LTC News for Immediate Release

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14-Bit 125Msps Low Power Dual ADC Enhances High Efficiency Basestation Transceivers

MILPITAS, CA – July 19, 2006 – Linear Technology Corporation announces the LTC2285, a 14-bit 125Msps dual high-speed Analog to Digital Converter (ADC) with low power dissipation of just 395mW per channel. This high speed device is optimized for use in power efficient, multi-carrier wireless basestation transceiver applications including WiBro and WiMAX standards with performance of 71.3dB SNR and 78dB SFDR at 140MHz. The high sampling rate allows designers to capture wider channel bandwidths, doubling the capacity of existing systems that are typically sampling at 65Msps.

In addition to the 14-bit LTC2285, Linear Technology offers the pin compatible 12-bit LTC2283 and 10-bit LTC2281 125Msps dual ADCs. These three dual ADCs complete a 3V family of 10-, 12- and 14-bit parts ranging from 10Msps up to 125Msps. The pin compatibility offers designers more flexibility during product development, providing a fast and cost-effective upgrade path for existing designs. The ADCs provide very low crosstalk between channels of -110dB.

The LTC2285 low power family is packaged in a small 9mm x 9mm QFN package. The parts include integrated bypass capacitance and 50 Ohm series output matching for a small total solution size. They provide the flexibility to choose between two input spans of 1Vp-p or 2Vp-p. The 125Msps dual ADCs also offer a data-ready clock-out pin for latching the output data buses. The ADCs are optimized for undersampling signals up to 140MHz, and have a wide analog input bandwidth of 640MHz. For downconversion signal chains, Linear Technology recommends the LT5516 direct conversion quadrature demodulator and LT6402 300MHz low distortion/low noise ADC driver.

All three devices are supported with demo boards for quick evaluation and can be purchased online at www.linear.com. Samples of the LTC2285, LTC2283 and LTC2281 are available today with production quantities in September for both commercial and industrial temperature grades and are competitively priced at $73.50, $41.25, $18.00, each respectively in 1,000-piece quantities.

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The following provides an overview of the LTC2285 dual ADC product family. All parts are available in optional lead-free packages for RoHS compliance. A table of Linear Technology's entire Low Power High Speed ADC family can be found at http://www.linear.com/designtools/hsadcs.jsp

Part Number	Resolution	Speed	Power/Ch.	Price (1k)
LTC2285	**14-bit**	**125Msps**	**395mW**	$73.50
LTC2284	14-bit	105Msps	270mW	$61.50
LTC2299	14-bit	80Msps	222mW	$37.50
LTC2298	14-bit	65Msps	205mW	$35.03
LTC2297	14-bit	40Msps	120mW	$27.38
LTC2296	14-bit	25Msps	75mW	$18.75
LTC2295	14-bit	10Msps	60mW	$17.00
LTC2283	**12-bit**	**105Msps**	**395mW**	$41.25
LTC2282	14-bit	105Msps	270mW	$34.50
LTC2294	12-bit	80Msps	211mW	$25.05
LTC2293	12-bit	65Msps	205mW	$18.12
LTC2292	12-bit	40Msps	120mW	$11.88
LTC2291	12-bit	25Msps	75mW	$11.25
LTC2290	12-bit	10Msps	60mW	$10.00
LTC2281	**10-bit**	**125Msps**	**395mW**	$18.00
LTC2280	10-bit	105Msps	270mW	$11.25
LTC2289	10-bit	80Msps	211mW	$10.05
LTC2288	10-bit	65Msps	205mW	$7.50
LTC2287	10-bit	40Msps	120mW	$7.20
LTC2286	10-bit	25Msps	75mW	$5.25

Photo Caption: 14-Bit 125Msps Dual ADC

Summary of Features: LTC2285

- Sample Rate: 125Msps
- 10-bit, 12-bit, 14-Bit Resolution
- 110dB Channel Isolation at 100MHz
- Data Ready Clock Out Pin
- Wide Analog Input Bandwidth of 640MHz
- Single 3V Supply
- Low Power Dissipation: 790mW
- Flexible Input: 1Vp-p to 2Vp-p Range
- Optional Clock Duty Cycle Stabilizer
- 64-Pin, 9mm x 9mm QFN Package

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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

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