

VIAVI

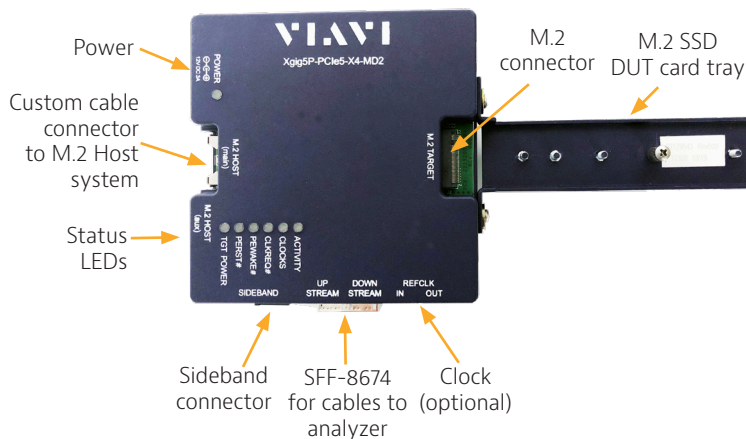
Xgig M.2, 4-lane Interposer

for PCI Express® 5.0

Provides a tap of host-system to M.2 PCIe SSD data signals for input to the VIAVI PCIe 5.0 Analysis System

VIAVI Solutions Xgig® 4-lane, M.2 Interposer, the Xgig5P-PCIe5-X4-MD2, is an Active Interposer with a design optimized for M.2 SSD development. This Interposer enables protocol analysis of communication between a M.2 PCIe SSD and the host system. It supports use in server, workstation, desktop and notebook PCs, and other system types. This Interposer works with M.2 card types 2230, 2242, 2260, 2280 and 22110. Bidirectional PCIe 5.0 protocol data on each of 4 lanes is captured at up to 32GT/s rate for analysis. High-quality, low-loss, custom SFF-8764 cables are supplied for connection into the VIAVI Analyzer.

This Interposer uses high-speed linear signal redrivers to buffer the system data signals ensuring a clean signal is delivered to both the Analyzer and the devices-under-test (DUT) for accurate protocol capture and analysis.



Features

- Supports PCIe links of up to 4-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
- M.2 PCIe SSD DUT plugs directly into the Interposer
- Supports card types 2230, 2242, 2260, 2280 and 22110
- Custom cable with PCB connects to host system DUT
- Supplied with two high-quality SFF-8674 equivalent custom cables for Analyzer attachment
- Data path uses high-speed linear redrivers to ensure good signal capture with little or no tuning
- Supports Analyzer side-band signal capture and triggering
- Supplied with two clock connectors and cables
- Interposer power is independent of host system
- A 120/220 AC in, 12V/3A DC output converter is included
- LEDs give quick indicators of power and status
- Size: (L x W x H): 103 mm x 103 mm x 30 mm
- Works together with the VIAVI Xgig 5P16 or 5P8 analysis platform chassis
- Provides consistent, repeatable capture of link training, equalization negotiation and other data information
- Supports error injection for deep system analysis
- Supported by Xgig tool suite including Trace Control, Expert™ and Serialytics™

Applications

Working together with the VIAVI Xgig 5P16 or 5P8 PCIe 5.0 analysis platform, the Interposer enables debug and verification of new ICs, M.2 PCIe SSD cards, system implementations, firmware development, validation of system BIOS and software, and for manufacturing test. It supports full decode and analysis of data traffic and link states.

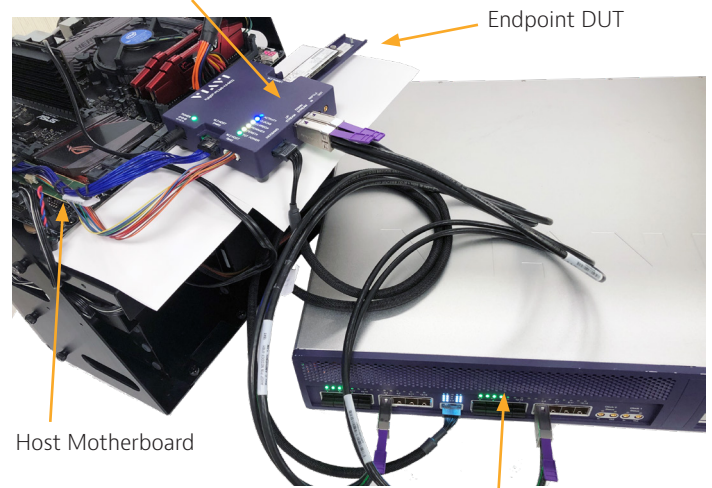
To use the Xgig5P-PCIe5-X4-MD2 Interposer, first the PCIe SSD is mounted into the Interposer M.2 Card tray. Cables are attached to connect the Interposer to the VIAVI analysis platform chassis. Then the M.2 DUT PCB and cable is installed into the system under test and the cable plugged into the Interposer pod.

The photo to the right shows a typical application, while the block diagram below indicates the signal data path. Data flows between the host CPU and the SSD DUTs as normal and is "tapped" for use by the Analyzer.

When operating in analyzer mode, both upstream and downstream data are tapped as inputs to the analyzer ports. When operating in Analyzer/Jammer mode, data flows through the Analyzer chassis. When operating in Analyzer/Exciser mode, data flows through the Interposer to the DUT.

VIAVI offers a variety of other Interposer types for connecting into different PCIe system applications, including CEM slot cards, U.2 and others.

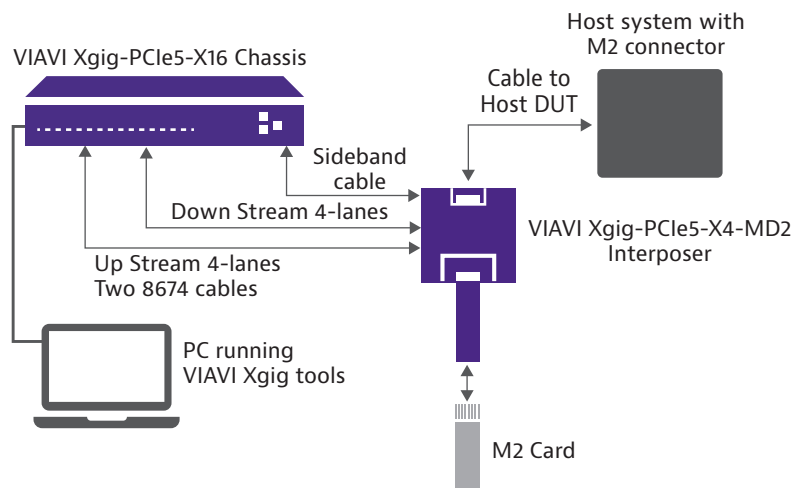
VIAVI Xgig 4-lane, M.2 Interposer for PCIe 5.0



Host Motherboard

Endpoint DUT

VIAVI Xgig5P-PCIe5-X16-PF Analyzer



Kit Contents

Item	Description	Qty
1	M.2 4-lane Interposer pod for PCIe 5.0	1
2	M.2 DUT cable and PCB	1
3	SFF-8674 custom high-performance cables	2
4	Sideband cable (to Analyzer)	1
5	MCX 50-Ohm coax cables for optional clock	2
6	Power brick, 120/220 input, 12V/3A output	1
7	Quick Start Guide	1

Ordering Information

Part Number	Description
Xgig5P-PCIe5-X4-MD2	M.2 Active Interposer, 4-lane, 32GT/s, for PCIe 5.0
Xgig5P-PCIe5-X4-MD2-H1	1-year extended hardware warranty



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