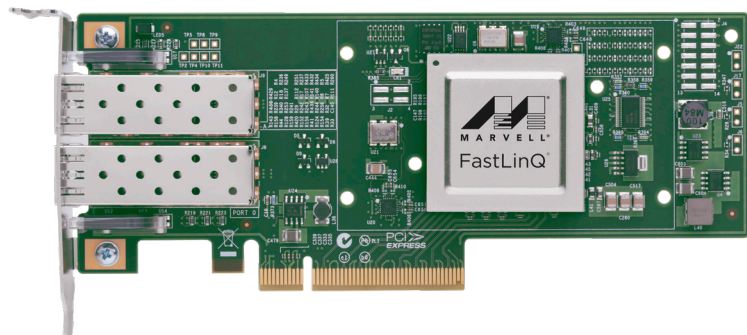


MARVELL FastLinQ® 41000 Series Adapters Interoperability Matrix



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.

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.

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) |

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 8

VALIDATED CABLES AND OPTICAL MODULES

Table 2 is a representative list of components tested by Marvell.

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

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 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 |

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 |

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.
- The onboard Marvell ASIC does not support IEEE clause 37, which requires autonegotiation on optical links. 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 or DAC.
- 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*.



Marvell_FastLinQ41000Series

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