TI Expands ADC Family with Eight Dual-channel Devices from 65 to 250 MSPS

Texas Instruments expanded its line of high-speed, ultra-low power consumption analog-to-digital converters (ADCs) with eight dual-channel devices available in 12- and 14-bit resolutions at speeds from 65 to 250 MSPS. With these additions, the ADS42xx family provides the performance and bandwidth needed for 3G/LTE wireless base stations, portable test and measurement and software defined radio applications, while providing best-in-class power consumption. For more information and to order samples, visit www.ti.com/ads42xx-pr [1].

Key features and benefits of the ADS42xx family
• The 14-bit ADS4246 uses 332 mW total power at 160 MSPS, 35-percent less power than its closest competitor. The family provides options down to 92 mW per channel to reduce board heating and operating costs.
• Pin-compatible 12- and 14-bit options, with speeds ranging from 65 to 250 MSPS, enable customers to move to higher resolutions and sample rates without redesigning the board.
• Pin-compatible with 11-bit, 200-MSPS ADS58C28, providing a license-free export option with up to 65 MHz of high-performance RF channel bandwidth at input frequencies over 200 MHz.
• 6-dB programmable gain option provides the flexibility needed to achieve a high signal-to-noise ratio of up to 73.6 decibel full scale (dBFS) and spurious free dynamic range (SFDR) of up to 91 dBc for high receive sensitivity in 3G/LTE wireless infrastructure.

Tools and support
TI offers a variety of tools and support to speed development with the ADS42xx family, including:
• An evaluation module (EVM) for each part.
• TSW1200 digital capture tool for rapid analysis of EVMs.
• An Altera-compatible high-speed mezzanine connector and Xilinx-compatible FPGA mezzanine connector, allowing ADS42xx EVMs to mate to FPGA EVMs to speed system-level prototyping.
• IBIS models to verify board signal integrity requirements.
• Software for calculation utilities, including an ADC harmonic calculator, anti-aliasing calculation tool, and jitter and SNR calculator.

Availability and packaging
The ADS42xx family is offered in a 64-pin QFN package. 1,000-unit pricing and availability for the new devices follow below.

65 MSPS
• 14-bit ADS4242 is available today for a suggested retail price of $28.00.
• 12-bit ADS4222 will be available in August for a suggested retail price of $18.00.

125 MSPS
• 14-bit ADS4245 is available today for a suggested retail price of $51.25.
• 12-bit ADS4225 will be available in August for a suggested retail price of $31.30.

160 MSPS
• 14-bit ADS4246 is available today for a suggested retail price of $73.50.
• 12-bit ADS4226 is available today for a suggested retail price of $39.00.

250 MSPS
• 14-bit ADS4249 will be available 3Q 2011 for a suggested retail price of $133.50.
• 12-bit ADS4229 is available today for a suggested retail price of $67.50.

Learn more about TI's data converter portfolio by visiting the links below:
• Order samples or EVMs of the ADS42xx family: www.ti.com/ads42xx-pr [1].
• Read tips on how to attain the performance benefits of buffered high-speed ADCs: www.ti.com/ecnadc-pr [2].
• Ask questions, help solve problems in the High Speed Data Converter forum in the TI E2ETM Community: www.ti.com/e2ehsdc-pr [3].

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Links:
[1] http://www.ti.com/ads42xx-pr
[2] http://www.ti.com/ecnadc-pr
[3] http://www.ti.com/e2ehsdc-pr