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**ACTEL EXPANDS SECURITY SOLUTIONS WITH ENCRYPTION CORES**

*AES, DES and Triple DES IP Complement Actel's Existing FPGA Design Security*

**SUNNYVALE, Calif., November 25, 2002** — Furthering its commitment to offer secure solutions to the marketplace, Actel Corporation (Nasdaq: ACTL) announced the availability of new Advanced Encryption Standard (AES) and Data Encryption Standard (DES) intellectual property (IP) cores optimized for Actel's nonvolatile Axcelerator, ProASIC, ProASIC Plus, RTSX-S and SX-A field-programmable gate array (FPGA) architectures. Through Actel and its partners, Amphion Semiconductor, Inc. and Helion Technology, customers now have access to design services and a range of encryption cores certified by the National Institute of Standards and Technology (NIST) that support AES, DES and triple DES (3DES) algorithms. With a wide variety of configurations, these flexible IP cores offer users high-performance data encryption for wireless and wire-line communications, including e-Commerce, secure enterprise networks and personal security devices.

“To safeguard against reverse engineering, cloning and overbuilding, Actel's nonvolatile antifuse- and flash-based FPGA architectures offer exceptional levels of design security protection. Often, our customers are also interested in securing and authenticating their data streams,” stated Dr. Yankin Tanurhan, senior director, IP solutions at Actel. “The introduction of these new AES, DES and triple DES encryption cores further underscores Actel's commitment to deliver secure solutions for a wide

range of applications in the communications, consumer, military, aerospace, aircraft and industrial markets.”

“It’s quite conceivable that every mobile communicator, server and Internet-enabled appliance in the worldwide communications infrastructure will embed high-performance encryption technology in some form or other,” said Dr. J. G. Doherty, president and chief executive officer at Amphion. “Coupled with the inherent design security of Actel’s FPGAs, these AES, DES and triple DES solutions are ideal for applications that require maximum levels of data privacy.”

“We see a growing demand in the industry for high-performance encryption functions to secure data for e-Commerce transactions, secure enterprise networks and personal security devices,” said Graeme Durant, chief executive officer at Helion. “Our customers, such as Ember Corporation, have already benefited from the security advantages offered as a result of the implementation of our standard AES encryption core optimized for Actel’s nonvolatile devices.”

“After evaluating Actel’s flash-based FPGA architecture, it is clear that ProASIC offers the low power, security and nonvolatility that competitive solutions are unable to deliver,” said Jeffrey Grammer, president and chief executive officer at Ember Corporation. “With Actel’s ProASIC FPGA and Helion’s standard AES IP core, we are now able to offer our customers high-performance, secure solutions for their embedded wireless sensing and control applications.”

### **Encryption Solutions**

Actel has developed the new CoreDES and Core3DES IP cores for its Axcelerator, ProASIC Plus, SX-A and RTSX-S FPGA devices. Each core includes encryption and decryption capabilities and supports 56-bit and 168-bit keys, respectively.

Amphion Semiconductor, a leading provider of semiconductor IP for digital video and broadband wireless, has optimized its high-performance AES, DES and 3DES solutions for Actel’s Axcelerator, ProASIC Plus and SX-A FPGA families. The AES encryption and decryption cores are available in standard, compact, high-speed and ultra high-speed versions, enabling customers to choose an implementation that best

fits their specific application. Designed to operate in either DES or 3DES mode, four DES/3DES solutions are available — ultra compact, compact, high speed and ultra high speed.

Helion Technology, a consulting firm with expertise in the development of IP cores for data security applications, is offering three certified AES encryption solutions — Tiny AES, Standard AES and Fast AES. These cores are available as highly optimized netlists for use with Actel's Axcelerator, ProASIC, ProASIC Plus and SX-A families.

### **Design Security**

Actel's nonvolatile Axcelerator, ProASIC, ProASIC Plus, RTSX-S and SX-A devices offer levels of design security beyond SRAM-based FPGAs and conventional application-specific integrated circuit (ASIC) solutions and safeguard against copying or reverse engineering of the design. The Actel Security Resource Center (<http://www.actel.com/products/security>) provides customers, design engineers and managers with information on the fundamentals of security issues and secure FPGA solutions, including technology tutorials, market overviews, white papers, government links and extensive glossaries.

### **Core Availability**

The new AES, DES and 3DES cores are available for purchase directly from Actel, Amphion Semiconductor or Helion Technology with prices starting from \$1,995 for a single-use netlist. Free evaluation versions of Actel's CoreDES and Core3DES IP cores are available through the company's sales force. Documentation is accessible from Actel's Web site at <http://www.actel.com/products/ip>. For more information, please contact Actel.

### **About Actel**

Actel Corporation is a supplier of innovative programmable logic solutions, including field-programmable gate arrays (FPGAs) based on antifuse and flash technologies, high-performance intellectual property (IP) cores, software development tools and design services targeted for the high-speed communications, application-

specific integrated circuit (ASIC) replacement and radiation-tolerant markets. Founded in 1985, Actel employs approximately 500 people worldwide. The Company is traded on the Nasdaq National Market under the symbol ACTL and is headquartered at 955 East Arques Avenue, Sunnyvale, Calif., 94086-4533. Telephone: 888-99-ACTEL (992-2835). Internet: <http://www.actel.com>.

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