

# Cavium FastLinQ® 41000/45000 Series Interoperability Matrix



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

## SUPPORTED SPECIFICATIONS

The FastLinQ® 41000 and 45000 Series Adapters are interoperable with 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 (QSFPs):
  - SFF8636 (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—IEEE802.3by Annex 109B (25GAUI)
  - 40G—IEEE802.3 Annex 86A (nPPI)
  - 100G—IEEE802.3 Annex 83E (CAUI4)

## TESTED CABLES AND OPTICAL MODULES

Cavium does not guarantee that every cable or optical module that satisfies the compliance requirements will operate with the 41000 and 45000 Series Adapters. Tables 1 and 2 list the components that have been tested with the FastLinQ 41000 Series adapters. Tables 3 and 4 list the components that have been tested with the FastLinQ 45000 Series adapters.

The cable and module components listed in these tables were available at the time of the Cavium product release. Market availability of these components may change over time.

Table 1. Cavium FastLinQ 41000 Series Tested Cables

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
10G DAC <sup>b</sup>	Cisco®	COPQAA4JAA	SFP Twin-axial 10G	1	30
		COPQAA6JAA	SFP Twin-axial 10G	3	30
		COPQAA5JAA	SFP Twin-axial 10G	5	26
	HPE®	2074260-2	SFP Twin-axial 10G	1	30
		AP784A	SFP Twin-axial 10G	3	26
		AP820A	SFP Twin-axial 10G	5	26

Table 1. Cavium FastLinQ 41000 Series Tested Cables (continued)

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
10G DAC <sup>b</sup> (continued)	Dell <sup>®</sup>	CN-OW25W9-52204-36R-016-A00	SFP Twin-axial 10G	3	26
		407-BBBK	SFP Twin-axial 10G	1	30
		407-BBBI	SFP Twin-axial 10G	3	26
		07-BBBP	SFP Twin-axial 10G	5	30
25G DAC	Amphenol <sup>®</sup>	NDCCGJ0003	SFP28 to SFP28	3	26
		NDCCGJ0005	SFP28 to SFP28	5	26
		NDCCGF0001	SFP28 to SFP28	1	30
		NDCCGF0003	SFP28 to SFP28	3	30
	HPE	844471-B21	SFP28 to SFP28	0.5	26
		844474-B21	SFP28 to SFP28	1	26
		844477-B21	SFP28 to SFP28	3	26
		844480-B21	SFP28 to SFP28	5	26
40G DAC Splitter (4 × 10G)	Dell	470-AAVO	QSFP40GB to 4XSFP10GB	1	26
		470-AAXG	QSFP40GB to 4XSFP10GB	3	26
		470-AAXH	QSFP40GB to 4XSFP10GB	5	26

Table 1. Cavium FastLinQ 41000 Series Tested Cables (continued)

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
100G DAC Splitter (4 × 25G)	Dell	07R9N9 Rev A00	QSFP100GB to 4XSFP28GB	3	26
		0YFNDD Rev A00	QSFP100GB to 4XSFP28GB	2	26
		026FN3 Rev A00	QSFP100GB to 4XSFP28GB	1	26
	FCI	0130795-4050LF	QSFP100GB to 4XSFP28GB	5	26
	Amphenol	NDAQGJ-0005	QSFP100GB to 4XSFP28GB	5	26
		NDAQGF-0003	QSFP100GB to 4XSFP28GB	3	30
		NDAQGJ-0001	QSFP100GB to 4XSFP28GB	1	26
		NDAQGF-0002	QSFP100GB to 4XSFP28GB	2	30
	Arista	CAB-Q-4S-100G-3M	QSFP100GB to 4XSFP28GB	3	26

a Cable length is indicated in meters.  
 b DAC is direct attach cable.  
 c AOC is active optical cable.

Table 2. Cavium FastLinQ 41000 Series Tested Optical Solutions

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
10G Optical Transceivers	Finisar	FTLX8571D3BCL-QL	SFP 10G Optical Transceiver SR	N/A	N/A
		FTLX1471D3BCL-QL	SFP 10G Optical Transceiver LR	N/A	N/A
	Avago	AFBR-703SMZ	SFP 10G Optical Transceiver SR	N/A	N/A
		AFBR-701SDZ	SFP 10G Optical Transceiver LR	N/A	N/A
25G Optical Transceivers	Finisar	FTLF8536P4BCL	SFP28 Optical Transceiver SR	N/A	N/A
		FTLF8538P4BCL	SFP28 Optical Transceiver SR no FEC	N/A	N/A
	Mellanox	MMA2P00-AS	SFP28 Optical Transceiver SR	N/A	N/A
	HPE/Finisar	845398-B21 / FTLF8536P4BCL	SFP28 Optical Transceiver SR	N/A	N/A

Table 2. Cavium FastLinQ 41000 Series Tested Optical Solutions (*continued*)

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
10G AOC <sup>c</sup>	Dell	470-ABLV	SFP 10G Optical AOC	2	N/A
		470-ABLZ	SFP 10G Optical AOC	3	N/A
		470-ABLT	SFP 10G Optical AOC	5	N/A
		470-ABML	SFP 10G Optical AOC	7	N/A
		470-ABLU	SFP 10G Optical AOC	10	N/A
		470-ABMD	SFP 10G Optical AOC	15	N/A
		470-ABMJ	SFP 10G Optical AOC	15	N/A
25G AOC	InnoLight	TF-PY020-N00	SFP28 AOC	20	N/A
		TF-PY003-N00	SFP28 AOC	3	N/A

a Cable length is indicated in meters.

b DAC is direct attach cable.

c AOC is active optical cable.

Table 3. Cavium FastLinQ 45000 Series Tested Cables

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
10G DAC <sup>b</sup>	Cisco	37-0962-01	SFP Twin-axial 10G	5	30
		COPQAA4JAA	SFP Twin-axial 10G	1	30
		COPQAA6JAA	SFP Twin-axial 10G	3	26
		COPQAA5JAA	SFP Twin-axial 10G	5	30
	HPE	2074260-2	SFP Twin-axial 10G	1	26
		AP784A	SFP Twin-axial 10G	3	26
		AP820A	SFP Twin-axial 10G	5	26
	Dell	407-BBBK	SFP Twin-axial 10G	1	30
		407-BBBI	SFP Twin-axial 10G	3	26
		407-BBBP	SFP Twin-axial 10G	5	26

a Cable length is indicated in meters.

b DAC is direct attach cable.

c AOC is active optical cable.

Table3 . Cavium FastLinQ 45000 Series Tested Cables (continued)

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
25G DAC	Amphenol	NDCCGJ0003	SFP28 to SFP28	3	26
		NDCCGJ0005	SFP28 to SFP28	5	26
		NDCCGF0001	SFP28 to SFP28	1	30
		NDCCGF0003	SFP28 to SFP28	3	30
	HPE	844471-B21	SFP28 to SFP28	0.5	26
		844474-B21	SFP28 to SFP28	1	26
		844477-B21	SFP28 to SFP28	3	26
		844480-B21	SFP28 to SFP28	5	26
40G DAC	Tripp Lite <sup>®</sup>	N282-03M-BK, passive	QSFP40GB to QSFP40GB	3	26
	LuXshare-ICT <sup>™</sup>	LP9QF002-SD-R	QSFP40GB to QSFP40GB	1	26
	HPE FCI	845408-B21 10137498-4050LF Dual mode 40/100G	QSFP40GB to QSFP40GB	5	26
40G DAC Splitter (4 × 10G)	Dell	470-AAV0	QSFP40GB to 4XSFP10GB	1	26
		470-AAXG	QSFP40GB to 4XSFP10GB	3	26
		470-AAXH	QSFP40GB to 4XSFP10GB	5	26

Table 3. Cavium FastLinQ 45000 Series Tested Cables (continued)

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
100G DAC	Arista	CAB-Q-4S-100G-3M Rev 1	QSFP100GB to QSFP100GB	3	26
	Dell	03CC35 Rev A00	QSFP100GB to QSFP100GB	3	26
	Amphenol	NDAQGF-0001	QSFP100GB to QSFP100GB	1	30
		NDAQGF-0003	QSFP100GB to QSFP100GB	3	30
		NDAQGJ-0005	QSFP100GB to QSFP100GB	5	30
		NDAAFF-0001	QSFP100GB to QSFP100GB	1	30
		NDAAFF-0003	QSFP100GB to QSFP100GB	3	30
		NDAAFJ-0004	QSFP100GB to QSFP100GB	5	30
	HPE	845402-B21	QSFP100GB to QSFP100GB	0.5	30
		845404-B21	QSFP100GB to QSFP100GB	1	30
		845406-B21	QSFP100GB to QSFP100GB	3	30
		845408-B21	QSFP100GB to QSFP100GB	5	30
	100G DAC Splitter (4 × 25G) TB_TableBody	Dell	07R9N9 Rev A00	QSFP100GB to 4XSFP28GB	3
0YFNDD Rev A00			QSFP100GB to 4XSFP28GB	2	26
026FN3 Rev A00			QSFP100GB to 4XSFP28GB	1	26
FCI		10130795-4050LF	QSFP100GB to 4XSFP28GB	5	26
Amphenol		NDAQGJ-0005	QSFP100GB to 4XSFP28GB	5	30
		NDAQGF-0003	QSFP100GB to 4XSFP28GB	3	30
		NDAQGJ-0001	QSFP100GB to 4XSFP28GB	1	30
		NDAQGF-0002	QSFP100GB to 4XSFP28GB	2	30
Arista		CAB-Q-4S-100G-3M	QSFP100GB to 4XSFP28GB	3	26

a Cable length is indicated in meters.

b DAC is direct attach cable.

c AOC is active optical cable.

Table 4. Cavium FastLinQ 45000 Series Tested Optical Solutions

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
10G Optical Transceiver	Finisar	FTLX8571D3BCL-QL	SFP 10G Optical Transceiver SR	N/A	N/A
		FTLX1471D3BCL-QL	SFP 10G Optical Transceiver LR	N/A	N/A
	Avago	AFBR-703SMZ	SFP 10G Optical Transceiver SR	N/A	N/A
		AFBR-701SDZ	SFP 10G Optical Transceiver LR	N/A	N/A
25G Optical Transceiver	Finisar	FTLF8536P4BCL	SFP28 Optical Transceiver SR	N/A	N/A
		FTLF8538P4BCL	SFP28 Optical Transceiver SR no FEC	N/A	N/A
	Mellanox	MMA2P00-AS	SFP28 Optical Transceiver SR	N/A	N/A
	HPE/Finisar	845398-B21 / FTLF8536P4BCL	SFP28 Optical Transceiver SR	N/A	N/A
40G Optical Transceiver	Finisar	FTL410QE2C QSFP-40G SR4	QSFP40G SR Optical Transceiver	N/A	N/A
	Cisco	10-2672-02 QSFP-40G SR4	QSFP40G SR Optical Transceiver	N/A	N/A
	JDSU	JQP-04SRAB1	QSFP40G SR Optical Transceiver	N/A	N/A
100G Optical Transceiver	Finisar	FTLC9551REPM	100G SR-4 Optical Transceiver	N/A	N/A
	Arista	XVR-00067-01	100G SR-4 Optical Transceiver	N/A	N/A
	Avago	AFBR-89CDDZ	100G SR-4 Optical Transceiver	N/A	N/A
	Cisco	10-3142-01	100G SR-4 Optical Transceiver	N/A	N/A
10G AOC <sup>c</sup>	Dell	470-ABLV	SFP 10G Optical AOC	2	N/A
		470-ABLZ	SFP 10G Optical AOC	3	N/A
		470-ABLT	SFP 10G Optical AOC	5	N/A
		470-ABML	SFP 10G Optical AOC	7	N/A
		470-ABLU	SFP 10G Optical AOC	10	N/A
		470-ABMD	SFP 10G Optical AOC	15	N/A
		470-ABMJ	SFP 10G Optical AOC	15	N/A

Table 4. Cavium FastLinQ 45000 Series Tested Optical Solutions (*continued*)

Speed/Form Factor	Manufacturer	Part Number	Type	Cable Length <sup>a</sup>	Gauge
25G AOC	InnoLight	TF-PY020-N00	SFP28 AOC	20	N/A
		TF-PY003-N00	SFP28 AOC	3	N/A

a Cable length is indicated in meters.

b DAC is direct attach cable.

c AOC is active optical cable.

### TESTED SWITCHES

Table 5 lists the switches that have been tested for interoperability with the Cavium FastLinQ 41000 and 45000 Series Adapters.

Table 5. Switches Tested for Interoperability with Cavium FastLinQ 41000 and 45000 Series Adapters

Manufacturer	Ethernet Switch Model
Arista	7060X, 7160
Cisco	Nexus 3132 Nexus 5548 and 5596T Nexus 6000
Dell EMC	Z9100
HPE	FlexFabric 5950
Mellanox	SN2700

### ABOUT CAVIUM

Cavium, Inc. (NASDAQ: CAVM), offers a broad portfolio of infrastructure solutions for compute, security, storage, switching, connectivity and baseband processing. Cavium's highly integrated multi-core SoC products deliver software compatible solutions across low to high performance points enabling secure and intelligent functionality in Enterprise, Data Center and Service Provider Equipment. Cavium processors and solutions are supported by an extensive ecosystem of operating systems, tools, application stacks, hardware reference designs and other products. Cavium is headquartered in San Jose, CA with design centers in California, Massachusetts, India, Israel, China and Taiwan.



Follow us:       

**Corporate Headquarters** Cavium, Inc. 2315 N. First Street San Jose, CA 95131 408-943-7100

**International Offices** UK | Ireland | Germany | France | India | Japan | China | Hong Kong | Singapore | Taiwan | Israel

Copyright © 2017 Cavium, Inc. All rights reserved worldwide. FastLinQ is a registered trademark of Cavium, Inc. All other brand and product names are registered trademarks or trademarks of their respective owners.

This document is provided for informational purposes only and may contain errors. Cavium reserves the right, without notice, to make changes to this document or in product design or specifications. Cavium disclaims any warranty of any kind, expressed or implied, and does not guarantee that any results or performance described in the document will be achieved by you. All statements regarding Cavium's future direction and intent are subject to change or withdrawal without notice and represent goals and objectives only.