

EASY, AFFORDABLE, POWERFUL



ASSET INTERTECH

SCANWORKS® FOR HIGH-SPEED BUSES

Take advantage of Intel® IBIST, a next-generation embedded test technology!

WHY SCANWORKS FOR HIGH-SPEED BUSES?

More and more high-speed buses are being implemented on printed circuit boards today. PCI Express, Serial ATA, LVDS, Fibre Channel, Gigabit Ethernet and others are all being used for chip-to-chip interconnections on circuit boards. These types of buses often behave more like analog signals than digital. And the boards that feature these types of buses are often very densely populated with chips, making them more difficult to test because of the limited physical access to device pins and test pads. As a result, structural test methods are needed that do not depend upon physical access. Two test technologies, Intel IBIST and IEEE 1149.6, have been developed to address this situation. ASSET ScanWorks is the only test platform to implement tools for both of these new technologies on the same test platform. Now, with ScanWorks, test engineers can develop, apply and diagnose traditional 1149.1 JTAG tests, Intel IBIST tests for high-speed buses such as PCI Express, and 1149.6 tests for AC-coupled buses with differential signaling and speeds in the 1 to 10 Gbps range.

SCANWORKS INTEL® IBIST TOOLS

What is it?

ScanWorks Intel IBIST Tools makes Intel's next generation test technology easy to use by test engineers. ScanWorks functions as the interface for the embedded IBIST technology. IBIST will be embedded in Intel's next-generation processors with the intent that it will reduce design validation and test costs significantly. The ScanWorks Intel IBIST Tools provide the ability to quickly develop IBIST tests and apply them to boards with high-speed buses such as PCI Express, Serial-ATA and others. No other tool set is available for IBIST at this time.

SCANWORKS IEEE 1149.6 TESTING

What is it?

The IEEE 1149.6 standard was developed for advanced AC-coupled digital networks, many of which feature differential signaling. Some types of systems, such as high-speed fiber-optic switching equipment, already feature hundreds, if not thousands, of these high-speed serial links. With the IEEE 1149.6 capabilities of ScanWorks these buses can be tested at-speed. ScanWorks' automatic test generation tool examines the design of a PCB to determine whether IEEE 1149.6 devices are present and if IEEE 1149.6 testing is needed. If it is, ScanWorks will automatically generate the IEEE 1149.6 test patterns and include them into a test suite with other types of tests, such as traditional IEEE 1149.1 JTAG tests, for the PCB.