



**Dual Positive/Negative $\pm 20V_{IN}$ $\pm 150mA$ LDO with $20\mu V_{RMS}$ Noise
Now Offered in High Reliability, MP-Grade Temperature Range**

MILPITAS, CA – April 18, 2012 – Linear Technology Corporation announces a new high reliability MP grade, wider temperature range version of the [LT3032](#), a dual, low noise, positive/negative low dropout voltage linear regulator. The device delivers up to $\pm 150mA$ continuous output current on each channel with a 300mV dropout voltage at full load. The LT3032 features a wide input voltage range of $\pm 2.3V$ to $\pm 20V$, delivering adjustable output voltages from $\pm 1.22V$ to $\pm 20V$. A single capacitor provides ultralow noise operation of only $20\mu V_{RMS}$ across a wide bandwidth of 10Hz to 100kHz for the positive output rail, and only $30\mu V_{RMS}$ for the negative rail. The LT3032's output voltage tolerance is highly accurate at $\pm 3\%$ over line, load and temperature. The device's wide input and output voltage ranges, fast transient response and low quiescent current of 30uA per channel (operating) and <3uA in shutdown (total) make it an excellent choice for portable battery-powered systems that require optimum run time, and for use in bipolar op amp/instrumentation power supply and low noise supply applications.

The LT3032 operates with very small, low cost, ceramic output capacitors, optimizing stability and transient response. It is stable with only 2.2uF output capacitors. These tiny external capacitors can be used without the addition of series resistance (ESR) as is common with many other regulators. The LT3032's internal protection circuitry includes reverse-output protection, current limiting and thermal limiting.

The LT3032 MP grade is available with an operating junction temperature of $-55^{\circ}C$ to $+125^{\circ}C$ in both adjustable and fixed ($\pm 5V$, $\pm 12V$ and $\pm 15V$) versions in a 14-lead 4mm x 3mm DFN package, offering a compact footprint. The device is available from stock and 1,000 piece pricing starts at \$5.95. For more information, visit www.linear.com/product/LT3032


Photo Caption: MP Grade $\pm 20V_{IN}$, $\pm 150mA$ Dual Positive/Negative Ultralow Noise LDO

Summary of Features: LT3032

- Output Current: $\pm 150mA$
- Operating Junction Temperature Range: $-55^{\circ}C$ to $+125^{\circ}C$ (MP Grade Only)
- Low Noise: $20\mu V_{RMS}$ Positive, $30\mu V_{RMS}$ Negative (10Hz to 100kHz)
- Low Dropout Voltage: 300mV
- Low Quiescent Current: 30uA/Channel
- Wide Input Voltage Range: $\pm 2.3V$ to $\pm 20V$
- Adjustable Output Voltage: $\pm 1.22V$ to $\pm 20V$
- Output Tolerance: $\pm 3\%$ Over Load, Line & Temperature
- Stable with 2.2uF Ceramic Capacitors
- Low Shutdown Current: $< 3\mu A$ Total (typical)
- Starts into Reverse Output Voltage
- Thermal Limiting & Current Limiting
- Low Profile 4mm x 3mm DFN-14 Package

About Linear Technology

Linear Technology Corporation, a member of the S&P 500, has been designing, manufacturing and marketing a broad line of high performance analog integrated circuits for major companies worldwide for three decades. The Company's products provide an essential bridge between our analog world and the digital electronics in communications, networking, industrial, automotive, computer, medical, instrumentation, consumer, and military and aerospace systems. Linear Technology produces power management, data conversion, signal conditioning, RF and interface ICs, μ Module[®] subsystems, and wireless sensor network products. For more information, visit www.linear.com

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Press Contacts:

North America / Worldwide

John Hamburger, Director Marketing
Communications
jhamburger@linear.com
Tel 408-432-1900 ext 2419

Doug Dickinson, Media Relations Manager
ddickinson@linear.com
408-432-1900 ext 2233

UK & Nordic

Alan Timmins
alan@ezwire.com
Tel: +44-1-252-629937