PCI Express® 4.0 MultiPort Interposer

For Summit™ T416 and T48

Gen4 x16 Interposer

Gen4 x1-x8 Interposer

Specifications

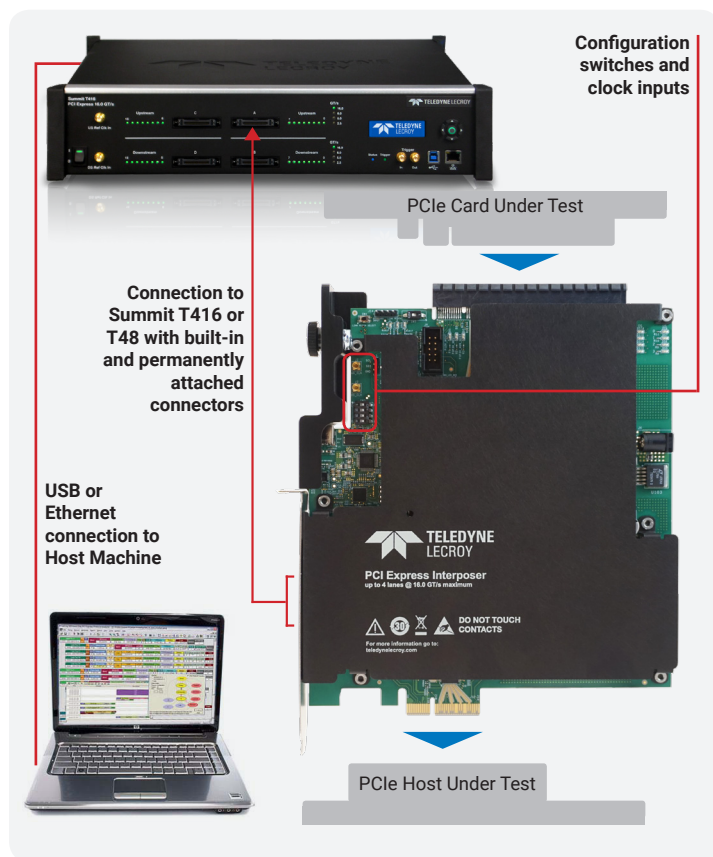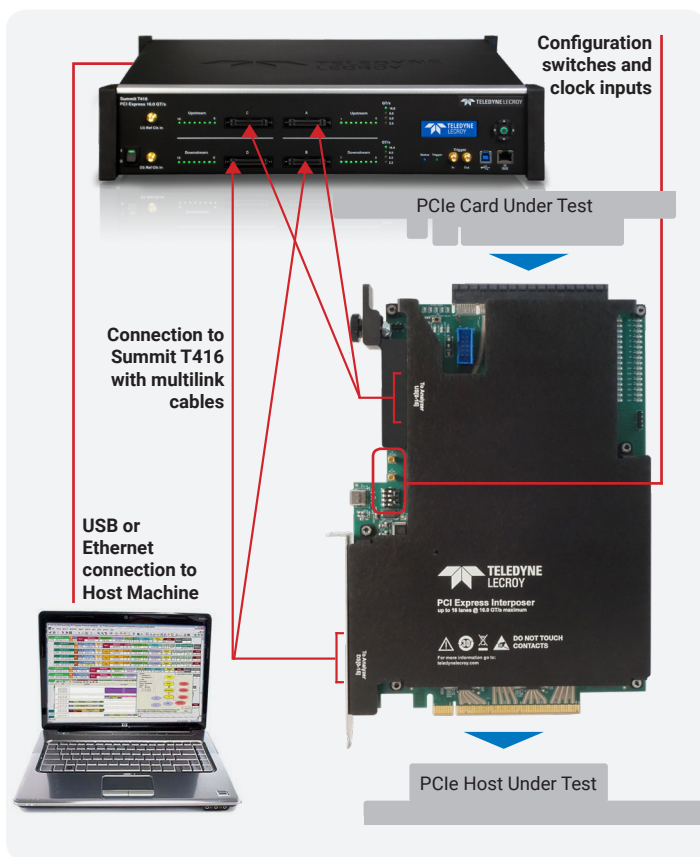|	
Dimensions	Gen4 x1 to x8: 167 x 190mm (6.6" x 7.5") Gen4 x16: 167 x 231mm (6.6" x 9.1")
Link Width	x1, x4, x8 or x16
Data Rates	2.5 GT/s, 5.0 GT/s, 8.0 GT/s and 16.0 GT/s (Gen4)
System Compatibility	Gen4 16x compatible with Summit T416 Gen4 1x 4x 8x compatible with Summit T416 and T48

Ordering Information

Product Description	Product Code
G4x1 MultiPort Interposer (includes G4x1 Interposer Card and requires one PE021UCA-X PCIe Y-Cable or one PE020UCA-X Straight Cable if MultiPort enabled)	PE180UIA-X
G4x4 MultiPort Interposer (includes G4x4 Interposer Card and requires one PE021UCA-X PCIe Y-Cable or one PE020UCA-X Straight Cable if MultiPort enabled)	PE181UIA-X
G4x8 MultiPort Interposer (includes G4x8 Interposer Card and requires one PE021UCA-X PCIe Y-Cable)	PE182UIA-X
G4x16 MultiPort Interposer (includes G4x16 Interposer Card and requires two PE021UCA-X PCIe Y-Cables)	PE183UIA-X

The Teledyne LeCroy PCI Express Interposer provides a simple and easy-to-use way to probe Gen4 PCI Express traffic between a host and PCIe® add-in card. The interposer assures reliable data transmission while providing 100% capture of all data traffic flowing through the PCIe CEM slot interface. Connecting the interposer to a Teledyne LeCroy Summit Gen4 analyzer allows decoding and display of data flowing in both directions and across all lanes, and will display data traffic using the industry-standard CATC Trace™ data display, along with a wide range of traffic and error reports.

The Gen4 MultiPort Interposer supports data rates of 2.5, 5.0, 8.0, and 16.0 GT/s, and is available in four configurations: x1, x4, x8 and x16. Each configuration supports lesser link widths (e.g., the x4 configuration supports x4, x2 and x1 through the x4 PCIe connector mounted on the card, but cannot support greater than x4 since the host slot connector is limited to x4).

The Gen4 Interposer, in combination with a Summit Gen 4 analyzer, provides the user a complete suite of test capability, including the ability to test products to the PCI Express 4.0

specification, analyze SMBus out of band signaling and allow recording and analysis of low power modes supported through CLKREQ# and SRIS. The new Gen4 Interposer is a powerful and versatile tool for all developers working with PCIe 4.0 add-in cards.

PCI EXPRESS®
PERFORMANCE SCALABLILTY FOR THE NEXT DECADE

Configuration switches and clock inputs

PCIe Card Under Test

Connection to Summit T416 with multilink cables

USB or Ethernet connection to Host Machine

PCIe Host Under Test

Configuration switches and clock inputs

PCIe Card Under Test

Connection to Summit T416 or T48 with built-in and permanently attached connectors

USB or Ethernet connection to Host Machine

PCIe Host Under Test

Connecting the PCI Express Interposer

1. Install the Interposer into the host system PCIe connector.

2. Install the PCIe add-in card under test (DUT) into the connector on the interposer. Note that PCIe add-in cards with edge connectors smaller than the connector are inserted, the connection will negotiate to the lesser lane width.

3. Connect 12V DC using the AC adapter supplied with the interposer. Make sure that the AC adapter is turned on.

4. Connect the Summit T416 Analyzer (or other compatible Teledyne LeCroy PCIe 4.0 protocol analyzer) to the interposer using up to 4 high speed connector cables, as indicated in the diagram above. Follow cable labeling.

5. If testing SRIS, refer to the clock configuration tables in the manual to properly set the clocks.

6. Connect the analyzer to a host machine using the Ethernet or USB port on the back panel of the Summit analyzer.

7. Install the software on the host machine.

8. Power on the protocol analyzer, then power on the host system.

9. Use the Teledyne LeCroy software application to monitor, record and view PCI Express traffic in the PCIe add-in card DUT system.

Local sales offices are located throughout the world. Visit our website to find the most convenient location.

1-800-5-LeCroy • teledynelecroy.com

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Everywhere**you**look™