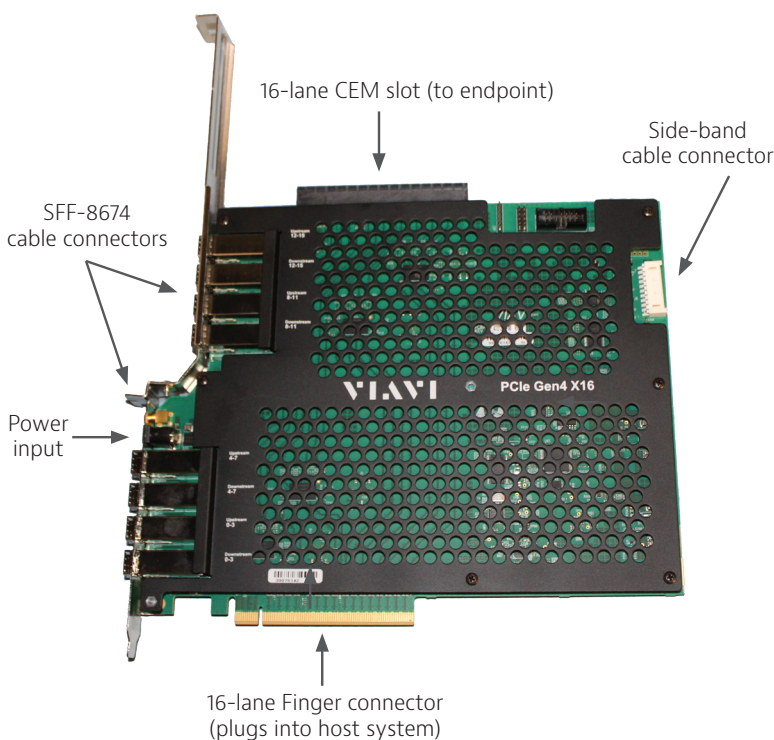


VIAVI Xgig 16-lane CEM-slot Interposer for PCI Express® 4.0

Provides data signal connection between a System-Under-Test and VIAVI Analyzer.

VIAVI Xgig4K-PCIe4-X16-AI Active Interposer provides connection between the VIAVI PCIe 4.0 Analyzer/Jammer chassis and system under test. The Interposer installs into a PCIe CEM slot that is common on many servers, workstations, and desktop PCs. The Interposer provides a data signal tap of communication between host and endpoint devices. It operates at the 16GTps, PCIe 4.0 rate, across 16-lanes (bi-directional).

This interposer uses high-speed linear signal redrivers to buffer the system data signals across the interposer between PCIe slot and PCB fingers. This design ensures a clean signal is delivered to the Analyzer for reliable protocol capture and analysis.



Key Features

- Supports link widths up to 16-lanes
- Operates up to 16GTps, PCIe 4.0 data rates
- Downward compatible with PCIe data rates of 2.5, 5.0 and 8.0GTps
- Top edge 16-lane CEM slot connector accepts all end-point DUT adapter cards
- Bottom edge 16-lane PCB finger connector installs into host test system's 16-lane PCIe slot
- Supplied with eight high-quality SFF-8674 equivalent custom cables for Analyzer attachment
- Data path uses high-speed linear redrivers to ensure good signal capture with minimal tuning effort
- Supports PCIe side-band signal triggering and capture via custom cable
- Interposer power is independent of host system. A 120/220 AC in, 12V/3A DC out power supply included
- Custom bracket enables secure chassis and endpoint card installations
- LED's give quick indicators of power and operation
- Format: Design based on 16-lane Card Electromechanical (CEM) specification
- PCB size: 254mm deep X 212mm tall X 15mm thick
- Works together with the VIAVI Xgig4K-PCIe4-X16 Analyzer/Jammer chassis
- Supported by VIAVI Analyzer tools for trace capture with filter, trigger and more
- Provides consistent, repeatable capture of link training, equalization negotiation and other data
- Supports error injection for deep system analysis

Applications

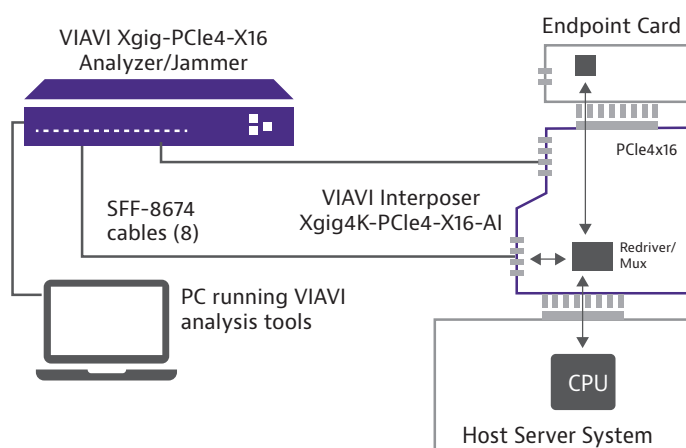
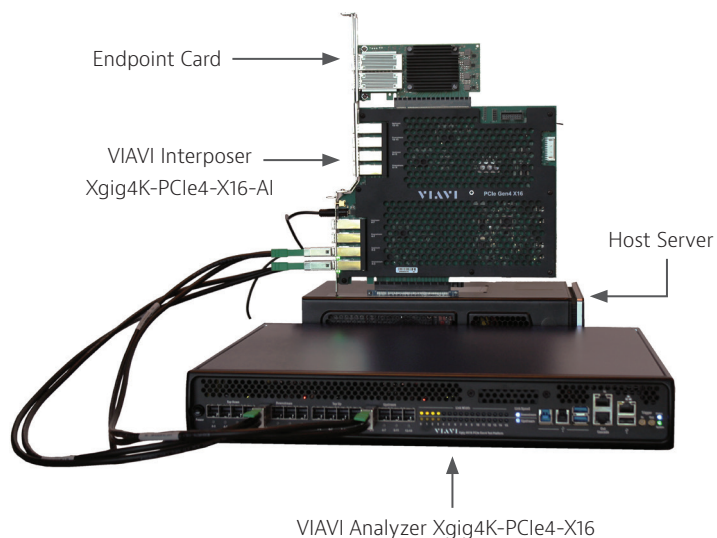
Working together with the PCIe 4.0 Analyzer/Jammer chassis, the Interposer enables debug and verification of new hardware ICs, new system hardware implementations, FPGA firmware, validation of system BIOS and software, and for manufacturing test.

The Xgig4K-PCIe4-X16-AI Interposer is inserted into a 16-lane PCIe slot in the host server system, and an endpoint card is inserted into the top 16-lane connector creating the test data path. Cables connect the Interposer to the VIAVI protocol Analyzer/Jammer chassis.

The following photo shows a typical application, while the corresponding block diagram indicates the signal data path. Note that this interposer requires an open chassis while in use.

When operating in Analyzer mode, the DUT data is captured (tapped) from both the upstream and downstream data paths as inputs to the Analyzer. When operating in Jammer mode, or Analyzer/Jammer mode, data flows into and out of the Analyzer.

VIAVI offers a variety of interposer types for connecting into different PCIe system applications, including U.2, M.2 and others.



Ordering Information

Item	Description	Qty
1	Xgig4K-PCIe4-X16-AI, PCIe 4.0, 16-lane CEM interposer adapter card	1
2	SFF-8674 custom high-performance cables	8
3	Sideband cable	1
4	Power brick, 120/220 input, 12V/3A output	1
5	Quick Start Guide	1

VIAVI Part Number	Description
Xgig4K-PCIe4-X16-AI	16-lane, 16Gbps PCIe 4.0 CEM interposer
Xgig4K-PCIe4-X16-AI-H1	1-year extended hardware warranty

* CEM: Card Electromechanical Specification (a PCI spec)



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