

***LTC News for Immediate Release***

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**12-Bit, 185Msps ADC Targets PA Linearization**

MILPITAS, CA – February 2, 2005 – Linear Technology Corporation introduces the LTC2220-1, a 12-Bit 185Msps ADC, that achieves excellent AC performance with low power consumption. In a 9mm x 9mm QFN package and using just 910mW, the LTC2220-1 achieves over 67.5dB SNR and 80dB SFDR up to 140MHz input. It features a 775MHz full power bandwidth making it attractive for undersampling. These benefits combine to make the LTC2220-1 ideal for communications applications such as digital predistortion power amplifier linearization and microwave links between cellular base station transceivers.

In addition to the excellent AC performance of the ADC, the logic interface can be optimized for low noise as well. The digital outputs can be either differential LVDS for low EMI, or single-ended CMOS. A separate digital output power supply allows the CMOS output swing to range from 0.5V to 3.3V matching low voltage DSPs and minimizing switching noise.

The LTC2220-1 is pin-compatible with the lower power LTC2220 (12-Bit 170Msps), LTC2221 (12-Bit 135Msps), LTC2230 (10-Bit 170Msps) and LTC2231 (10-Bit 135Msps). These parts are part of a much larger family that features industry-leading AC performance over a broad range of sample rates, low power and pin-compatibility, allowing easy migration from 10-bits to 14-bits, or to different sample rates.

Available from stock and specified over the commercial and industrial temperature ranges, the LTC2220-1 is available in the 64-pin 9mm x 9mm QFN package. Pricing begins at \$49.00 each for 1,000 piece quantities.

(more...)

**Summary of Features: LTC2220-1**

- Sample Rate: 185Msps
- 67.5dB SNR up to 140MHz Input
- 80dB SFDR up to 170MHz Input
- 775MHz Full Power Bandwidth S/H
- Tiny Board Footprint
- Single 3.3V Supply
- Low Power Dissipation: 910mW
- LVDS, CMOS, or Demultiplexed CMOS Outputs
- Selectable Input Ranges:  $\pm 0.5V$  or  $\pm 1V$
- No Missing Codes
- Optional Clock Duty Cycle Stabilizer
- Shutdown and Nap Modes
- 64-pin, 9mm x 9mm QFN Package
- Pin Compatible Family
  - 170Msps: LTC2220 (12-Bit), LTC2230 (10-Bit)
  - 135Msps: LTC2221 (12-Bit), LTC2231 (10-Bit)

**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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