LeCroy

Protocol Solutions Group
Product Datasheet

AMC Interposer Card for PCI Express® 2.0

AMC Interposer Card Enables Probing of PCI Express 2.0 Traffic at 5 GT/s with Quick, Simple Setup!

LeCroy's Advanced Mezzanine Card (AMC) Interposer for PCI Express 2.0 allows users to connect a LeCroy PCI Express protocol analyzer between an AMC mezzanine module and the carrier board at data rates up to 5 GT/s. The analyzer can be used to capture, decode and display all traffic on the PCI Express bus for troubleshooting, debugging and monitoring system performance.

Installation is quick and simple: The interposer card is plugged into the card slot in place of the AMC module, the AMC module is plugged into the interposer, and the analyzer is connected to a separate connector on the interposer card.

The AMC Interposer Card supports PCI Express lane widths up to x8 at data rates of 2.5 GT/s and 5 GT/s. The card supports an analyzer connection to a variety of LeCroy PCI Express protocol analyzers (see chart).

The AMC card (also called AdvancedMC) is a modular add-in card that can attach to a carrier board or backplane. It is considered the telecommunication industry's next-generation mezzanine standard supporting PCI Express in both AdvancedTCA® as well as MicroTCA systems. In the past, tight tolerances between AMC mezzanine cards and systems have made it difficult to probe protocol traffic between interfaces. The new interposer minimizes signal interference by using passive tapping, allowing equipment to be analyzed while it functions normally. AMC cards are defined by the PCI Industrial Computers Manufacturers Group (PICMG).

LeCroy is a strong supporter of embedded board communication and provides advanced tools for rapid product development and debugging of new AMC products.

Specifications

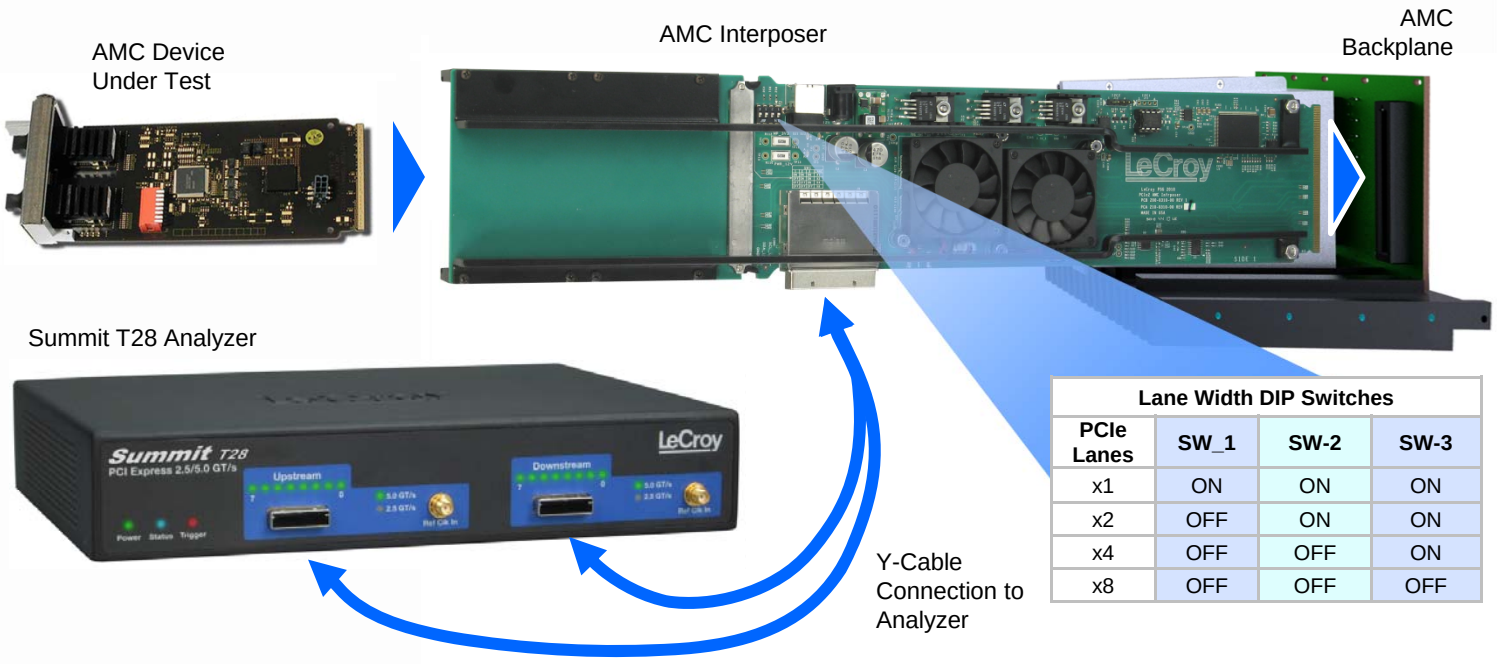
Dimensions	79 x 381 x 45 mm (3.1" x 15" x 1.8")
Lane Width	x1, x2, x4 or x8
Data Rates	2.5 GT/s and 5 GT/s
Compatibility	AMC R1.0/R1.1 compliant single-width, full-height, or half-height modules

Ordering Information

PE060UIA-X	AMC Gen2 x8 Interposer Card for PCI Express

AdvancedMC™ µTCA™ AdvancedTCA® PCI EXPRESS® PICMG MEMBER VITA Open Standards, Open Markets

AMC Interposer Interconnection Overview



Lane Width DIP Switches			
PCIe Lanes	**SW_1**	**SW-2**	**SW-3**
x1	ON	ON	ON
x2	OFF	ON	ON
x4	OFF	OFF	ON
x8	OFF	OFF	OFF

Connecting the AMC Interposer

1. Set the DIP switches on the AMC Interposer to the correct setting for the lane width desired (x1, x2, x4 or x8).
2. Install the AMC Interposer into the AMC Backplane.
3. Install the AMC Device Under Test (DUT) into the AMC Interposer.
4. Connect the Summit T28 Analyzer (or other LeCroy PCI Express analyzer) to the AMC Interposer.
5. Connect the analyzer to a host computer system using the USB 2.0 port on the rear panel of the Summit T28 analyzer.
6. Install the software on the host system.
7. Power on the analyzer.
8. Power on the AMC system.
9. Use the LeCroy software application to monitor, record and view PCI Express traffic in the AMC system.

System Compatibility	
Summit T3-16	✓
Summit T3-8	✓
Summit T2-16	✓
Summit T28	✓

AMC 2.0 Interposer Test Points

Test Point	Signal	Description
TP1	INH#	This is an input signal to turn power to the interposer on or off. Ground this signal to turn off power.
TP2	P12V	+12V external power supply to interposer.
TP3	GND	Ground.
TP4	P3P3V_1	+3.3V power for interposer. It is the output of regulator U2.
TP5	GND	Ground.
TP6	P2P5v	+2.5V power for interposer. It is the output of regulator U3.
TP7	GND	Ground.
TP8	P3P3V_2	+3.3V power for interposer. It is the output of regulator U4.
TP9	GND	Ground.
TP12	MP_3V3	+3.3V power from host to device. It is used to measure current. Measure the voltage between TP12 and TP18, and Current = Voltage/0.02.
TP13	PWR_12V	+12V power supply from host to device. It is used to measure current. Measure the voltage between TP13 and TP15, and Current = Voltage/0.02.
TP14	GND	Ground.
TP15	PWR_12V_B	+12V power supply from host to device (after current sensor).
TP16	N18036923	Test point of PCIe reference clock (REFCLKP).
TP17	N18036927	Test point of PCIe reference clock (REFCLKN).
TP18	MP_3V3_B	+3.3V power supply from host to device (after current sensor).

LeCroy 1-800-5-LeCroy
www.lecroy.com

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

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