

VIAVI

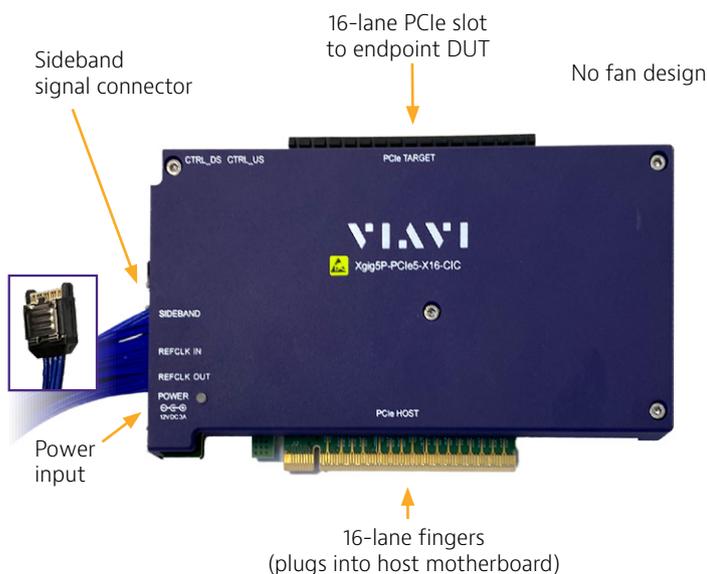
Xgig 16-lane CEM Interposer

for PCI Express® 5.0

Provides a tap of data signals between a host system and adapter card for the VIAVI Analyzer

VIAVI Solutions Xgig® 16-lane CEM slot Interposer provides connection between the VIAVI PCIe 5.0 Analyzer/Exciser/Jammer platform and a system under test. The Interposer installs into a 16-lane PCIe CEM slot which is common on many servers, workstations, and desktop PCs. The Interposer provides a tap of the data signal communication between host and endpoint devices for input to the Analyzer chassis. It operates at the 32GTps, PCIe 5.0 rate, across 16-lanes (bi-directional).

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



Key Features

- Supports link widths up to 16-lanes
- Operates at 32GT/s PCIe 5.0 data rates, and is compatible with PCIe rates of 2.5, 5.0, 8.0 and 16GT/s
- A top edge 16-lane CEM slot connector accepts all endpoint DUT adapter cards
- Bottom edge 16-lane PCB finger connector installs into host test system's 16-lane PCIe slot
- Supplied with high-quality custom data cables for Analyzer attachment
- Data path uses high-speed linear redrivers to ensure good signal capture with minimal tuning effort
- Supports Analyzer 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 converter is included
- Custom, exchangeable brackets enable secure chassis and endpoint card installations
- LEDs give quick indication of power and operation
- Format: Design is based on the 16-lane Card Electro-Mechanical (CEM) specification
- Size: 180.4mm deep x 105.1mm tall x 18.28mm thick
- Works together with the VIAVI Xgig5PK-PCIe5-X16-PF Analyzer/Exciser/Jammer chassis platform
- Supported by Xgig tool suite including Trace Control, Expert™ and Serialytics™
- Provides consistent, repeatable capture of link training, equalization negotiation and other data
- Supports error injection for deep system analysis

Applications

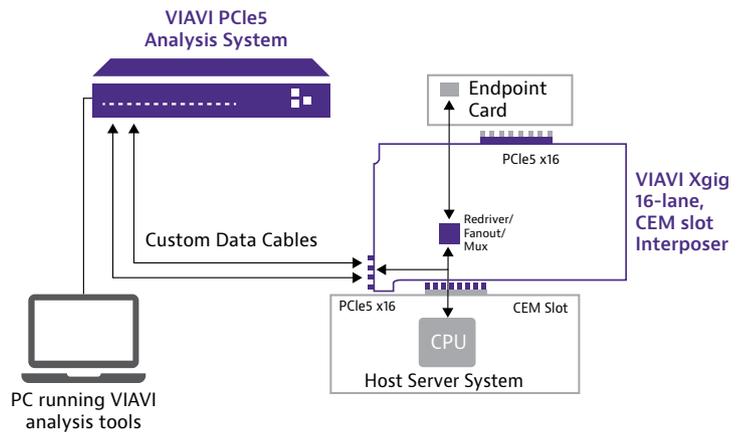
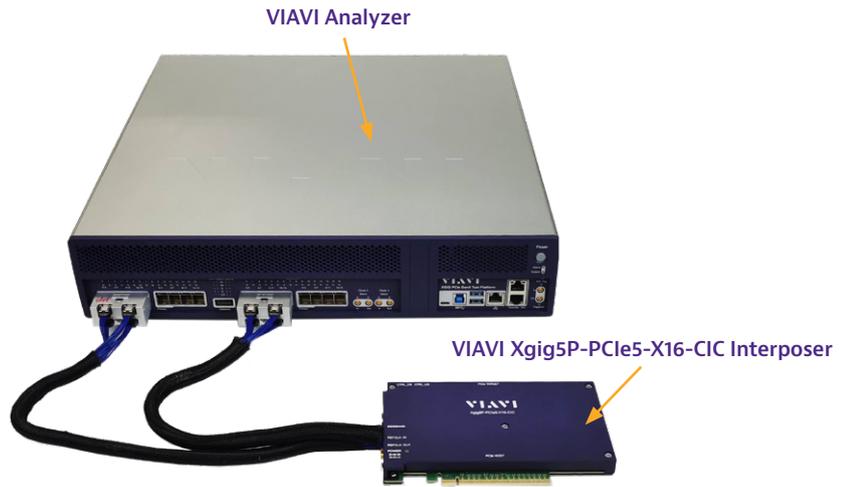
Working together with the VIAVI PCIe 5.0, Analyzer/Exciser/Jammer platform, this Interposer enables debug and verification of new ICs, new system hardware designs, FPGA firmware, validation of system BIOS and software, and supports manufacturing test.

The Xgig 16-lane, CEM slot Interposer is inserted into a 16-lane PCIe slot in the host system, and an endpoint card is installed into the top 16-lane slot connector creating the test data path. Cables connect the Interposer to the VIAVI protocol Analyzer/Exciser/Jammer platform chassis.

The photo to the right shows the Interposer connections to the Analyzer chassis, while the diagram indicates the signal path with DUT devices attached. Note that this Interposer requires an open DUT system chassis while in use.

When operating in Analyzer mode, the DUT data is captured (tapped) from both the upstream and downstream signal paths as inputs to the Analyzer. When operating in Jammer mode, or Analyzer/Jammer mode, the Interposer data path is switched to route data into and out of the Xgig analysis system.

VIAVI offers a variety of other Interposer types for connecting into many popular PCIe system applications, including other CEM, U.2, M.2, EDSFF, Flying-Lead and others.



Kit Contents

Item	Description	Qty
1	Xgig5P-PCIe5-X16-CIC, 16-lane CEM Interposer card with cables for PCIe 5.0	1
2	Sideband cable for PCIe5	1
3	MCX coax cables (for optional clock)	2
4	Power brick, 120/220 input, 12V/3A output	1
5	Replaceable bracket kit	1
6	Quick Start Guide	1

Ordering Information

Part Number	Description
Xgig5P-PCIe5-X16-CIC	Xgig 16-lane, 32GTps CEM* Interposer Kit for PCIe 5.0
XGIG-INTPSR-C-Hx (x=1,2,3,4)	x-year extended hardware warranty

*CEM: Card Electro-Mechanical Specification (a PCIe spec)



Contact Us

+1 844 GO VIAVI
(+1 844 468 4284)

To reach the VIAVI office nearest you,
visit viavisolutions.com/contact

© 2023 VIAVI Solutions Inc.
Product specifications and descriptions in this document are subject to change without notice. Patented as described at viavisolutions.com/patents
xgig-16-lane-cem-interposer-ds-snt-nse-ae
30193520 901 0123

viavisolutions.com