management ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LT3032EDE#PBF or Email to us; sales@ovaga.com We will contact you in 12 hours.

**RFO** 

### **General Description**

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 $\mu$ A operating and  $<3\mu$ 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  $\pm 1.22$ V reference voltage or in fixed voltages of  $\pm 3.3$ V,  $\pm 5$ V,  $\pm 12$ V and  $\pm 15$ 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  $\pm 1.22 V$  to  $\pm 20 V$ 

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

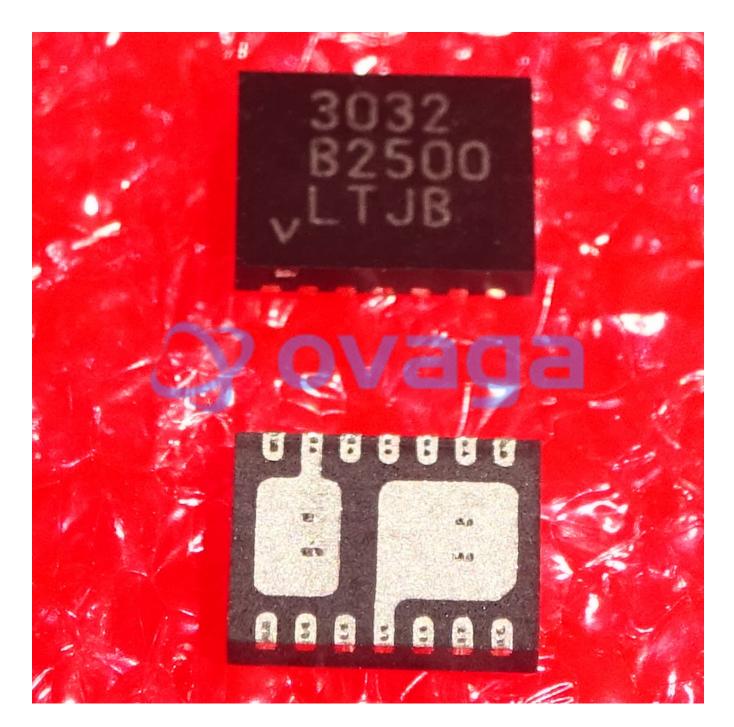
Low Profile 14-Lead 4mm  $\times$  3mm  $\times$  0.75mm DFN Package

## **Application**

Battery-Powered Instruments

Bipolar Power Supplies

Low Noise Power Supplies



#### **Related Products**



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



LTC1966CMS8#PBF
Analog Devices, Inc
MSOP-8P



Analog Devices, Inc 10MSOP

LTC2990IMS#PBF



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN