

High-Performance DSP Workshop – For University Professors



University courses in DSP design get a head start.

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The Xilinx System Generator for DSP is a significant advancement, allowing you to quickly model and simulate DSP algorithms in a graphical environment. University professors are now using this software to teach engineering courses that focus on high-performance DSP design

techniques. For courses with labs, students can quickly and easily implement a completed DSP model, in an FPGA, at the computer desktop. This software, combined with Xilinx FPGAs, makes an ideal environment for learning how to create high-performance DSP systems.

To help professors integrate the System Generator for DSP into the engineering curriculum, Xilinx offers workshops on Digital Signal Processing with FPGAs

"THE DSP DESIGN FLOW WORKSHOP IS AN EXCELLENT TRAINING FOR ANY UNIVERSITY PROFESSOR TO BRING TOGETHER A LARGE VARIETY OF TOOLS SUCH AS MATLAB, SYSTEM GENERATOR FOR DSP, ISE, SYNPLICITY, AND MODELSIM. I THINK ALL THE DELEGATES THOUGHT IT WAS AN EXCELLENT COURSE."

— PETER CHEUNG - IMPERIAL COLLEGE - ENGLAND



"I WAS REALLY IMPRESSED WITH THE QUALITY OF THE DSP DESIGN FLOW WORKSHOP. SYSTEM GENERATOR FOR DSP IS A VERY ATTRACTIVE TOOL FOR CONCEPTUALIZING AND IMPLEMENTING HIGH-LEVEL ALGORITHMS TARGETING FPGAs. THE EASY-TO-USE TOOL ENABLED ME TO MANIPULATE DATA FLOW PATHS USING HIGH-LEVEL BLOCK FUNCTIONS."

— FRANK POPPEN - OFFIS (OLDENBURGER FORSCHUNGS UND ENTWICKLUNGSINSTITUT FÜR INFORMATIKWERKZEUGE UND SYSTEME) RESEARCH INSTITUTE - GERMANY

through the Xilinx University Program (XUP). A series of hands-on labs allow professors to step through the process of creating an audio FIR filter and implementing it in hardware, learning how FPGAs are used to create high-performance DSP designs through parallelism.

During the summer of 2002, XUP presented two of these workshops, one at Xilinx headquarters in San Jose, California, and one at Imperial College London. A total of 69 university professors attended from 42 institutions and 13 countries.

Conclusion

The Xilinx System Generator for DSP is finding many uses in industry and academia – there is no faster or easier way to develop DSP designs. For more information on the Digital Signal Processing with FPGAs workshops, go to: www.xilinx.com/univ. ❧