

Happy 20th Anniversary, *Xcell* Journal Readers!

Xcell journal

PUBLISHER Mike Santarini
mike.santarini@xilinx.com
408-879-5270

EDITOR Jacqueline Damian

ART DIRECTOR Scott Blair

DESIGN/PRODUCTION Teie, Gelwicks & Associates
1-800-493-5551

ADVERTISING SALES Dan Teie
1-800-493-5551
xcelladsales@aol.com

INTERNATIONAL Melissa Zhang, Asia Pacific
melissa.zhang@xilinx.com

Christelle Moraga, Europe/
Middle East/Africa
christelle.moraga@xilinx.com

Yumi Homura, Japan
yumi.homura@xilinx.com

SUBSCRIPTIONS All Inquiries
www.xcellpublications.com

REPRINT ORDERS 1-800-493-5551



www.xilinx.com/xcell/

Xilinx, Inc.
2100 Logic Drive
San Jose, CA 95124-3400
Phone: 408-559-7778
FAX: 408-879-4780
www.xilinx.com/xcell/

© 2008 Xilinx, Inc. All rights reserved. XILINX, the Xilinx Logo, and other designated brands included herein are trademarks of Xilinx, Inc. All other trademarks are the property of their respective owners.

The articles, information, and other materials included in this issue are provided solely for the convenience of our readers. Xilinx makes no warranties, express, implied, statutory, or otherwise, and accepts no liability with respect to any such articles, information, or other materials or their use, and any use thereof is solely at the risk of the user. Any person or entity using such information in any way releases and waives any claim it might have against Xilinx for any loss, damage, or expense caused thereby.

Twenty years ago this quarter, an applications engineer who had just joined Xilinx from AMD, with prior stints at Zilog and Fairchild, started a technical publication for Xilinx customers. He named it *Xcell*, “The Newsletter for Xilinx Programmable Gate Array Users.”

Two decades later, that Xilinx legend, Peter Alfke, says he fashioned *Xcell Journal* after Fairchild’s now defunct magazine *Progress*. “In those days, FPGAs were a really new and unconventional technology, and we wanted to tell designers how to best use them,” said Alfke. “We used to issue Data Books once a year—this was, of course, before the Internet. So we decided to make *Xcell Journal* a quarterly applications update with a lot of technical detail, how-to content and innovative ideas, as well as silicon, tools and IP availability information.”

Peter and his daughter Karen, at the time a Berkeley student, created the debut issue of *Xcell* in the fourth quarter of 1988. “She brought her Mac down to the office and she did the typesetting and layout for the first five issues,” said Alfke.

The lead story reported on the company’s new Data Book, which contained complete data sheets for the XC2000 and XC3000 device families and for a military-grade version of the XC2000. Issue No. 1 also featured an article on DOS (“All DOS Are Not Created Equal”) and several pieces on the XACT FPGA design tool, the ISE® of its day. One story described XACT as “a large, demanding program, using interactive graphics, requiring megabytes of RAM”—a behemoth that pushed the IBM-PC, which at the time could address only 640 kbytes, “into uncharted water.”

These older issues are fun to read, and not just for the sake of nostalgia. Alfke, still at Xilinx and still involved in applications and technical documentation, points out that some of the content remains fresh and somewhat useful today. So, instead of blabbing about how *Xcell* has evolved over time, I’d like to honor the guy who started an amazing legacy that we hope to continue for at least another 20 years. At right are Peter’s Picks of the best of the oldies but goodies from issues 1 through 28.

Pack rats will have no problem laying hands on them. For anyone who didn’t save every issue that came your way, we’re in the process of placing the content online. You’ll soon be able to find back issues at the *Xcell Journal Archives* page. In the meantime, if you want a specific issue, e-mail me at mike.santarini@xilinx.com with the heading “*Xcell* back issue request,” and I’ll send you an electronic copy.



Mike Santarini
Publisher

Peter’s Picks

#11, 4Q93, page 31:	“Reduce SPROM Standby Current to Zero” by grounding through LDC
#13, 2Q94, page 25:	“Carry and Overflow: A Short Tutorial”
#17, 2Q95, page 30:	“Manchester Decoder in Three CLBs”
#18, 3Q95, page 30:	“Overshoot and Undershoot”
#18, 3Q95, page 36:	“Hold is a Four-Letter Word”—hold-time, that is
#19, 4Q95, page 34:	“User-Defined Schmitt Trigger” with two pins, two resistors
#21, 2Q96, page 35:	“10-Digit Fully Synchronous BCD Counter @ 87 MHz”
#21, 2Q96, page 40:	“A Look at Minimum Delays,” and why they are so elusive
#22, 3Q96, page 28:	“Power, Package and Performance” and how to trade off among them
#24, 1Q97, page 20:	“Trouble-Free Switching Between Clocks,” with no glitches
#24, 1Q97, page 21:	“Demultiplexing 200-MHz Data Streams”
#27, 4Q97, page 27:	“Reduce EMI with a Spread-Spectrum Clock”
#27, 4Q97, page 28:	“The Dangers of Hot Plug-In”
#28, 1Q98, page 22:	“PC-Board Design Considerations”
#28, 1Q98, page 28:	“Self-Initiated Global Reset”
#28, 1Q98, page 29:	“CMOS I/O Characteristics”
#28, 1Q98, page 33:	“Low-Power XC4002XL Achieves 400-MHz Performance” in a self-contained frequency counter