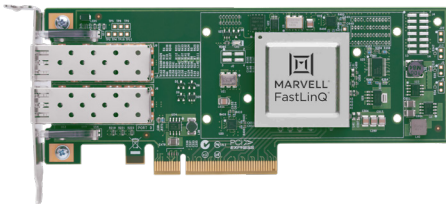


Marvell FastLinQ 41000 Series Adapters

Interoperability Matrix



Overview

This document identifies the types of cables, modules, and switches, and specifications that are compatible with the FastLinQ 41000 Series Adapters.

The tables of validated cables and transceivers represent a subset of peripherals that are compatible with the FastLinQ 41000 Series Adapters. Most cables and modules that meet the specifications are expected to inter-operate with the adapters. However Marvell does not guarantee that all peripherals that meet the compliance requirements will operate with the FastLinQ 41000 Series Adapters.

Supported Cables and Optical Modules

Table 1 lists the cables and optical modules that are supported by the Marvell FastLinQ 41000 Series Adapters, and the specifications to which they must adhere.

Validated Cables and Optical Modules

Table 2 is a representative subset of all the compatible peripherals supported by our customers and tested by Marvell.

For OEM validated lists of cables and optical modules, refer to the respective server OEM Web site supporting the FastLinQ adapters.

What You Need to Know

- These peripherals work with the Marvell® FastLinQ® 41000 Series Adapters:
 - SFP28
 - SFP+
- To find the information you want:
 - Table 1 lists the peripheral types.
 - Table 2 lists peripherals tested.
 - Table 3 lists the switches tested.

Table 1. Supported Cables and Optical Modules, and the Specifications To Which They Must Comply

Cable and Module Type	Supported Specifications
SFP28, direct-attach copper (DAC) (25G) SFP+ DAC (10G)	IEEE 802.3-2018 (See Clause 110 for DAC cable quality definition) SFF 8431 Annex E
SFP+, SFP28; Optical modules and DAC	SFF 8472 (for memory map)
SFP+, SFP28; Optical modules and DAC	SFF 8419 or SFF 8431 (low-speed signals and power)
Optical modules electrical input/output, active copper cables (ACC), and active optical cables (AOC)	SFF8431 limiting interface (10G)
Optical modules electrical input/output, ACC, and AOC	IEEE 802.3-2018 Annex 109B (25GAUI) (with or without RS-FEC)
SFP+ Copper module (10G)	SFF-8431 and SFF-8432

10G/40G DACs/Optics do not require FEC as per the SFF8431 Annex E specification for 10G and IEEE standard 802.3-2018 Clauses 52, 85, and 86 (references to 40G QSFP+ optics, on the switch side, are for when those optics are used in 4x10G mode). Similarly, 100G QSFP28 optics, on the switch side, can be used in 4x25G mode over a splitter/fanout optical cable.

NOTES

- PCIe Gen3 conformance and performance
- Breakout cables are supported when the FastLinQ 41000 Series Adapters are on the SFP side and the link partner is QSFP.
- Autonegotiation for BASE-T and 25G-CR is supported, but validation is required for specific cables and switches.
 - 1G speeds can be achieved with BASE-T modules.
- Speed supported on one port is independent of the speed set on the other port; see the *Converged Network Adapters and Intelligent Ethernet Adapters FastLinQ 41000 Series User's Guide*.

Table 2. Tested Cables and Optical Modules

Form Factor	Description	Supplier	Part Number
SFP+ Optical Module	10Gb/s 850nm Multimode Datacom SFP+ Transceiver	Finisar®	FTLX8574D3BCL-FC
SFP+ Optical Module	10Gb/s 850nm Multimode Datacom SFP+ Transceiver	Finisar	FTLX8571D3BCL
SFP+ Optical Module	10G LR	Finisar	FTLX1471D3BCL
SFP28 Optical Module	25G SR	Finisar	FTLF8536P4BCL
SFP28 Optical Module	25G LR	Finisar	FTLF1436P3BCL
SFP28 Optical Module	10G/25G Dual Rate LR ¹	Finisar	FTLF1436P4BCV
SFP28 Passive Cable	25G DAC, 1m, 30 AWG	Amphenol®	NDCCGF0001
SFP28 Passive Cable	25G DAC, 3m, 30 AWG	Amphenol	NDCCGF0005
SFP28 Passive Cable	25G DAC, 1m, 30 AWG	Molex®	111145-1101
QSFP28 100G to 4xSFP28 25G	100G DAC, 1m, 30 AWG	Amphenol	NDAQGF-0001
QSFP28 100G to 4xSFP28 25G	100G DAC, 2m, 30 AWG	Amphenol	NDAQGF-0002
SFP+ Active Cable	10G AOC, 2m	Finisar	FCBG110SD1C02-FC
SFP+ Active Cable	10G AOC, 3m	Finisar	FCBG110SD1C03-FC
SFP+ Active Cable	10G AOC, 5m	Finisar	FCBG110SD1C05-FC
SFP+ Active Cable	10G AOC, 10m	Finisar	FCBG110SD1C10-FC
SFP28 Active Cable	25G AOC, 7m	Finisar	FCBG125SD1C07-FC
SFP Transceiver	1000BASE-T Copper SFP Transceiver	Finisar	FCLF-8521-3

1. Setting 10G on dual rate optics may require configuring both ends to 10G fixed speed mode with no FEC enabled.

Switches

Table 3 lists the switches that have been tested for interoperability with the 41000 Series Adapters.

Table 3. Tested Switches

Manufacturer	Ethernet Switch Model
Arista™	7060X
	7160
Cisco®	NEXUS 3232C
	NEXUS 5548
	NEXUS 5596T
Mellanox™	SN2410
	SN2700

Additional Resources

For a list of qualified cables for Marvell FastLinQ HPE® adapters, see the following document:

<https://www.marvell.com/content/dam/marvell/en/public-collateral/hpe/hpe-marvell-adapter-transceiver-and-cable-matrix.pdf>

For a list of qualified cables for Marvell FastLinQ Dell®/EMC® adapters, see the following document:

<https://i.dell.com/sites/doccontent/shared-content/data-sheets/en/documents/dell-networking-optics-spec-sheet.pdf>



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