



Xgig[®] Generator SAS/SATA Traffic Generation to 6 Gb/s

Overview

Viavi Solutions continues its tradition of providing best-of-breed tools to assist storage equipment designers, testers, and manufacturers to develop and debug their products with the introduction of its latest tester, the Xgig[®] Generator.

Part of the Xgig platform of design and test tools, the Generator connects to users' systems and supports arbitrary creation of SAS protocol traffic at 1.5, 3.0, or 6.0 Gb/s, and SATA traffic at 1.5 and 3.0 Gb/s, allowing emulation of either SAS or SATA devices. The tool also includes support for the SAS sub-protocols, Serial SCSI Protocol (SSP), SATA Tunneling Protocol (STP) and SAS Management Protocol (SMP). For maximum usability, Generator's user control is via either a Graphical User Interface (GUI) or an Application Programming Interface (API). With Generator, companies can accelerate bring-up, regression, and manufacturing testing—to name just a few possibilities.

Exceptional Capabilities

The Generator builds upon the proven Xgig platform. Xgig employs a flexible chassis-and-blade hardware architecture that supports multiple protocols. Utilizing this architecture and the Viavi 6 Gb/s 4-Wide blade with dual mini-SAS connectors, the Generator allows bidirectional SAS or SATA traffic creation and emulation up to 8 ports per chassis. The double-width blade occupies two slots in a 4-slot Xgig chassis¹. Using the Xgig's multi-function capabilities users can configure the Generator function to any other supported Xgig SAS/SATA function, such as Analyzer or Jammer, simply by toggling software switches.²

Xgig also provides flexibility to its users by offering either port synchronization, or the ability to support many users. The Xgig platform's cascade function allows cascading of multiple Xgig chassis together to form a "sync group". Sync groups can provide anywhere from 2 to 32 SAS/SATA synchronized ports. In noncascaded scenarios, Xgig can support a maximum of 32 simultaneous users.

Key Features

- Part of the best-of-breed Xgig platform of design and test tools
- Generates arbitrary SAS (SSP, SMP, and STP) and SATA protocol traffic
- Operates at speeds of 1.5, 3.0, and 6.0 Gb/s
- Includes SATA-IO approved SATA Compliance Test Suite (CTS) for UTD 1.4 (pending approval)
- Utilizes the simple-to-use Xgig Maestro GUI software
- Runs on Windows XP, Vista, 2000 (Professional and/or Server), and 2003

Benefits

- Licensing of one, two, or four Generators per blade allows users to purchase only what they need, when they need it
- Having both GUI and API options allow control from simple commands to complex regression test libraries, making the tool useful to a range of users
- When combined with an Analyzer license and the included SATA CTS, the Generator and Xgig platform becomes an all-in-one test bench for SATA UTD 1.4 compliance

