Xilinx – The Next Generation

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Our mission is to help you explore new worlds, and new applications; to boldly go where no programmable logic device has gone before. And, our next generation of stellar devices are here now; no "science fiction."

We recently announced more than 20 new devices with densities ranging from 800 to 500,000 system gates, all fully supported by our highly acclaimed Alliance Series 1.5 and Foundation Series 1.5 software. A whole new world of possibility is now available, because these devices not only represent the cutting edge in performance and density, they also set new standards for low cost, high reliability, and ease of use.

This unprecedented offering brings you the broadest choice of 3.3V and 2.5V devices available anywhere, in four new families:

- **The XC9500XL family** consists of four 3.3V devices with logic densities ranging from 36 to 288 macrocells (800 to 6,400 gates). These devices are manufactured using advanced 0.35µ Flash technology for the industry's highest reliability in programming and data retention, as well as the lowest device cost and the smallest die size. These are the industry's highest performance CPLDs with pin-to-pin speeds of 4 nanoseconds and system clock frequencies of 200MHz, available in the most popular surface mount technology, including chip-scale packaging. All of our XC9500 products offer the industry's best pin locking and in-system programming capability as well as enhanced JTAG Boundary Scan support.

- **The XC4000XLA FPGA family** consists of eight 3.3V FPGAs ranging in density from 26,000 to 80,000 system gates. The XC4000XLA devices are manufactured with an advanced 0.25µ process that boosts performance by 30 percent over the current XC4000XL product line, at half the cost. The XC4000XLA family is the industry's lowest power, highest performance, full line of 3.3V FPGA products.

- **The XC4000XV family**, first unveiled last October, now consists of five 2.5V FPGAs, with densities from 220,000 to 500,000 system gates, including the newly announced XC40110XV. This second generation of 0.25µ devices offers the industry's highest performance, and includes the largest FPGA devices available today.

- **The SpartanXL family** consists of five 3.3V FPGAs. These new, very low cost devices follow the introduction earlier this year of the 5V Spartan line that features on-chip RAM and broad support for cores. The new SpartanXL products are available in densities ranging from 5,000 to 40,000 system gates.

All of these devices are supported by the Xilinx Foundation Series 1.5 and Alliance Series 1.5 software, which includes the new Xilinx AKA*speed*™ technology that delivers fast compile times and high clock speeds. These tools also support ASIC-like design features such as the reporting of minimum timing delays, prorated for both voltage and temperature. A wide variety of cores are also available, all managed by the Xilinx CORE Generator.

These new products are driving programmable logic into new applications that include digital cameras, digital television, set-top boxes, arcade games, PCMCIA modem cards, GPS driver information systems, and portable phones – applications that previously did not benefit from the many advantages of programmable logic.

And, even after all this, our million-gate Virtex family arrives next quarter, with system-level features that bring out-of-this-world possibilities – light years ahead of anything you've seen before. It's not science fiction, but it does come from the future.

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