Agilent U4301A PCI Express 3.0 Protocol Analyzer Module

DISCOVER the Alternatives...

Industries and Applications

- PCI Express Chipset turn-on, Debug and Validation

- Root Complex and End-point Debug and validation

Product Description

The U4301A helps test engineers and validation labs address the challenges of transitioning to PCIe 3.0 by addressing the high speeds, new encoding scheme, and advanced protocol features.

The U4301A protocol analyzer module supports all PCI Express 3.0 speeds, including 2.5 GT/s and 5.0 GT/s through PCIe 8 GT/s with x1 through x16 support.

... Agilent **Modular** Products

Models

Models	
U4301A	PCIe gen3 protocol analyzer

Main Features and Benefits

Product features	Your benefits
Support for Gen1/Gen2/Gen3, x1 through x16 link width	Support all modes of operation and all generations of PCI Express
Trace capture mode with lane view and triggering	Ensure data visibility even in the face of significant PHY layer issues
4 GB of capture buffer per module	Debug problems where the cause and symptoms are separated by large time gaps
Non-intrusive probing that leverages ESP technology	Reliable capture even with small eye diagrams
Mid-bus, Slot Interposer, and Flying Lead probe, x1 to x16 support	Variety of probing to meet your specific needs

Specifications and Characteristics

Hardware	
Size	1-slot AXIe module
Number of lanes	x16 single direction lanes per module or bi-direction up to x8 lanes per module
Memory depth	4 GB per module (8 GB for x16 lanes)
Supported speeds	2.5 GT/s (Gen1) 5.0 GT/s (Gen2) 8.0 GT/s (Gen3)
Speed detection	Automatic among Gen1, Gen2, Gen 3
Trigger sequencer states	4 states

Chassis compatibility: AXIe

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Software Information

The U4301A comes complete with the Protocol Analysis Software. This software only requires the U4301A PCIe Analyzer module to be installed in the AXIe chassis.

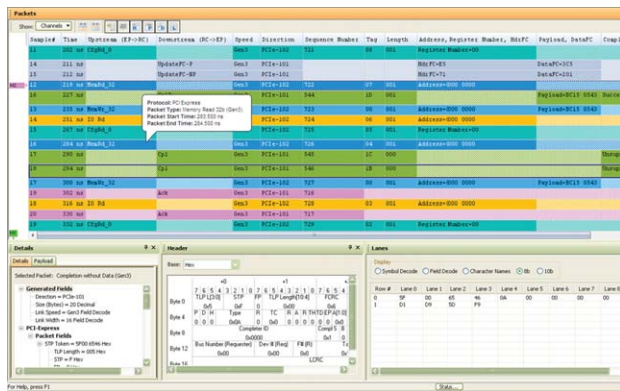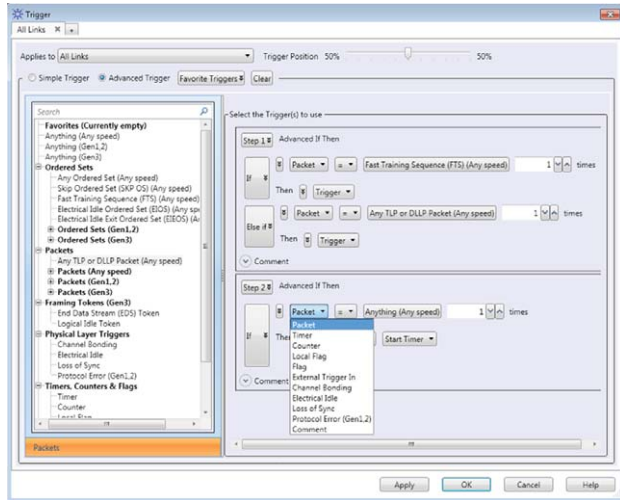|	
Supported operating systems	Microsoft Windows® XP (32-bit) Microsoft Windows® 7 (32/64-bit)
Standard compliant drivers	N/A
Supported application development environments (ADE)	Agilent PCI Express Protocol Analyzer Software
Agilent IO Libraries	N/A

Figure 1. Full PCI Express Protocol Decoding.

Figure 2. Advanced triggering capabilities.

Ordering Information

Typical Product Configuration

Model	Description
U4301A	Analyzer module for PCIe 8Gbps
U4301A-A08 or U4301A-A16	Analyzer linkwidth x8 or Analyzer linkwidth x16 (2 modules required for x16 analysis)
U4301A-AN3	Analyzer software license for PCIe 8 Gbps
U4301A-AN2	Analyzer software license for PCIe 5 Gbps
U4321A-A08	Slot interposer 3.0 for PCIe 8 Gbps x8
U4322A	Mid-bus probe 3.0 for PCIe 8 Gbps (bi-directional x8)

Related products

M9502A	2-slot AXIe chassis
M9505A	5-slot AXIe chassis
M9536A	AXIe controller

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R-51B-001-5C	Return to Agilent Warranty - 5 years

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Product specifications and descriptions in this document subject to change without notice.

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