

VIAVI

Xgig[®] 5P16 Analyzer/Exerciser Platform

for PCI Express[®] 5.0

Provides 16-lane full-speed data capture and error injection, enabling detailed functional and performance analysis of PCIe protocol.



The Xgig 5P16 is a system platform that allows for simultaneous protocol analysis for PCIe 5th generation protocol traffic at all layers of the stack. The exerciser capability supports compliance testing and advanced debug. It supports link speeds to 32 GT/s and widths up-to 16-lanes.

The Xgig 5P16 analysis system is the latest addition of PCI Express 5.0 Analyzer test tools to the family of VIAVI protocol test products. Multicolored LEDs on the front panel specify Link Speed, Lane Width, and Signal Quality. In today's complex, multiprotocol environments where integrated analysis with other interfaces such as Ethernet, SAS, and FC are required, the Xgig 5P16 connects with other VIAVI protocol analyzers designed for those protocols to provide time correlated multi-protocol views.

The Xgig 5P16 chassis has 256GB of memory; 128GB for upstream and 128GB for downstream traffic capture. The chassis provides advanced PCIe and NVMe level trigger and search capabilities designed to reduce debug and problem resolution time. Additional features include interposer auto-tuning, configuration space viewer, PCIe link performance measurements, trace view packet compression, and sideband signal triggers.

Key Features

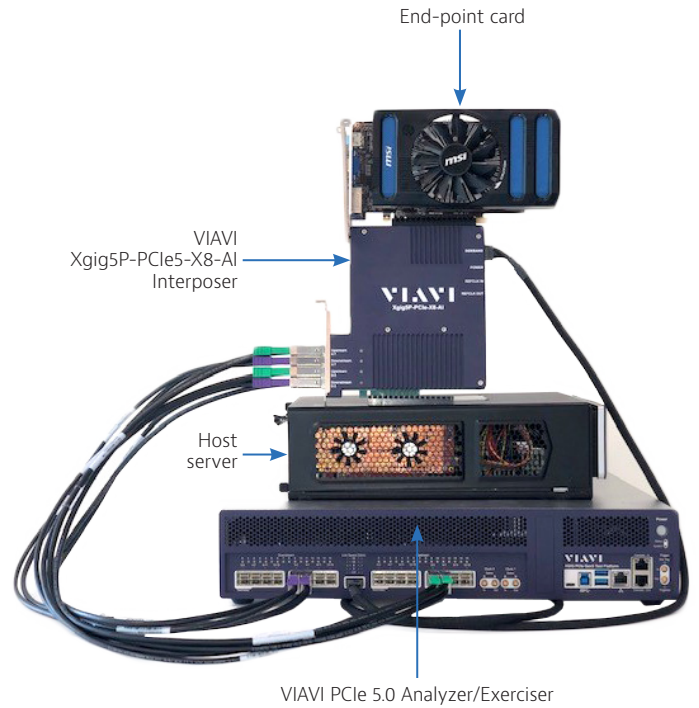
- 32GTps, PCIe 5.0 data rate operation. Fully compatible with other PCIe data rates of 2.5, 5.0, 8.0 and 16GTps
- Link widths to 16-lanes, including 1-, 2-, 4-, 8-lanes
- 256GB memory (128GB upstream and 128GB downstream)
- Memory segmentation for capture of multiple traces
- Host-Client connection for remote debugging using Ethernet or local debugging using USB
- SMB capture and trigger for NVMe Management Interface (NVMe-MI) observability
- Supports full Analyzer functionality together with Exerciser operation
- The Auxiliary ports allow multi-chassis operation
- Decodes all PCIe and NVMe traffic at all layers of the stack including the TLP, DLLP, and PHY layer logic sub-blocks
- Flexible trigger events include training sequences, ordered sets, queue pairs, PRPs, SGL, SMB, etc.
- Cascade captures from up to four Xgig chassis into a single trace view
- Full support of PCI Express LTSSM analysis
- Field replaceable modular fan and power supply
- LED's give quick indicators of power and status
- Size (W x D x H): 17.2 x 16.8 x 3.2 inches; 43.7 x 42.7 x 8.1 cm
- Weight: 25.4 lbs; 11.5 kg
- Power: 100 – 240 VAC, 900W maximum
- Includes one-year hardware and three-year software warranties
- Works with the VIAVI Xgig software tool suite: Trace Control, Trace View, Expert
- Supported by a wide variety of interposers (CEM, U.3, etc.)

Application

The 5P16 hardware chassis, together with firmware and Xgig software tools support the latest PCIe and NVMe specifications. Analysis will alert the user to all protocol errors at every layer of the PCIe stack, including state and sub-state level errors within the LTSSM viewer.

A full complement of Interposers and probes is available enabling the Xgig 5P16 to attach to all popular PCIe and NVMe connector interfaces. Interposers include CEM, U.2/U.3, M.2, EDSFF and more. Using time-synchronized packet trace view, the Xgig 5P16 supports the SMBus status to be shown alongside PCIe or NVMe packets. The following photo and diagram show an example test configuration of the 5P16 system.

When purchasing the 5P16 platform you must select appropriate analyzer and/or exerciser licenses, and interposers to fit your specific application requirements.

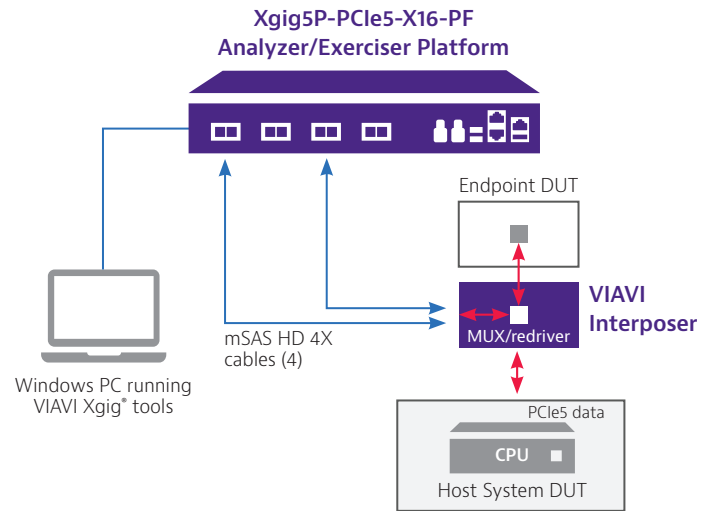


Kit Contents

Item	Description	Qty
1	Xgig5P-PCIe5-X16-PF, 16-lane chassis for PCIe 5.0	1
2	Mechanical accessory kit (includes: Cat5e and USB cables, USB recovery drive, power cord)	1
3	Rack mounting tray	1
4	Hard-shell, wheeled travel case with padding	1

Ordering Information

Part Number	Description
Xgig5P-PCIe5-X16-PF	16-lane, 32GTps PCIe 5.0 Analyzer/Exciser Platform Chassis with 1-yr HW and 3-yr SW maintenance
Xgig5P-PCIe5-X16-PF-H1	Optional 1-year extended hardware warranty
Xgig5P-PCIe5-X16-PF-M1	Optional 1-year extended software maintenance



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