Marvell® FastLinQ® 45000 Series Interoperability Matrix

This document identifies the supported standards and lists the cables, modules, and switches tested for interoperability with Marvell® adapters.

Supported Specifications

The 45000 Series Adapters support a variety of cables and optical modules that comply with SFF8024. Specific form factor compliance is as follows:

- **SFPs:**
  - SFF8472 (for memory map)
  - SFF8419 or SFF8431 (low speed signals and power)
- **Quad small form factor pluggable (QSFP):**
  - FF8636 (for memory map)
  - SFF8679 or SFF8436 (low speed signals and power)
- **Optical modules electrical input/output, active copper cables (ACC), and active optical cables (AOC):**
  - 10G—SFF8431 limiting interface
  - 25G—IEEE 802.3by Annex 109B (25GAUI) (does not support RS-FEC)
  - 40G—IEEE 802.3 Annex 86A (nPPI)
  - 100G—IEEE 802.3 Annex 83E (CAUI4)
- **Passive copper cables:**
  - 10G SFF8431 Annex E
  - 25G IEEE 802.3 Clause 110 (25GBASE-CR-S)
  - 40G IEEE 802.3 Clause 85 (40GBASE-CR4)
  - 100G IEEE 802.3 Clause 92 (100GBASE-CR4)

Tested Cables and Optical Modules

Marvell does not guarantee that every cable or optical module that satisfies the compliance requirements will operate with the 45000 Series Adapters. Marvell has tested the components listed in Table 1 and presents this list for your convenience.

This list is based on cable and optics components that are available at the time of product release, and is subject to change over time as new components enter the market or are discontinued.

Table 1. Tested Cables and Optical Modules

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length[a]
10G DAC [b]	Cisco	COPQAA4JAA	SFP Twin-axial 10G	1
		COPQAA6JAA	SFP Twin-axial 10G	3
		COPQAA5JAA	SFP Twin-axial 10G	5
		37-0962-01	SFP Twin-axial 10G	5
	Dell	407-BBBK	SFP Twin-axial 10G	1
		407-BBBI	SFP Twin-axial 10G	3
		407-BBBP	SFP Twin-axial 10G	5
	HP®	2074260-2	SFP Twin-axial 10G	1
		AP784A	SFP Twin-axial 10G	3
		AP820A	SFP Twin-axial 10G	5
25G DAC	AMPHENOL®	NDCCGF0001	SFP28 TO SFP28	1
		NDCCGF0003	SFP28 TO SFP28	3
		NDCCGJ0003	SFP28 TO SFP28	3
	HP®	844471-B21	SFP28 TO SFP28	0.5
		844474-B21	SFP28 TO SFP28	1
		844477-B21	SFP28 TO SFP28	3
40G DAC	HPE FCI	"845408-B21 10137498-4050LF DUAL MODE 40/100G"	QSFP40GB TO QSFP40GB	5
	LUXSHARE-ICT™	LP9QF002-SD-R	QSFP40GB TO QSFP40GB	1
	TRIPP LITE®	N282-03M-BK, PASSIVE	QSFP40GB TO QSFP40GB	3
40G DAC SPLITTER (4 × 10G)	DELL	470-AAVO	QSFP40GB TO 4XSFP10GB	1
		470-AAXG	QSFP40GB TO 4XSFP10GB	3
		470-AAXH	QSFP40GB TO 4XSFP10GB	5
100G DAC	AMPHENOL	NDAQGF-0001	QSFP100GB TO QSFP100GB	1
		NDAAFF-0001	QSFP100GB TO QSFP100GB	1
		NDAQGF-0003	QSFP100GB TO QSFP100GB	3
		NDAAFF-0003	QSFP100GB TO QSFP100GB	3
		NDAAFJ-0004	QSFP100GB TO QSFP100GB	5
		NDAQGJ-0005	QSFP100GB TO QSFP100GB	5
	ARISTA	CAB-Q-4S-100G-3M REV 1	QSFP100GB TO QSFP100GB	3
	DELL	03CC35 REV A00	QSFP100GB TO QSFP100GB	3
	HPE	845402-B21	QSFP100GB TO QSFP100GB	0.5
		845404-B21	QSFP100GB TO QSFP100GB	1
		845406-B21	QSFP100GB TO QSFP100GB	3
		845408-B21	QSFP100GB TO QSFP100GB	5
"100G DAC SPLITTER (4 × 25G)"	AMPHENOL	NDAQGJ-0001	QSFP100GB TO 4X SFP28GB	1
		NDAQGF-0002	QSFP100GB TO 4X SFP28GB	2
		NDAQGF-0003	QSFP100GB TO 4X SFP28GB	3
		NDAQGJ-0005	QSFP100GB TO 4X SFP28GB	5
	ARISTA	CAB-Q-4S-100G-3M	QSFP100GB TO 4XS-FP28GB	3
	DELL	026FN3 REV A00	QSFP100GB TO 4X SFP28GB	1
		0YFNDD REV A00	QSFP100GB TO 4X SFP28GB	2
		07R9N9 REV A00	QSFP100GB TO 4X SFP28GB	3
	FCI	10130795-4050LF	QSFP100GB TO 4XS-FP28GB	5

Table 1. Tested Cables and Optical Modules

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length[a]
OPTICAL SOLUTIONS				
"10G OPTICAL TRANSCEIVER"	AVAGO	AFBR-703SMZ	SFP 10G OPTICAL TRANSCEIVER SR	N/A
		AFBR-701SDZ	SFP 10G OPTICAL TRANSCEIVER LR	N/A
	FINISAR	FTLX8571D3BCL-QL	SFP 10G OPTICAL TRANSCEIVER SR	N/A
		FTLX1471D3BCL-QL	SFP 10G OPTICAL TRANSCEIVER LR	N/A
"25G OPTICAL TRANSCEIVER"	FINISAR	FTLF8536P4BCL	SFP28 OPTICAL TRANSCEIVER SR	N/A
		FTLF8538P4BCL	SFP28 OPTICAL TRANS-CEIVER SR NO FEC	N/A
	HPE/FINISAR	845398-B21 / FTLF8536P4BCL	SFP28 OPTICAL TRANSCEIVER SR	N/A
	MELLANOX®	MMA2P00-AS	SFP28 OPTICAL TRANSCEIVER SR	N/A
"40G OPTICAL TRANSCEIVER"	CISCO	10-2672-02 QSFP-40G SR4	QSFP40G SR OPTICAL TRANSCEIVER	N/A
	FINISAR	FTL410QE2C QSFP-40G SR4	QSFP40G SR OPTICAL TRANSCEIVER	N/A
	JDSU	JQP-04SRAB1	QSFP40G SR OPTICAL TRANSCEIVER	N/A
"100G OPTICAL TRANSCEIVER"	ARISTA	XVR-00067-01	100G SR-4 OPTICAL TRANSCEIVER	N/A
	AVAGO	AFBR-89CDDZ	100G SR-4 OPTICAL TRANSCEIVER	N/A
	CISCO	10-3142-01	100G SR-4 OPTICAL TRANSCEIVER	N/A
	FINISAR	FTLC9551REPM	100G SR-4 OPTICAL TRANSCEIVER	N/A
		FTLC1151SDPL	100GBASE-LR4 WDMC	10KM
	SUMITOMO	SQF1002L4LNGG01P	100GBASE-LR4 WDM QSFP28	10KM
10G AOC[d]	DELL	470-ABLV	SFP 10G AOC	2
		470-ABLZ	SFP 10G AOC	3
		470-ABLT	SFP 10G AOC	5
		470-ABML	SFP 10G AOC	7
		470-ABLU	SFP 10G AOC	10
		470-ABMD	SFP 10G AOC	15
		470-ABMJ	SFP 10G AOC	15
25G AOC	INNOLIGHT[e]	TF-PY003-N00	SFP28 AOC	3
		TF-PY020-N00	SFP28 AOC	20

[a] Cable length is indicated in meters, unless otherwise specified.

[b] DAC is direct attach cable.

[c] WDM is wavelength-division multiplexing.

[d] AOC is active optical cable.

[e] InnoLight AOCs guarantee BER1e-12.

Tested Switches

Table 2 lists the switches that have been tested for interoperability with the 45000 Series Adapters. This list is based on switches that are available at the time of product release, and is subject to change over time as new switches enter the market or are discontinued.

Table 2. Switches Tested for Interoperability

Manufacturer	Ethernet Switch Model
Arista	7060X
	7160
CISCO	NEXUS 3132
	NEXUS 3232C
	NEXUS 5548
	NEXUS 5596T
	NEXUS 6000
DELL EMC	S6100
	Z9100
HPE	FLEXFABRIC 5950
MELLANOX	SN2410
	SN2700