

The Low-Cost PCI Solution

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Xilinx provides the most cost-effective and highest-performance PCI solution in the market by leveraging the flexibility of Xilinx FPGAs. We make PCI easy to design by providing a complete solution of proven cores, intuitive development tools, and comprehensive support.

Why Xilinx PCI?

By integrating a fully compliant PCI interface with an application-specific back-end design into one FPGA, you can achieve higher integration and higher

performance than other PCI solutions. The flexibility of Xilinx FPGAs makes it possible to update the PCI board, using software alone, in development or in the field. This significantly reduces your design risk and cuts development time.

Furthermore, the Xilinx PCI solution can be customized for a specific application

and, as a result, the highest possible performance can be achieved. Xilinx high-speed FPGAs support zero wait-state burst operations and by integrating scalable, dual-port FIFOs on the chip, our customers have achieved a sustained bandwidth of up to 132 Mbytes per second (the theoretical maximum for a 32-bit, 33MHz PCI interface).

PCI32 XC4000 Devices— The high-performance PCI solution

This solution integrates a PCI interface with up

to 124,000 system gates. The core supports zero wait-state burst operations and a sustained bandwidth of up to 132 Mbytes per second.

PCI32 Spartan – The low-cost PCI solution

This solution integrates a PCI interface plus up to 30,000 system gates at a price below standard chip solutions.

To minimize the learning curve and simplify the design process, Xilinx provides fully proven and predictable PCI cores (LogiCORE PCI) that can be integrated into your design using the standard Xilinx implementation tools. LogiCORE PCI products use Xilinx Smart-IP technology, are easily configured and downloaded with an intuitive user interface from WebLINX (the Xilinx website), and come with VHDL and Verilog simulation models and testbenches.

Xilinx and its partners can also provide reference design examples, prototyping boards, PCI drivers, driver development tools, and design services.

Conclusion

Because Xilinx FPGAs integrate the PCI interface plus 15,000 to 124,000 user gates, no external PLD is required for glue logic. The result is a highly integrated, flexible, one-chip, PCI solution at a lower cost than most standard PCI chip sets.

*For more information, visit WebLINX at:
www.xilinx.com/products/logicore/pci/pci_sol.htm ♦*

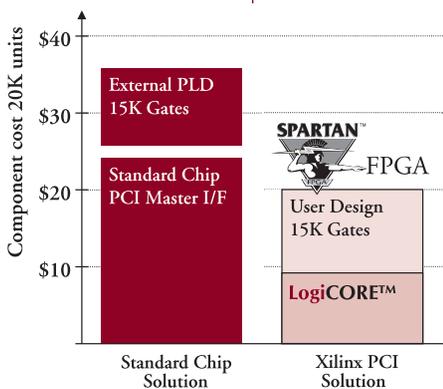


Figure 1: The Xilinx Cost Advantage