

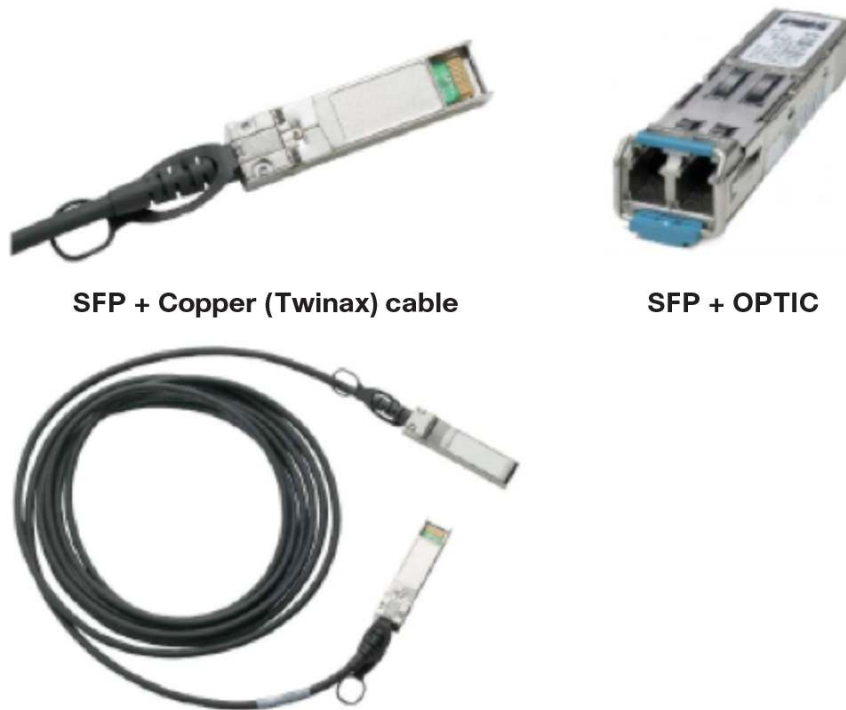
Twinax cables certification matrix for Cisco® Nexus 2000 and Nexus 5000 Series Switches

Revised: November 06, 2010

The Cisco® Nexus™ 2000 and Nexus 5000 Series Data Center switches deliver an innovative architecture to simplify data center transformation by enabling a high-performance, standards-based Ethernet unified fabric.

Both Nexus 2000 and Nexus 5000 series switches use SFP+ form-factor for 10GE interconnects, which is capable of providing 10GE support in either copper or fiber media.

Figure 1. 10GBase-SFP Modules



SFP + Copper (Twinax) cable

SFP + OPTIC

Note: Requirements and procedures for initial configurations and software upgrades tend to change and therefore appear only in the switch or router software release notes. Before installing, configuring, or upgrading a switch, refer to the product release notes on Cisco.com for the latest information. This matrix does not replace or supersede the release notes.

Twinax Cables Certification Matrix for Nexus 2000 and Nexus 5000 switches

Platform	Twinax Cables	Length	Vendor	Minimum Software
N2K-C2148T-1GE	SFP-H10GB-CU1M	1M	Cisco	NX-OS 4.0(0)N1(1)
	SFP-H10GB-CU3M	3M	Cisco	NX-OS 4.0(0)N1(1)
	SFP-H10GB-CU5M	5M	Cisco	NX-OS 4.0(0)N1(1)
	SFP-H10GB-ACU7M	7M	Cisco	NX-OS 4.2(1)N1(1)
	SFP-H10GB-ACU10M	10M	Cisco	NX-OS 4.2(1)N1(1)
N2K-C2248TP-1GE	SFP-H10GB-CU1M	1M	Cisco	NX-OS 4.2(1)N1(1)

Platform	Twinax Cables	Length	Vendor	Minimum Software
N2K-C2224TP-1GE N2K-C2232PP-1GE	SFP-H10GB-CU3M	3M	Cisco	NX-OS 4.2(1)N1(1)
	SFP-H10GB-CU5M	5M	Cisco	NX-OS 4.2(1)N1(1)
	SFP-H10GB-ACU7M	7M	Cisco	NX-OS 4.2(1)N1(1)
	SFP-H10GB-ACU10M	10M	Cisco	NX-OS 4.2(1)N1(1)
N5K-C5020P-BF N5K-M1600 N5K-M1404	SFP-H10GB-CU1M	1M	Cisco	NX-OS 4.0(0)N1(1)
	SFP-H10GB-CU3M	3M	Cisco	NX-OS 4.0(0)N1(1)
	SFP-H10GB-CU5M	5M	Cisco	NX-OS 4.0(0)N1(1)
	NEX-5020-TX1M	1M	EMC	NX-OS 4.0(0)N1(2a)
	NEX-5020-TX3M	3M	EMC	NX-OS 4.0(0)N1(2a)
	NEX-5020-TX5M	5M	EMC	NX-OS 4.0(0)N1(2a)
	3722 S51 5510	1M	IBM	NX-OS 4.1(3)N1(1)
	3722 S51 5520	3M	IBM	NX-OS 4.1(3)N1(1)
	3722 S51 5530	5M	IBM	NX-OS 4.1(3)N1(1)
	AP784A	3M	HP StorageWorks	NX-OS 4.1(3)N1(1)
	AP785A	5M	HP StorageWorks	NX-OS 4.1(3)N1(1)
	X-SFP-H10GB-CU1M-R6	1M	NetApp	NX-OS 4.0(1A)N1(1)
	X-SFP-H10GB-CU1M-R6-C	1M	NetApp	NX-OS 4.0(1A)N1(1)
	X-SFP-H10GB-CU3M-R6	3M	NetApp	NX-OS 4.0(1A)N1(1)
	X-SFP-H10GB-CU3M-R6-C	3M	NetApp	NX-OS 4.0(1A)N1(1)
X-SFP-H10GB-CU5M-R6	5M	NetApp	NX-OS 4.0(1A)N1(1)	
X-SFP-H10GB-CU5M-R6-C	5M	NetApp	NX-OS 4.0(1A)N1(1)	
N5K-C5020P-BF N5K-M1600 N5K-M1404	SFP-H10GB-ACU7M	7M	Cisco	NX-OS 4.2(1)N1(1)
	SFP-H10GB-ACU10M	10M	Cisco	NX-OS 4.2(1)N1(1)
N5K-C5010P-BF N5K-M1600 N5K-M1404	SFP-H10GB-CU1M	1M	Cisco	NX-OS 4.0(1A)N1(1)
	SFP-H10GB-CU3M	3M	Cisco	NX-OS 4.0(1A)N1(1)
	SFP-H10GB-CU5M	5M	Cisco	NX-OS 4.0(1A)N1(1)
	NEX-5020-TX1M	1M	EMC	NX-OS 4.0(1A)N1(1)
	NEX-5020-TX3M	3M	EMC	NX-OS 4.0(1A)N1(1)
	NEX-5020-TX5M	5M	EMC	NX-OS 4.0(1A)N1(1)
	3722 S51 5510	1M	IBM	NX-OS 4.1(3)N1(1)
	3722 S51 5520	3M	IBM	NX-OS 4.1(3)N1(1)
	3722 S51 5530	5M	IBM	NX-OS 4.1(3)N1(1)
	AP784A	3M	HP StorageWorks	NX-OS 4.1(3)N1(1)
	AP785A	5M	HP StorageWorks	NX-OS 4.1(3)N1(1)
	X-SFP-H10GB-CU1M-R6	1M	NetApp	NX-OS 4.0(1A)N1(1)
	X-SFP-H10GB-CU1M-R6-C	1M	NetApp	NX-OS 4.0(1A)N1(1)
	X-SFP-H10GB-CU3M-R6	3M	NetApp	NX-OS 4.0(1A)N1(1)
	X-SFP-H10GB-CU3M-R6-C	3M	NetApp	NX-OS 4.0(1A)N1(1)
X-SFP-H10GB-CU5M-R6	5M	NetApp	NX-OS 4.0(1A)N1(1)	
X-SFP-H10GB-CU5M-R6-C	5M	NetApp	NX-OS 4.0(1A)N1(1)	
N5K-C5010P-BF N5K-M1600 N5K-M1404	SFP-H10GB-ACU7M	7M	Cisco	NX-OS 4.2(1)N1(1)
	SFP-H10GB-ACU10M	10M	Cisco	NX-OS 4.2(1)N1(1)
N5K-C5548P-FA N55-M16P N55-M8P8FP	SFP-H10GB-CU1M	1M	Cisco	NX-OS 5.0(2)N1(1)
	SFP-H10GB-CU3M	3M	Cisco	NX-OS 5.0(2)N1(1)
	SFP-H10GB-CU5M	5M	Cisco	NX-OS 5.0(2)N1(1)
	SFP-H10GB-ACU7M	7M	Cisco	NX-OS 5.0(2)N1(1)
	SFP-H10GB-ACU10M	10M	Cisco	NX-OS 5.0(2)N1(1)
	NEX-5020-TX1M	1M	EMC	NX-OS 5.0(2)N1(1)
	NEX-5020-TX3M	3M	EMC	NX-OS 5.0(2)N1(1)
	NEX-5020-TX5M	5M	EMC	NX-OS 5.0(2)N1(1)
	3722 S51 5510	1M	IBM	NX-OS 5.0(2)N1(1)
	3722 S51 5520	3M	IBM	NX-OS 5.0(2)N1(1)
	3722 S51 5530	5M	IBM	NX-OS 5.0(2)N1(1)
	AP784A	3M	HP StorageWorks	NX-OS 5.0(2)N1(1)
	AP785A	5M	HP StorageWorks	NX-OS 5.0(2)N1(1)
	X-SFP-H10GB-CU1M-R6	1M	NetApp	NX-OS 5.0(2)N1(1)

Platform	Twinax Cables	Length	Vendor	Minimum Software
	X-SFP-H10GB-CU1M-R6-C	1M	NetApp	NX-OS 5.0(2)N1(1)
	X-SFP-H10GB-CU3M-R6	3M	NetApp	NX-OS 5.0(2)N1(1)
	X-SFP-H10GB-CU3M-R6-C	3M	NetApp	NX-OS 5.0(2)N1(1)
	X-SFP-H10GB-CU5M-R6	5M	NetApp	NX-OS 5.0(2)N1(1)
	X-SFP-H10GB-CU5M-R6-C	5M	NetApp	NX-OS 5.0(2)N1(1)

Twinax Cable support algorithm on Nexus 2000 and Nexus 5000 switches

Starting NX-OS 4.1(3)N2.1 software release, following algorithm is used while detecting SFP+ twinax cables on Nexus 2000 and Nexus 5000 switches:

If attached interconnect (transceiver) is a twinax cable, then verify transceiver SPROM to match Cisco magic code. If the check succeeds then bring up the interface else check whether the Vendor Part Number (PN) has been certified. If the Vendor PN is certified bring up the interface else print a warning message stating that non-Cisco transceiver is attached (shown below) and try to bring up the port.

```
2009 Oct 9 01:46:42 switch %ETHPORT-3-IF_NON-CISCO_TRANSCEIVER: Non-Cisco transceiver on interface Ethernet1/18 is detected
```

Cisco Service and Support

If customer has valid support contract for Cisco Nexus switches, Cisco TAC will support twinax cables that are part of compatibility matrix for respective switches. However, if the twinax cables are not purchased through Cisco, customer cannot RMA these cables to Cisco for replacement.

If a twinax cable that is not part of the compatibility matrix is connected into a system, Cisco TAC will still debug the problem provided the customer has valid support contract on the switches. However TAC may ask the customer to replace with Cisco qualified cables if there is a situation that points to cables possibly being faulty or the customer will be redirected to the cable provider for support. Cisco TAC cannot issue an RMA against uncertified cables for replacement.

For more information about Cisco Nexus Services, visit

http://www.cisco.com/en/US/products/ps10405/serv_home.html

References:

- Cisco Nexus 2000 Series: <http://www.cisco.com/go/nexus2000>
- Cisco Nexus 5000 Series: <http://www.cisco.com/go/nexus5000>
- Cisco 10GE SFP+ Transceivers:
http://www.cisco.com/en/US/prod/collateral/modules/ps5455/data_sheet_c78-455693.html
- Cisco NX-OS: <http://www.cisco.com/go/nxos>
- Cisco Nexus Services: http://www.cisco.com/en/US/products/ps10405/serv_home.html



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)