



Virtex-II FPGAs — Product Of The Year

Xilinx recently received the Product of the Year Award from Electronic Products magazine — and we were the only programmable logic supplier to receive this award.

by Xilinx Staff

For 26 years, Electronic Products has held an annual contest to choose the most outstanding products introduced each year. The editorial board at the magazine considers thousands of product introductions based on significant advances in technology or its application, a decided innovation in design, or a substantial gain in price-performance benefits. As usual, picking winners was made difficult by the many impressive products announced during the year.

The Xilinx Virtex™-II FPGA family was recognized as the FPGA platform to address next-generation designs. “Programmable logic has heretofore been limited to relatively simple computational tasks and glue logic functions,” said David Suchman, Digital IC editor at Electronic Products. “Now, for the first time, a programmable platform is available from Xilinx to enable rapid development of today’s technically challenging applications.”

The ever-increasing requirements for higher performance and system-level features are bringing new challenges as

designers develop the next-generation of complex high-performance digital applications such as data communications and DSP systems. Characterized by high logic integration, fast and complex routing of wide buses, and extensive requirements for pipeline and FIFO memory, these new systems exceed the capabilities of current programmable logic devices, which lack the gate capacity, memory, routing resources, performance, and architecture flexibility that is required to fully support these designs. The Electronic Products’ editors judged that the Xilinx Virtex-II series (see Electronic Products, May 2001) also solves the problems resulting from signal integrity, system timing, EMI, and security issues in these complex systems.

The Virtex-II family allows unlimited design changes throughout the development and production phases for optical networks, gigabit routers, wireless cellular base stations, modem arrays, and video broadcast systems. Capable of handling designs from 40,000 to 10 million system gates, Virtex Series FPGAs feature an interconnect architecture for optimizing routing, and an advanced memory array with up to 4.5 Mbits of on-chip memory. An additional feature is the industry’s first digitally controlled impedance technology, which maintains constant impedance even with temperature and voltage fluctuations — eliminating hundreds of termination resistors, saving board space, increasing reliability, and lowering costs.

For more information on the winners, go to www.electronicproducts.com.

“PROGRAMMABLE LOGIC HAS HERETOFORE BEEN LIMITED TO RELATIVELY SIMPLE COMPUTATIONAL TASKS AND GLUE LOGIC FUNCTIONS. NOW, FOR THE FIRST TIME, A PROGRAMMABLE PLATFORM IS AVAILABLE FROM XILINX TO ENABLE RAPID DEVELOPMENT OF TODAY’S TECHNICALLY CHALLENGING APPLICATIONS.” — DAVID SUCHMAN, DIGITAL IC EDITOR AT ELECTRONIC PRODUCTS.