New Analysis Probe Captures DDR PCI-X 2.0 Protocol at 266 MT/s

Colorado Springs, Colo., June 30, 2003 - FuturePlus Systems Corp. today introduced the FS2009 PCI-X 2.0 protocol analysis probe. Computer-design engineers will use it in the development of workstations, servers and other systems that employ the new PCI-X 2.0 standard.

The FS2009 provides two key benefits: Non-intrusive probing of the PCI-X bus at 266 MT/s and protocol decode of all PCI-X transactions.

The analysis probe includes both a solder-on adapter and a plug-in interposer for easy, A quickuncomplicated electrical and mechanical connection with minimal effect on the system under test. between an Agilent Technologies logic analyzer and a target system frees the designer from having to configure an entire PCI-X bus. The FS2009 also includes software that quickly automatically configures the logic analyzer to acquire and label the signals over the appropriate input lines for the user.

Protocol-decode software, included with the FS2009, reconstructs PCI-X 2.0 and 1.0 transactions from the acquired data. The software executes on the logic analyzer to display key bus signals, showing transaction type, address, and data; as well as key status conditions such as wait states and retries. A color-coded display permits rapid identification of specific transaction types.

Key FS2009 Specifications

- "Supports PCI-X 1.0, PCI-X 2.0 Mode 1 and 2.0 Mode 2 DDR
- "Full-speed 266 MT/s data transfer rate (133 MHz clock)
- " 32-and 64-bit bus support
- " 3.3 and 1.5 volt operation
- " Operates with Parity or ECC
- "Triggers on complex sequence of events and filters on data
- " PCI-X data may be viewed on a PC or workstation using the Agilent Off-line Analysis software

Two Options for Connection to the Target System

Users may connect the analysis probe to a target system using a solder-on flex circuitadapter or a plug-in interposer, while leaving the target's PCI-X connector available for application requirements.

The FS1021 solder-on flex circuit adapter is designed to be soldered to through-hole pins on the target's PCI-X connector. This method offers minimal electrical intrusion and high bandwidth

The FS1022 interposer/extender adapter provides a fast, easy connection with minimal mechanical intrusion. This adapter inserts directly into the target PCI-X connector, while

also accommodating an application card to occupy the probe's extender socket. One of each adapter is included with the FS2009 analysis probe.

Price and Delivery

The FS2009 has a U.S. list price of \$13,000. Delivery is approximately six weeks ARO.

About PCI-X 2.0

PCI-X 2.0 is a new, higher-speed version of the conventional PCI standard. The new standard supports signaling speeds up to 533 mega-transfers per second (MT/s). PCI-X 1.0 defined PCI-X 66 and PCI-X 133 devices that transferred data up to 133 MTS, or over 1GB/s for a 64-bit device. The new PCI-X 2.0 standard can provide up to 533 MT/s, or 4.3 GB/s of bandwidth, 32 times faster than the first generation of PCI. PCI-X 2.0 is built upon the same architecture, protocols, signals, and connector as traditional PCI. Hardware and software compatibility with previous generations of PCI and PCI-X allows new designs to connect immediately with hundreds of currently available PCI and PCI-X products.

Summary of PCI-X 2.0 Features

- " Doubles and Quadruples PCI-X bandwidth.
- "Full hardware and software backward compatibility to previous generations of PCI.
- " Builds upon tens of man-centuries of development.
- "Uses the same form factor, pin-outs, connector, bus widths, and protocols."
- " Enables 10 GB Ethernet, 10 GB FibreChannel, InfiniBand™ Architecture, and other IO technologies.
- " Full RAS support including ECC.
- "Performance 32 times higher than the first generation of PCI.

About FuturePlus Systems Corp.

FuturePlus Systems Corporation is a privately held manufacturer of measurement and debugging tools for the computer industry. Founded in 1991, FuturePlus Systems Corporation is a Premier Solution Partner in Agilent Technologies' Value-Added Business program. Agilent is a designated official distributor of FuturePlus Systems products. More information about FuturePlus Systems Corporation may be found on the web at www.futureplus.com.