

***LTC News for Immediate Release***

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**Tiny 2-Channel, 14-Bit ADC Offers Simultaneous Sampling at 3Msps**

**Enables Compact High-Speed Data Acquisition Systems**

MILPITAS, CA – January 5, 2004 – Linear Technology introduces the LTC1407A and LTC1407, 14-bit and 12-bit, 3Msps Analog to Digital Converter (ADC) with two simultaneous sampling inputs. These high speed serial ADC are available in a 10-pin MSOP package, less than half the size of an SO-8, allowing the design of compact high-speed data acquisition systems. The LTC1407A device achieves 73.5dB SINAD and guarantees 14-bit no missing codes. The small size in combination with high speed and simultaneous sampling make the LTC1407 the ideal choice for medical applications, instrumentation, multiphase motor control and narrowband I & Q demodulation applications.

The LTC1407A is powered from a single 3V supply and power dissipation is typically 12mW. When the device is not converting, power dissipation can be reduced to 3.3mW in the NAP mode, with the onboard 2.5V reference remaining active, and 6uW with everything powered down in the SLEEP mode. The two conversion results are delivered sequentially to high speed DSP serial ports via a 3-wire SPI interface. These features support new smaller, lower power designs for simultaneous sampling applications.

The LTC1407A and LTC1407 are available in the commercial and industrial temperature ranges. Pricing begins at \$7.00 each for the LTC1407A and \$4.00 each for the LTC1407 in 1,000-piece quantities.

(more...)

**Summary of Features: LTC1407**

- Simultaneous Sampling 14-Bit/12-Bit, 3Msps ADC
- 2-Channel True Differential Inputs
- Single 3V Supply
- 2.5V Reference
- Low Supply Power: 12mW (Typ)
- LTC1497A: 14-Bit No Missing Code & INL  $\pm 4$ LSB Max.
- LTC1407A: SINAD 73.5dB @ 750kHz Max.
- LTC1407: 12-Bit No Missing Code & INL  $\pm 2$ LSB Max.
- LTC1407: SINAD 70.5dB @ 750kHz Max.
- Differential Inputs: 80dB Common Mode Rejection

COMPANY BACKGROUND: Linear Technology Corporation was founded in 1981 as a manufacturer of high performance linear integrated circuits. Linear Technology products include operational, instrumentation and audio amplifiers; voltage regulators, power management devices, DC-DC converters and voltage references; comparators; monolithic filters; communications interface circuits; one-chip data acquisition sub-systems; pulse-width modulators and sample-and-hold devices; and high frequency devices. Applications for Linear Technology's high performance circuits include wireless and broadband telecommunications infrastructure, cellular telephones, networking products and satellite systems, notebook and desk top computers, computer peripherals, video/multimedia, industrial and medical instrumentation, automotive electronics, factory automation, process control, military and space systems, and high-end consumer products including digital cameras, MP3 players and other electronic products.

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