

***LTC News for Immediate Release***

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**Tiny 50MHz CMOS Op Amp Boasts Low Noise and High Precision**

MILPITAS, CA – August 17, 2006 – Linear Technology Corporation announces the latest addition to its family of low noise, precision CMOS op amps. With a gain bandwidth of 50MHz and input characteristics that challenge precision bipolar amplifiers, the LTC6244 dual op amp offers breakthrough performance that no other amplifier can deliver. Guaranteed offset voltage of only 300uV max over the full industrial temperature range rivals the 25°C spec for other amplifiers in its class.

Using a unique architecture, the LTC6244 boasts low noise of 8nV/√Hz while maintaining an input capacitance of only 2.1 pF. Very low input capacitance is critical at high frequencies to maintain high input impedance and low noise performance.

“This breakthrough performance, previously unattainable from a CMOS amplifier, delivers maximum signal resolution in a variety of applications such as large or small area photodiode, transimpedance and charge coupled amplifiers, precision integrators and filters,” says design manager, Dan Tran. The LTC6244 has applications in instrumentation, medical, industrial and communications systems.

In addition to minimizing the voltage gain error, the LTC6244 provides excellent DC precision. It features 1pA bias current and less than 100uV input offset voltage at 25°C. Offset voltage drift is guaranteed under 2.5uV/°C while the high voltage gain of 120dB keeps system error to a minimum. The 50MHz gain bandwidth and 40V/us slew rate at a low supply current of 7.4mA max per amplifier makes this amplifier extremely versatile and perfect for use in a wide variety of applications.

Operating from supply voltages as low as 2.8V and up to 12V (HV version), the amplifier’s output swings rail-to-rail. The LTC6244 dual op amp is offered in tiny 3mm x 3mm DFN and 8-pin

MSOP packages. Fully specified to operate over the commercial, industrial, and high temperature ranges, 1,000-piece pricing starts at \$1.65 each.

**Photo Caption: 50MHz Low Noise CMOS Op Amp Offers Exceptional Precision**

**Summary of Features: LTC6244**

- Low Noise:
  - $e_n(1\text{kHz})$ : 8nV/ $\sqrt{\text{Hz}}$  typ
  - $i_n(1\text{kHz})$ : 0.56 fA/ $\sqrt{\text{Hz}}$  typ
- Low Bias Current: 1pA typ
- Low Offset Voltage: 100uV Max @ 25°C, 300uV Max Over Temp
- Low Offset Voltage Drift: 2.5uV/°C Max
- Low Input Capacitance: 2.1pF Common Mode, 3.5pF Differential
- Gain Bandwidth Product: 50MHz typ
- Slew Rate: 40V/us typ
- Rail-to-Rail Outputs
- Supply Current: 7.4 mA/amplifier
- Supply Range:
  - 2.8V to 6V (LTC6244)
  - 2.8V to 12V (LTC6244HV)

**About Linear Technology**

Linear Technology Corporation, a manufacturer of high performance linear integrated circuits, was founded in 1981, became a public company in 1986 and joined the S&P 500 index of major public companies in 2000. Linear Technology products include high performance amplifiers, comparators, voltage references, monolithic filters, linear regulators, DC-DC converters, battery chargers, data converters, communications interface circuits, RF signal conditioning circuits, and many other analog functions. Applications for Linear Technology's high performance circuits include telecommunications, cellular telephones, networking products such as optical switches, notebook and desktop computers, computer peripherals, video/multimedia, industrial instrumentation, security monitoring devices, high-end consumer products such as digital cameras and MP3 players, complex medical devices, automotive electronics, factory automation, process control, and military and space systems. For more information, visit [www.linear.com](http://www.linear.com)

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