



Industry Support for PCI-X: Catalyst Enterprises, Inc. Is Setting New Standards in PCI-X Test and Development Tools

Catalyst Enterprises, Inc. has been a key supplier of test and development tools for the computer industry since 1992. In July 2000, Catalyst was the first company to provide a working PCI-X bus analyzer. Since then, Catalyst has announced the next-generation TA700 Bus Analyzer/Exerciser for both PCI-X and PCI systems, providing real-time analysis at speeds of up to 100 MHz.

Working closely with the Peripheral Component Interconnect Special Interest Group (PCI-SIG) and other industry leaders, Catalyst equipped the TA700 with special features designed to add to the ease and management of complex tasks including test, debug, verification and optimization. These unique features include a GUI interface with "Easy" and "Advanced" modes that supports basic operations and troubleshoots even under the most difficult conditions.

The TA700 is fully programmable, able to perform multiple independent applications, while permitting the user to upgrade the hardware in the field with a simple authorization code. The real-time continuous performance analysis, made possible through dual-ported FIFOs, provides uninterrupted measurement of eight independent parameters, covering system efficiency, throughput, latency and utilization. As both a hardware and software solution, the TA700 is a powerful tool that combines ease of use with the ability to perform intricate system-level testing.

"As the first provider of a working bus analyzer for PCI-X, Catalyst is setting new standards for PCI-X test and development tools. We see PCI-X as a promising new technology that will grow rapidly," said Nader Saleh, president of Catalyst Enterprises, Inc. "Our TA700 has been designed to quickly and easily handle the most difficult operations so that designers can get their products to market faster."

PCI-X increases performance, eliminates I/O bottleneck

Able to, one, provide up to four times the speed of existing PCI bus technology, and, two, eliminate I/O bottlenecks by allowing simultaneous bus transactions, PCI-X provides the highest level of performance for demanding applications. The 64-bit architecture runs at speeds up to 133 MHz, delivering burst transfer rates of up to 1 GByte/s. Designers can choose whether to put four 66-MHz slots behind each PCI bridge or one 133-MHz slot behind each bridge. This flexibility is critical to meeting specific performance requirements of systems with advanced peripheral devices, multiple PCI-X buses running at different speeds, and maximum slot capacity.

PCI-X is a compatible extension to the existing PCI bus, which is used in almost every PC today, as well as in new applications like routers, NICs and embedded systems. As a fully backward-compatible technology, PCI-X allows significant enhancements, while protecting the customer's investment in current PCI adapter technology.

About Catalyst Enterprises, Inc.

Catalyst Enterprises, Inc. is a privately held company in San Jose, Calif., and has been providing engineers with a range of flexible, high-quality, cost-effective test and development tools since 1992.

The president of Catalyst Enterprises, Nader Saleh, was an original founder of Credence Systems and has been an integral part of several Silicon Valley high-technology companies in the past 20 years.

About the PCI-SIG

Formed in 1992, the PCI Special Interest Group (PCI-SIG) is the organization that develops and manages what has become one of the most successful I/O bus standards ever, the PCI bus specification. Through wide industry support and active developer participation, the PCI bus specification has been a well-maintained, open and non-proprietary solution that is scalable to the needs of today's industry, while also retaining legacy compatibility. In addition to the advancement of the PCI specification, the PCI-SIG educates the industry on the latest developments of the PCI interconnect through technical seminars and via its Compliance Workshops (Plugfests), which provide forums for testing the interoperability of the many PCI-related systems and software in the market.

The PCI-SIG has continued to develop successful extensions to the PCI bus, such as PCI-X and Mini PCI, and remains committed to furthering and advancing the specification. By adding new features and increased functionality, the PCI-SIG is driving the evolution of one of the most successful standards ever created for the computing industry.