PCI Express® 1.0 (2.5 GT/s) Protocol Test

Configuration and Pricing Guide

Gen1 today, ready for Gen2 in the future

As PCI Express® Gen2 becomes more mature in the market, you must decide whether to continue investment in test equipment for PCI Express Gen1 (2.5 GT/s) or to shift investment to PCI Express Gen2 (5 GT/s) test tools:

- How much longer will PCIe™ Gen1 equipment be needed
- What are the addtional costs for PCIe Gen2 test equipment?
- When will PCIe Gen2 be important for me?
- When will PCI Express Gen2 take off in the marketplace?

Agilent makes this decision easy

If you are currently testing PCI Express Gen1, Agilent's Gen1 solution includes the full suite of tools that you need at the right price.

Agilent's E2960B family Gen1 only protocol analyzer supports x1 through x16 link widths, with intuitive spreadsheet style visualization. Also, with different levels of decoding from lane view to transaction views, and easy flow capabilities, the analyzer helps speed up time to insight.

Agilent's cost effective Gen1 analyzers has a wide array of probing options available, including mid-bus 1.0, passive slot interposers, flying leads and express card probes.

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Sample analyzer configurations

Typical Gen1 analyzer configurations (with slot interposer probe):

Link width	Part number	Description	Pricing
X1 Link	N5306A	Analyzer hardware module for PCIe	Contact Agilent
	N5306A-G01	Analyzer SW license x1 for PCIe 2.5 Gb/s	
	E2945A	Passive x1 probe for Gen1 only	
	N5317A	Probe to analyzer module connection cable	
	N5540A	N2X 2-slot portable chassis	
X4 Link	N5306A	Analyzer hardware module for PCIe	Contact Agilent
	N5306A-G04	Analyzer SW license x4 for PCIe 2.5 Gb/s	
	E2946A	Passive x4 probe for Gen1 only	
	N5317A	Probe to analyzer module connection cable	
	N5540A	N2X 2-slot portable chassis	
X8 Link	N5306A	Analyzer hardware module for PCIe	Contact Agilent
	N5306A-G08	Analyzer SW license x8 for PCIe 2.5 Gb/s	
	E2947A	Passive x8 probe for Gen1 2.5 Gb/s only	
	N5317A	Probe to analyzer module connection cable	
	N5540A	N2X 2-slot portable chassis	
X16 Link	N5306A	Analyzer module for PCIe (requires 2 for x 16)	Contact Agilent
	N5306A	Analyzer module for PCIe (requires 2 for x 16)	
	N5306A-G16	Analyzer SW license x16 for PCIe 2.5Gb/s	
	N5306A-G16	Analyzer SW license x16 for PCIe 2.5Gb/s	
	N5315A-A16	Slot interposer x16 for PCIe 5Gb/s	
	N5317A	Probe to analyzer module connection cable	
	N5540A	N2X 2-slot portable chassis	

Agilent's E2960B family of Gen1 tools gives you investment protection by providing an easy and cost effective way to acquire Gen2 functionality without re-investing in new hardware. Agilent's PCI Express Gen1 tools are "Gen2 Ready." This means with a fast and easy software only update you can turn your Agilent E2960B Gen1 solution into PCI Express Gen2 test solution!

Ordering information

Protocol analyzer

Configure your PCI Express Analyzer in three simple steps :

1. Select your hardware. The N5306A analyzer module is the minimum requirement. Depending if you need to do Active state power management or not, you may optionally select the N5322A Extended Interface Module.
2. Select the Software option depending on your link width and Analyzer speed (2.5 Gb/s Gen1 or 5.0 Gb/s Gen2).
3. Select the type of probing you need; Prepare for the future with Gen2 capable probes, or save money now with Gen1 only probes.

Hardware		Description
	N5306A	Analyzer module for PCIe 5 Gb/s
	N5322A	Extended interface module for PCIe 5 Gb/s

Software		Description
Gen2 analyzer software	N5306A-A01	Analyzer SW license x1 for PCIe 5 Gb/s
	N5306A-A04	Analyzer SW license x4 for PCIe 5 Gb/s
	N5306A-A08	Analyzer SW license x8 for PCIe 5 Gb/s
	N5306A-A16	Analyzer SW license x16 for PCIe 5 Gb/s
Gen2 Ready analyzer software	N5306A-G01	Gen2 Ready analyzer SW license x1 for PCIe 2.5 Gb/s
	N5306A-G04	Gen2 Ready analyzer SW license x4 for PCIe 2.5 Gb/s
	N5306A-G08	Gen2 Ready analyzer SW license x8 for PCIe 2.5 Gb/s
	N5306A-G16	Gen2 Ready analyzer SW license x16 for PCIe 2.5 Gb/s

Probes		Description
Gen2 probes	N4241A	Mid-bus probe 2.0 bi-directional x8 for PCIe 5 Gb/s
	N4242A	Mid-bus probe 2.0 swizzled x16 for PCIe 5 Gb/s
	N4243A	Mid-bus probe 2.0 kit split x4 for PCIe 5 Gb/s
	N4241F	Flying lead set 2.0 Bi-directional x8 for PCIe 5 Gb/s
	N5315A-A01	Slot interposer for PCIe 5 Gb/s link width x1
	N5315A-A04	Slot interposer for PCIe 5 Gb/s link width x4
	N5315A-A08	Slot interposer for PCIe 5 Gb/s link width x8
	N5315A-A16	Slot interposer for PCIe 5 Gb/s link width x16
Gen1 probes	E2960B-MEC	Express card adapter for PCIe 2.5 Gb/s for N4241A
	E2945A	PCI Express x1 passive probe board
	E2946A	PCI Express x4 passive probe board
	E2947A	PCI Express x8 passive probe board
	E2941B	EXCH AVAIL soft touch mid-bus probe for PCI-Express
	N4221A	Mid-bus probe 1.0 bi-directional x8 for PCIe 2.5 Gb/s
	N4221F	Flying lead set 1.0 bi-directional x8 for PCIe 2.5 Gb/s
	N4228A	½ sized compression cable set for PCI Express 2.5 Gb/s
	N5317A	PCIe probe connection cable (connect Gen1 probes to Gen2 systems)

Ordering information

Protocol analyzer

Accessories		Description
	N5540A	N2X 2-slot portable chassis
	N5541A	N2X 4-slot chassis
	N5543D	N2X controller PC
	E2960B-LAN	USB to LAN adapter for chassis to controller connectivity
	E2960B-RET-05	Retention modules for mid-bus probe 2.0 - 5 pcs
	E2960B-RET-50	Retention modules for mid-bus probe 2.0 - 50 pcs
Logic analyzer to protocol analyzer correlation accessories	N5313A	P2L gateway cable to connect 16900A to E2960B analyzer
	N5319A	P2L gateway cable with flags to connect 16900A to E2960B analyzer

Exerciser

Configure your PCI Express Exerciser in two simple steps:

1. Select your hardware option depending on your required link width.
2. The exerciser hardware from Agilent supports multiple applications. Select the application you want to enable on the hardware. You can enable multiple applications on a single hardware module.

Hardware		Description
	N5309A-E01	Half size exerciser & LTSSM module x1 for PCIe 5 Gb/s
	N5309A-E04	Half size exerciser & LTSSM module x4 for PCIe 5 Gb/s
	N5309A-E08	Half size exerciser & LTSSM module x8 for PCIe 5 Gb/s
	N5309A-E16	Half size exerciser & LTSSM module x16 for PCIe 5 Gb/s

Software		Description
Gen2 exerciser software	N5309A-EX2	Exerciser SW license: exerciser and LTSSM at 5 Gb/s
Gen2 Ready exerciser software	N5309A-EX1	Gen2 Ready exerciser SW license: exerciser and LTSSM at 2.5 Gb/s
Compliance tests	N5309A-PTC	Exerciser SW license: protocol test cards software (included with exerciser purchase)
	N5309A-COM	Exerciser SW license: compliance assured test package (180 pre-defined tests)

Accessories		Description
	N5543D	N2X controller PC
	N5316A	Test backplane for PCIe2

Protocol test cards		Description
PTC1	E2969A	Protocol test card for PCI Express Gen 1 (includes software and hardware)
PTC2	E2969B	Protocol test card for PCI Express Gen 2 (includes software and hardware)

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Related Agilent Literature

Publication title	Pub number
The Agilent Test Portfolio for PCI Express 2.0 Brochure	5989-5594EN
Agilent E2960B Series for PCI Express 2.0 x1 through x16 Gen 2 Ready Program Photo card	5989-6395EN
Agilent E2969B Protocol Test Card for PCI Express 2.0 Photo card	5989-7594EN
Agilent E2969A Protocol Test Card for PCI Express Photo card	5989-9520EN

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