

Xgig Exerciser Host Test Stand

for PCI Express® 6.0

Provides connectivity and power to a PCIe® adapter card endpoint for testing and qualification

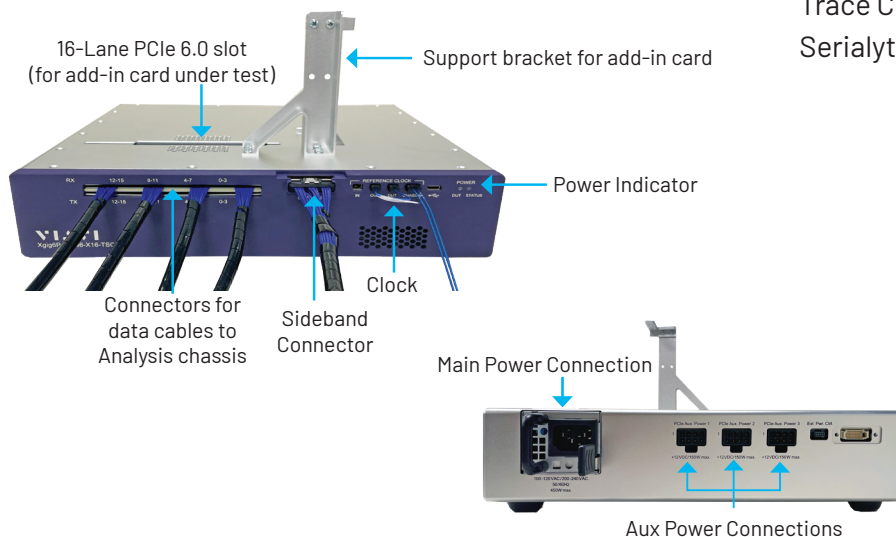
VIAVI Solutions Xgig® Exerciser Host Test Stand, the Xgig6P-PCIe6-X16-TSC, is used with the PCIe 6.0 Exerciser operating in host emulation mode. It provides consistent, repeatable capture of link training, equalization negotiation and other information. The Test Stand provides a PCIe CEM slot for connectivity and power to the adapter card endpoint Device Under Test (DUT). It supports testing of Ethernet, RAID controllers, graphics cards and many other device functions. The Exerciser Host-mode Test Stand supports side-band signaling and triggering connections and uses custom, high-performance cabling (included) to connect to the Analysis Platform.

The Test Stand complements the Exerciser and is intended for developing, debugging and performance tuning PCIe adapter cards and their controllers and firmware. Bi-directional PCIe 6.0 protocol data across 16-lanes and at 64 Gb/s can be transferred through the test stand between DUT and exerciser platform.

The Test Stand uses high-speed linear signal redrivers to buffer the high-speed data signals ensuring clean signals are delivered to the Analysis Platform chassis and DUT device.

Key Features

- Operates up to 64 GT/s at PCIe 6.0 data rates
- Downward compatible with PCIe data rates of 2.5, 5.0, 8.0, 16.0 and 32.0 GT/s
- Supports link widths up to 16-lanes
- CEM adapter card endpoint DUT devices plug directly into the Test Stand with support from an included mechanical bracket
- Data path uses high-speed redrivers to ensure good signaling
- Supports automatic link tuning for optimum communication and lowest BER
- Modular, replaceable 450W power supply powers Test Stand and DUT
- Provides additional auxiliary power for high-power cards, up to 300W nominal, with included cables
- Size: Base Pod: 300x 280 x 70 mm (DxWxH)
- Works with the VIAVI Xgig software tool suite: Trace Control, Trace View, Expert™, Serialytics™



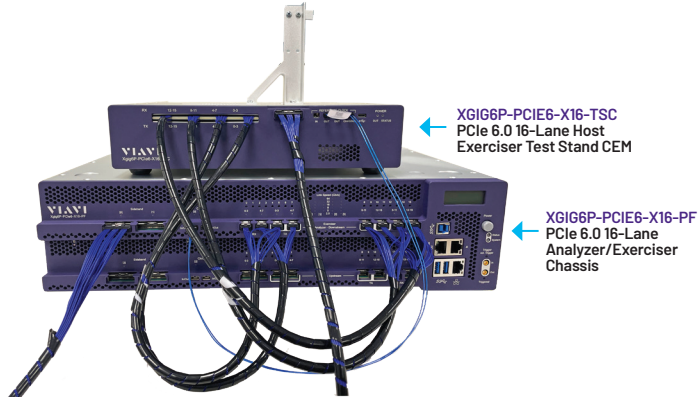
Application

Working together with the Xgig6P-PCIe6-X16-PF Analyzer/Exerciser chassis, the Test Stand enables debug and verification of new controller ICs, firmware tuning, and validation of application software.

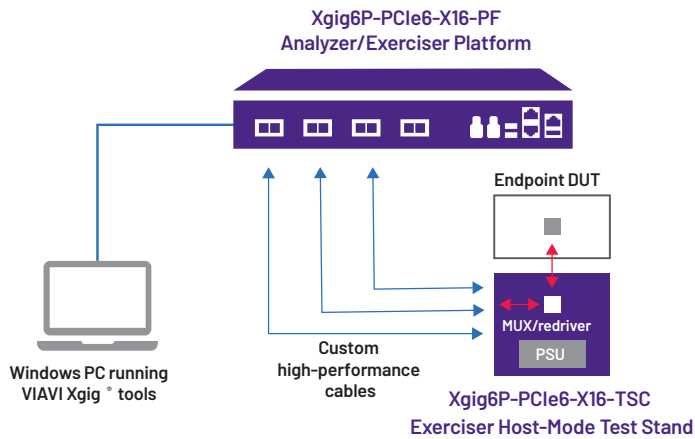
Setting up the Test Stand for operation is easy. Connect the cables between the Test Stand and the 6P16 system chassis. Next, install the Adapter Card DUT into the Test Stand and secure to the support bracket. Plug in AC power to both the system chassis and Test Stand, and power-on the chassis. The Xgig analysis tools which are loaded onto a Windows PC will give full control of the test bench, enabling the setup, execution and analysis of results.

The adjacent photo shows the test stand with the 6P16, while the corresponding block diagram indicates the signal data flow.

In operation, the Exerciser function of the 6P16 system chassis transmits PCIe protocol stream to the Test Stand, which electrically buffers the signals and forwards them to the Device Under Test. Responses transmitted by the DUT are electrically terminated at the Test Stand to ensure good signal integrity and are retransmitted to the 6P16 system platform. The analysis function determines if the response is correct as expected. Real-time branching is executed by the Exerciser to maintain an active PCIe link.



VIAVI PCIe 6.0 Host Test Stand (top) shown with the 6P16 Analyzer/Exerciser chassis



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Ordering Information

Part Number	Description
XGIG6P-PCIe6-X16-TSC	Xgig 16-lane Exerciser Host Test Stand for PCIe 6.0
XGIG-INTPSR-A-Hx (x=1,2,3,4)	1-year extended hardware warranty



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