

LTC News for Immediate Release

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**50uA CMOS Amplifier Equals
Best Bipolar Op Amps with 0.7uV/°C Drift**

MILPITAS, CA – September 12, 2005 – Linear Technology Corporation announces a new family of CMOS amplifiers that delivers extraordinary DC precision at the lowest possible supply current. With input DC characteristics similar to the best precision bipolar amplifiers, the LTC6078 dual and LTC6079 quad op amps offer a breakthrough combination of specifications that no other CMOS amplifier on the market can deliver. Using a unique design architecture, the amplifiers boast a miniscule input offset voltage of 25uV Max and guaranteed offset voltage drift of 0.7uV/°C max while drawing only 55uA per channel quiescent current. This implies a tenfold reduction in power consumption over existing op amps with similar DC accuracy.

“The LTC6078 and LTC6079 enable designers of precision portable and loop-powered instrumentation to maximize their system accuracy by having low DC drift and no input current,” said Erik Soule, General Manager for Linear’s Signal Conditioning Products. “Our new amplifier family offers the optimal balance of precision and low power, eliminating performance trade-offs that have traditionally challenged portable instrumentation designers.”

Featuring a rail-to-rail input stage, the LTC6078/LTC6079 maintain their outstanding input precision over the entire common mode range. The extremely low bias current, 1pA max, allows optimum DC accuracy with high source impedance and feedback resistors. In addition, the excellent CMRR of 110dB and high voltage gain of 120dB preserve precision performance. Operating on a 2.7V to 5.5V supply range, the amplifiers’ outputs swing rail-to-rail. Supply current is reduced to less than 2uA using the shutdown feature.

The LTC6078 dual is offered in the 8-pin MSOP and tiny 3mm x 3mm DFN packages. The LTC6079 quad is available in the 16-pin SSOP and 5mm x 3mm DFN

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packages. Fully specified to operate over the commercial, industrial and automotive temperature ranges. 1,000-piece pricing starts at \$1.49 each for the LTC6078 dual and \$2.53 each for the LTC6079 quad.

Summary of Features: LTC6078 & LTC6079

- Low Offset Voltage: 25uV Max
- Low Offset Drift: 0.7uV/°C Max
- Low Input Bias Current: 1pA Max
- Micropower: 55uA per Channel
- High Voltage Gain: 120dB Typ
- High CMRR: 110dB Typ
- Input Voltage Noise: 19nV/√Hz
- Rail-to-Rail Inputs and Outputs
- Unity Gain Stable
- 2.7V to 5.5V Supply Range

COMPANY BACKGROUND: Linear Technology Corporation was founded in 1981 as a manufacturer of high performance linear integrated circuits. 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.

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READER SERVICE: Call toll-free 1-800-4-LINEAR (for literature only), or go to the company's web site: **<http://www.linear.com>**

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