New IP Center

For FPGA Intellectual Property

A new website that includes 20 new and free reference designs, with details on 12 new XPERTS partners.

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Xilinx recently announced the IP Center, an easy to use, comprehensive Xilinx website that offers complete IP solutions. These solutions range from free reference designs, cores, DSP and PCI solutions, to IP implementation tools, third-party cores, specialized system-level services, and vertical application solutions. With the opening of the site, Xilinx also announced 20 new and free reference designs available for download and 12 more partners who have joined the XPERTS consulting program. The IP Center is on the Xilinx website at www.xilinx.com/ipcenter.

"We have a whole new way of helping customers who want to implement system applications on our Virtex FPGAs, be it cores, tools, or consulting. It is all in the Xilinx IP Center," said Babak Hedayati, program director of Core Solutions Marketing at Xilinx. "This is a first for a programmable logic vendor. Using our CORE Generator system, we were first to offer configurable cores over the Internet, and since then we have rapidly expanded our Web-based IP capabilities through the Silicon Xpresso initiative."

"As we introduced new cores or updates over the Web, the benefits to the customer were immediate," Hedayati said. "For example, we were the first company to actually deliver a real compliant 64-bit, 66-MHz PCI solution, and customers were able to immediately download the design and start their implementation as soon as we announced the availability of the product."

System-Level Applications

The system-level solutions area of the Xilinx IP Center offers access to comprehensive information on IP and consulting services for applications such as wireless, networking, XDSL technologies, image and video processing, and computers. Technology solutions such as Xilinx DSP and Xilinx PCI are also covered in detail.

New DSP Reference Designs

The reference designs available in the IP Center include:

- A parameterizable variable-by-variable multiplier for Virtex FPGAs (XCVWARE).

- A pipelined HDL multiplier module that supports signed and unsigned data.

- Fourteen different fixed-point, variable-by-variable multipliers for Virtex FPGAs.

- A Constant Coefficient Multiplier generator (KCM_VGEN) for Virtex FPGAs. It supports 8-, 12-, 16-, and 20-bit data, signed/unsigned, and combinatorial/pipelined versions.

- A parameterizable RAM module using Virtex distributed on-chip RAM and SelectRAM—provided as HDL source code.

- A parameterizable Delay Element module for Virtex FPGAs, utilizing the new Virtex shift-register feature—provided as VHDL/Verilog source code.

- Two fixed-point, complex FFT modules for the XC4000X and Spartan families. It includes a 1024-point, 16-bit complex FFT and a 16- point, 16-bit complex FFT.

More XPERTS

Twelve new third-party consulting companies have joined the Xilinx XPERTS program, bringing the number to more than 40. These experts have experience designing with Xilinx solutions (architecture, software, and IP) and can implement system-level designs or perform IP integration and customization. Some members are focused on the popular Xilinx PCI solution and can integrate the Xilinx PCI cores with customers' unique back-end logic designs. Σ