

ACTEL EXPANDS DSP IP PORTFOLIO WITH NEW COMPANIONCORES FROM 4i2i COMMUNICATIONS, LTD.

Viterbi, Reed-Solomon and JPEG IP Cores Optimized for Actel's ProASIC^{PLUS}, Axcelerator, SX-A and RTSX-S FPGAs

SUNNYVALE, Calif., July 28, 2003 - Actel Corporation (Nasdaq: ACTL) today announced that the latest partner to join its CompanionCore Alliance program, 4i2i Communications, Ltd., has optimized its Viterbi and Reed-Solomon encoder and decoder intellectual property (IP) cores for use with Actel's nonvolatile, single-chip ProASIC^{PLUS}, Axcelerator, SX-A and RTSX-S field-programmable gate arrays (FPGAs). Furthermore, 4i2i has also optimized its JPEG encoders and decoders for Actel's high-performance Axcelerator device family. With the extension of Actel's digital signal processing (DSP) IP offerings, customers have access to a breadth of cost-effective, parameterizable FPGA-based building blocks to accelerate the design and development of existing and future DSP, multimedia and error correction applications.

"The addition of [4i2i to our CompanionCore Alliance program](#) provides system designers with ready access to 4i2i's silicon- and production-proven Viterbi, Reed-Solomon and JPEG encoder and decoder cores as optimized building blocks for our successful ProASIC^{PLUS}, Axcelerator, SX-A and RTSX-S FPGAs," said Yankin Tanurhan, senior director, Applications and IP Solutions Group at Actel. "4i2i's cost-effective DSP IP cores are a strong complement to Actel's nonvolatile flash- and antifuse-based FPGAs, enhancing designer productivity and reducing time to market for our mutual customers requiring forward error correction or multimedia functionality."

"More and more, customers are requesting DSP IP blocks with user-configurable settings optimized for FPGAs for use in a variety of markets. Participation in Actel's CompanionCore Alliance program allows us to deliver exceptional DSP capabilities to Actel's growing customer base," said Martyn Riley, CEO of 4i2i Communications, Ltd. "Specifically, customers in the communications, consumer, industrial, military and aerospace industries will now be able to leverage Actel's low-power, highly reliable FPGAs with our innovative DSP IP in their designs."

New Cores for Actel FPGAs

Consisting of a convolutional encoder and Viterbi decoder, the Viterbi IP core supports error correction for both burst mode and continuous data input. The core

offers user-configurable parameters, including selectable code rates and interface widths, optional pseudo-BER calculation and in-phase detection.

The Reed-Solomon encoder and decoder IP cores offer full-duplex encoding and decoding. The cores are also compatible with a variety of international telecommunication standards, including CCSDS, DECT, ADSL and xDSL. Offering full ISO 10918 standard compatibility, the JPEG encoder and decoder cores provide baseline JPEG compression capabilities, including up to 4080x4080 image resolution support and processing of up to 30 CIF frames per second.

Actel DirectCore and CompanionCore Solutions

Actel offers its own system-level IP solutions, called [DirectCores](#), specifically designed and optimized for use with Actel devices. The company also offers third-party IP blocks, called [CompanionCores](#), that have been tested and verified in Actel FPGAs. Covering applications ranging from embedded systems to consumer and communications, the cores offered include bus interfaces, communication controllers and interfaces, processors and peripherals, encryption, memory controllers as well as multimedia and error correction.

Actel DirectCores and CompanionCore products offer seamless implementation through Actel's suite of internal and third-party EDA development tools, documentation, and quality service and support, thereby streamlining the design process, enabling faster time-to-market and minimizing design costs and risks. For more information on the CompanionCore Alliance program, DirectCores or CompanionCores, visit the IP section on the Actel Web site at <http://www.actel.com/products/ip/index.html>.