PRESS RELEASE

CYPRESS EXPANDS FPGA OFFERING WITH 8,000-GATE DEVICES

Highest Performance FPGAs Offer Full PCI Compliance For All Speed Grades

SAN JOSE, Calif., February 27, 1995 -- Cypress Semiconductor Corporation today introduced 8000-gate versions of its speed-leading pASIC380™ family of field-programmable gate arrays. The new CY7C387A and CY7C388A FPGAs are fully compliant with the PCI Rev2.0 specification for all speed grades. Other FPGAs only offer PCI compliance for the fastest speeds of a given device.

The new Cypress FPGAs provide the industry's highest performance and full utilization of all available resources by combining high-density Vialink™ programming elements with Cypress's VL2.6 CMOS process technology (0.65 micron). By using all available resources, the CY7C387A/388A compete with devices that have higher advertised gate counts but which can not fully utilize all resources because of routing restrictions. The CY7C387A/388A are targeted at a wide array of applications such as logic consolidation, bus interface, and memory controllers, as well as for use in PCI-based systems.

Dan McCranie, Cypress's vice-president of marketing and sales, said, "The addition of the 8000-gate members of our pASIC380 family opens up a large segment of the FPGA market, as well as the gate-array market. It is an indication of our commitment to compete and win in this market. We are projecting strong sales for these products based on their competitive advantages and Cypress's ability to manufacture them in high volumes at low costs."

The CY7C387A offers 114 I/O pins and 8 input/clock pins in a 144-pin TQFP (thin-quad flatpack) package, making it upwardly compatible with the 4000-gate CY7C386A. The CY7C388A is optimized for high I/O applications, with 172 I/O pins and 8 input/clock pins in a 208-pin PQFP (plastic-quad flatpack) package. The new devices complement Cypress current pASIC380A FPGA offerings, which include devices of 1000, 2000, and 4000 gates.

Cypress's pASIC380 family of FPGAs is based on an array of highly flexible logic cells optimized for efficient implementation of high-speed arithmetic, counter, data path, state machine, and glue logic functions. Logic cells are configured and interconnected by rows and columns of routing metal lines and Vialink metal-to-metal programmable interconnect elements. The result is a programming element one-seventh the size of SRAM-based programming elements. The smaller programming element gives the pASIC380 FPGAs one-twentieth the capacitance and resistance of SRAM-based devices, improving speed, reducing power consumption, and providing highly predictable timing delays so minor design changes do not significantly affect performance. It also allows the use of over four times the number of programming elements that SRAM-based devices employ, giving users greater capacity and 100% automatic place and route capability.

The pASIC380 FPGAs are a key part of Cypress's UltraLogic™ programmable logic family. UltraLogic includes the world's fastest complex programmable logic devices (the FLASH370 CPLDs), the pASIC380 FPGAs, and the VHDL-based *Warp3*™ design tool. UltraLogic gives users access to the highest performance CPLDs and FPGAs with a single, open development tool, positioning Cypress as a leader in high-density programmable logic.

Price and Availability

Software support for the new FPGAs is provided in Cypress's *Warp3* development tool. The 8000-gate CY7C388A in a 208-pin PQFP package, available today, is priced starting at $92.75 in 100-unit quantities.

Cypress Semiconductor Corporation is a leader in the design, development, and manufacture of a broad line of high-performance digital integrated circuits, fabricated using its proprietary 0.65- and 0.8-micron CMOS and BiCMOS technologies. Cypress offers a range of products, including PLDs (programmable logic devices), FPGAs (field programmable gate arrays), static RAMs (random access memories), CMOS PROMs (programmable read-only memories) and EPROMs, high performance multichip modules, frequency synthesizer products, FCT logic products, specialty memories, and data communications products.