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Actel Introduces Fusion Technology and Ushers in Era of the Programmable System Chip

Actel Fusion Technology Combines Analog Peripherals, Flash Memory and FPGA Fabric in a Monolithic Programmable System Chip

MOUNTAIN VIEW, Calif., July 18, 2005 -- Actel Corporation (Nasdaq: ACTL) today unveiled its Fusion technology, launching the era of the Programmable System Chip (PSC). Leveraging its leadership position in flash-based FPGAs, the company has developed the industry's first technology designed to bring true programmability to mixed-signal solutions. The Actel Fusion(TM) technology is the first to integrate mixed-signal analog capabilities with flash memory and FPGA fabric in a monolithic PSC.

The Actel Fusion technology brings the benefits of programmable logic to application areas that until now have only been served by discrete analog component and mixed-signal ASIC suppliers. This new technology takes advantage of the unique properties of Actel's flash-based FPGAs, including a high-isolation, triple-well process and the ability to support high-voltage transistors to meet the demanding requirements of mixed-signal system design. In addition, when used in conjunction with Actel's ARM7 and 8051-based soft MCU cores, the Actel Fusion technology represents the definitive PSC platform.

"The insatiable demand for increased integration and flexibility continues to fuel the industry's race toward programmable system chip solutions," explained John East, president and CEO of Actel. "With the creation of the Actel Fusion technology, we aim to simplify the way systems are designed. Leveraging the unique expertise acquired while creating the industry's leading flash-based FPGA devices, we have brought together the reprogrammable advantages of Actel's advanced flash FPGAs with analog components and large flash memory blocks into a landmark single-chip solution."

The Actel Fusion technology presents new capabilities for system development by allowing designers to use the same silicon for a variety of applications and/or quickly adapt to rapidly changing standards.

"End applications continue to demand increased flexibility, configurability and performance, while at the same time reducing power demands, board space and cost," said Rich Wawrzyniak, senior analyst at Semico Research. "The horizontal integration of analog, memory, logic and soft MCU implementations in a single chip has the potential to create new markets and alter the current landscape of system design."

Comprehensive Mixed-Signal FPGA Technology

The new Actel Fusion technology will enable designers to design at both very high and very low levels of abstraction. Fusion peripherals include hard analog IP and hard and/or soft digital IP. Peripherals will communicate across the FPGA fabric via a layer of soft gates -- the Fusion Backbone. Much more than a bus interface, the Actel Fusion Backbone integrates a micro-sequencer within the FPGA fabric and will configure the individual peripherals and support low-level processing of peripheral data.

The Actel Fusion technology will also give designers unprecedented levels of flexibility by allowing them to easily reconfigure analog block settings to perform widely different functions by simply downloading data from embedded flash memory.

To support this new ground-breaking technology, Actel is developing a series of major tool innovations to help maximize designer productivity. Implemented as extensions to Actel's popular Libero Integrated Design Environment (IDE), these new tools will allow designers to easily instantiate and configure peripherals within a design, establish links between peripherals, create or import building blocks or reference designs, and perform hardware/software verification. This tools suite will also add a comprehensive hardware/software debug capability as well as a suite of utilities to simplify development of embedded soft ARM and 8051 processor-based solutions.

Actel expects initial products based on its Fusion technology to be available in approximately six to nine months.

About Actel

Actel Corporation is the leader in single-chip FPGA solutions. The Company is traded on the NASDAQ National Market under the symbol ACTL and is headquartered at 2061 Stierlin Court, Mountain View, Calif., 94043-4655. For more information about Actel, visit <http://www.actel.com> . Telephone: 888-99-ACTEL (992-2835).

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