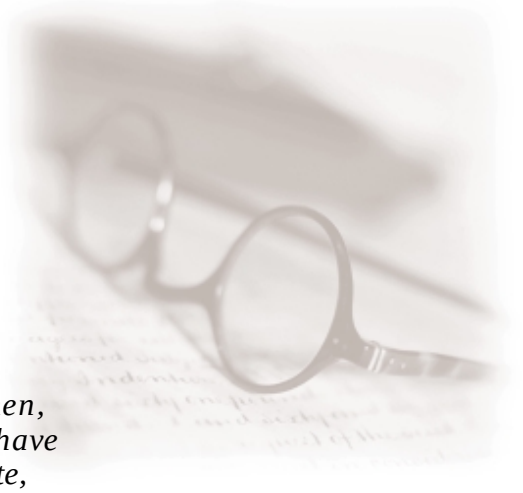
EDITOR
Carlis Collins
editor@xilinx.com
408-879-4519

SENIOR DESIGNER
Jack Farage

BOARD OF ADVISORS
Dave Stieg
Dave Galli
Mike Seither
Peter Alfke

PUBLICATION SERVICES
Ruddle Creative
111 N. Market St., Suite 715
San Jose, CA 95113
Tel: 408-297-3000 or
1-800-7RUDDLE
Web: www.ruddle.com

Xilinx, Inc.
2100 Logic Drive
San Jose, CA 95124-3450
Tel: 408-559-7778
Fax: 408-879-4780



Putting Things in Perspective

Xilinx invented the FPGA just 15 years ago. Since then, programmable logic devices and development tools have changed dramatically. Today, using our million-gate, high-performance, system-level devices, you can create unique designs that were never possible before, get them to market sooner, and keep them in the market longer; your "window of innovation" is practically unlimited.

Before programmable logic, your window of innovation closed when your specification went to engineering because design changes were costly, often delaying product introduction. After FPGAs arrived, you could continue to add features right up to the time your design went to manufacturing, without causing delays or adding costs. Today, with our new Virtex™ FPGA family and our Internet Reconfigurable Logic™ capability, you can continue to innovate, adding new capabilities even after your designs are in the field (including features you haven't even thought of yet). A lot has changed in the last 15 years.

In addition to lower costs, unprecedented device density, and higher performance, there are a number of key factors that make today's programmable logic a key element in the life and profitability of new systems. For example, you can use a fast-growing assortment of intellectual property (cores) to quickly and inexpensively create the most complex and risky parts of your design. You can use a wide array of the most advanced time-saving development tools to enter, simulate, and debug your designs. Plus, along with Internet Reconfigurable Logic, there are a number of striking advances in the application of FPGAs that allow you to upgrade, test, and maintain your FPGA-based designs remotely, adding features and fixing bugs at your customers' locations, anywhere in the world, via the Internet—imagine the possibilities.

In addition to lower costs, unprecedented device density, and higher performance, there are a number of key factors that make today's programmable logic a key element in the life and profitability of new systems.

In the past, custom ASICs were used for high volume, cost sensitive designs. FPGAs were just too expensive and they did not have the raw performance or logic density to make them compelling in many applications. Plus, the FPGA development tools were often difficult to learn and they lacked the high-level features found in ASIC development systems. Now however, all that has changed.

FPGAs now compete very well, on price, performance, and ease of use against custom ASICs and even against many standard off-the-shelf devices. For example, using FPGAs, you can create DSP designs that far outperform any standard DSP device, or create fully-compliant 64-bit/66-MHz PCI designs that cost less and outperform any standard PCI device. Plus, FPGAs offer you the key advantage of profitability: you can get your product to market sooner and keep it in the market longer than with any other method—period.

High performance, high density, cutting-edge innovation, ease-of-use, unique new applications, faster time-to-market, longer time-in-market, peace of mind–that's what you get from today's system-level FPGAs and development tools from Xilinx.

This issue of *Xcell* is intended to show you how far the programmable logic industry has progressed. I wonder what the next 15 years will bring… ✖