The **Real-PCI**™
64/66

New PCI 64/66 Design Kit

Includes a prototyping board, driver development tools, and reference designs.

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Xilinx recently announced The Real 64/66 PCI™ Design Kit, which includes access to the proven Xilinx LogiCORE PCI 64/66 and PCI 32/33 cores, a 3.3-V/5-V universal 64-bit/66-MHz PCI prototyping board, Windows driver development tools, and several PCI Reference Designs. The kit provides the only complete solution for developing 64-bit, 66-MHz fully compliant PCI add-in boards for the PC, server, and workstation markets.
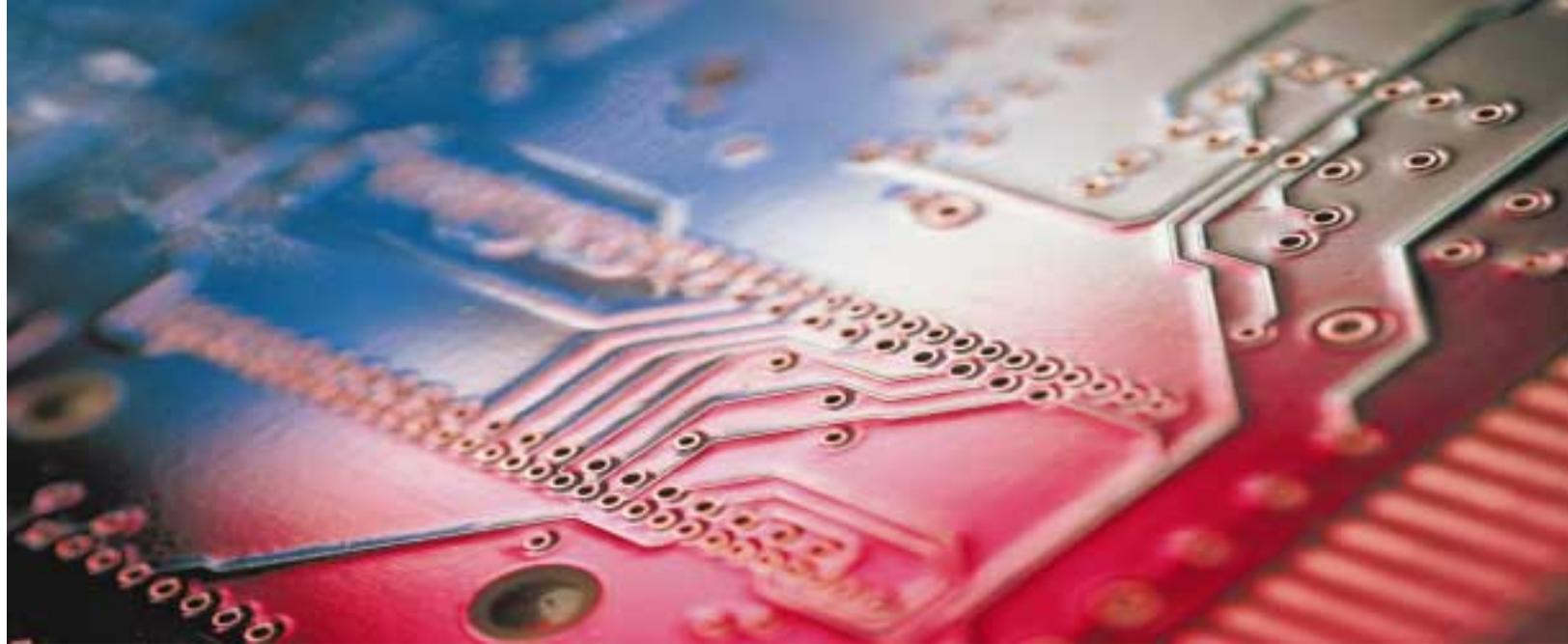
When Xilinx introduced The Real 64/66 PCI in March, last year, it was the industry's first general-purpose 64-bit, 66-MHz PCI solution. This new PCI standard has until now mainly been adopted by companies developing embedded applications. However, with new high-performance PC motherboards entering the market with support for 64-bit/66-MHz PCI, add-in board manufacturers for PCs, Servers, and Workstations started developing products using this new PCI standard.

With this design kit, Xilinx extends its solution to include all tools required to support this emerging market of high-performance PCs with

64/66 PCI capabilities. Not only will the Real 64/66 PCI Design Kit accelerate your time-to-market, but it also addresses the emerging need for concurrent support of 5-V PC motherboards and the next generation, high-performance 3.3-V PC motherboards.

To provide a complete solution and industry leading expertise, Xilinx has partnered with Compuware, the leading provider of software

driver development and debugging tools, and
Nallatech, a member of the Xilinx third-party
XPERTS consulting program, providing PCI
design services and the prototyping board.

The NuMega SoftICE Driver Suite

With The Real 64/66 PCI design kit, you receive
a production version of Compuware's NuMega
SoftICE Driver Suite. These tools accelerate the
development and debugging of Windows device
drivers, offering a full-featured solution for basic
driver development and debugging in Windows
2000, Windows NT, and Windows 95/98 plat-
forms. A standard license for the Compuware
suite is included.

"NuMega SoftICE Driver Suite addresses a
critical need for driver developers seeking high-
quality development tools to increase their pro-
ductivity," said Joe Wurm, vice president and lab
director for the NuMega product line. "This
release of the SoftICE Driver Suite enhances the
debugging and testing capabilities of the suite to
fully encompass Windows 2000 driver develop-

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ment. The SoftICE Driver Suite is a key element
of Compuware's comprehensive strategy for
helping corporations deploy reliable Windows
device drivers."

The PCI64 prototyping board

The Nallatech 64/66 PCI prototyping board
allows you to quickly evaluate the performance
of the Xilinx core in your system. In addition, the

board demonstrates how to build a universal PCI board that automatically changes the I/O characteristics as needed to support both 3.3V and 5V PCI. Additionally, this board shows how to meet the stringent PCI specification requirements for sub-100ms PCI reset timing with FPGAs.

An SDRAM interface to a Small Outline DIMM (dual inline memory module), using the integrated digital Delay Locked Loops of the Xilinx Virtex FPGAs, demonstrates how to build a single-chip solution. With Virtex FPGAs, board-level DLLs are not required because the FPGA can handle clock management, both on and off the chip.

The Xilinx Real 64/66 PCI Core

The Real 64/66 PCI core from Xilinx enables you to design fully compliant PCI bus interface systems, using Xilinx Smart-IP technology to guarantee the critical minimum, maximum, and hold timing required for a true zero wait-state burst operation at 66 MHz. PCI v2.2

compliance is verified through hardware testing, device characterization, and regression testing using the Xilinx internal test bench that simulates more than six million unique combinations of PCI transactions.

With its LogiCORE offerings, Xilinx has enabled thousands of 32-bit and 64-bit PCI designs. This translates to more than twice the revenue generated by the leading chip-set competitor. This is a significant milestone that underscores the inherent benefits of standard FPGAs on the most advanced processes. More important, The Real 64/66 PCI solution allows you to integrate very high-performance, high-density 66-MHz PCI systems tailored to your specific needs.

Conclusion

It's now easier than ever to design fully compliant PCI-compatible systems. The PCI design kit with the Nallatech prototyping board and Compuware software is available now for $17,995 from Xilinx distributors. For more information see www.xilinx.com/pci. Σ