Overview

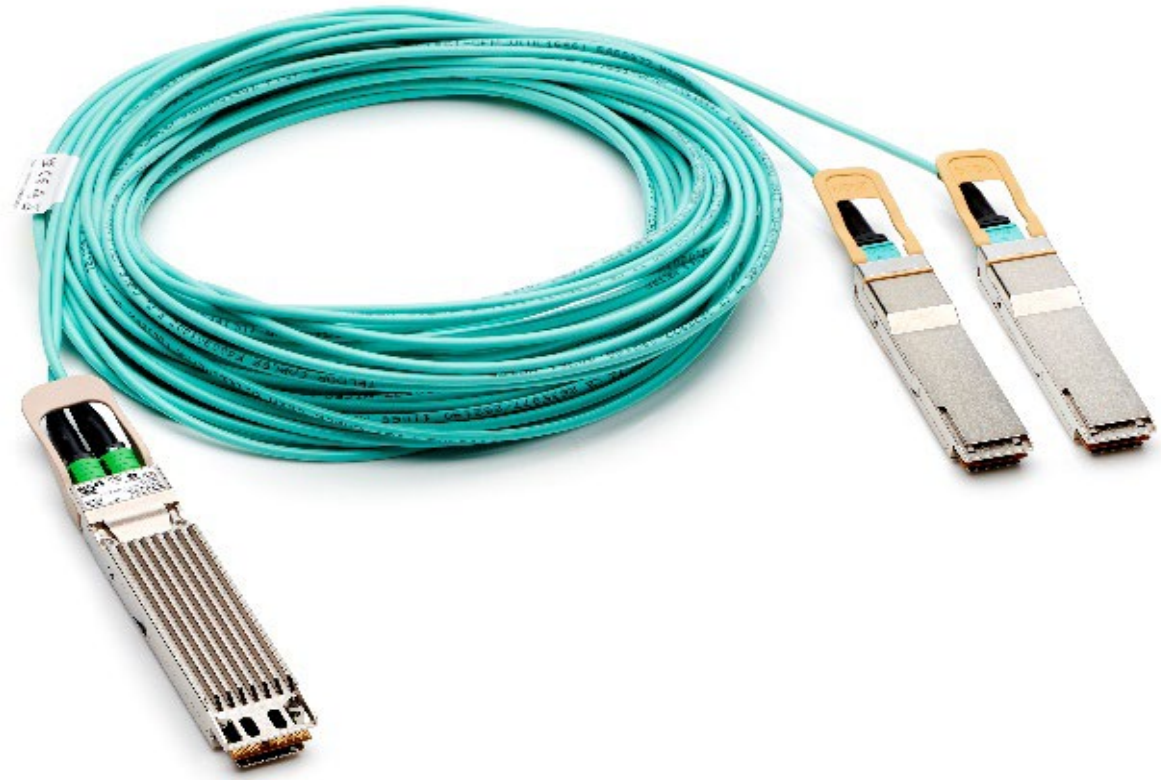
HPE InfiniBand NDR Cables

HPE InfiniBand NDR cables offer a variety of types in order to accommodate the customers' needs along the scale of cost and performance. InfiniBand NDR enables the solution to include 400G as a solution.

InfiniBand NDR Direct Attach Copper Cables (DAC) and InfiniBand Active Copper Cables (ACC) are the lowest cost solution to create high-speed, low-latency connections in an InfiniBand NDR solution. These cables are offered in a variety of lengths in an OSFP formal. Passive DACs use copper wires without any electronics as the connection. These cables consume zero power and have the lowest latency and insertion loss. InfiniBand Active Copper Cables include signal-boosting integrated circuits (ICs) in the cable end to extend their reach.

NDR optical interconnect is available using NDR transceivers and fiber cables. NDR transceivers for switches are dual ported and support two NDR links. NDR transceivers for Host Channel Adapters (HCAs) are single ported. Connection between NDR switches an HDR/HDR100 adapters is enabled with Active Optical Cable (AOC) providing OSFP to dual QSFP (HDR) or quad QSFP (HDR100) connections

These cables meet the InfiniBand Trade Association (IBTA) standards and are designed for use in supercomputers that have the most stringent requirements.



Overview

Models

InfiniBand Direct Attach Copper Cables

HPE InfiniBand NDR OSFP to OSFP 0.5m Switch-Switch Direct Attach Copper Cable	P45696-B21
HPE InfiniBand NDR OSFP to OSFP 1m Switch-Switch Direct Attach Copper Cable	P45696-B22
HPE InfiniBand NDR OSFP to OSFP 1.5m Switch-Switch Direct Attach Copper Cable	P45696-B23
HPE InfiniBand NDR OSFP to OSFP 2m Switch-Switch Direct Attach Copper Cable	P45696-B24
HPE InfiniBand NDR200 OSFP to 4xOSFP 1m Splitter Direct Attach Copper Cable	P45698-B22
HPE InfiniBand NDR200 OSFP to 4xOSFP 1.5m Splitter Direct Attach Copper Cable	P45698-B23
HPE InfiniBand NDR200 OSFP to 4xOSFP 2m Splitter Direct Attach Copper Cable	P45698-B24
HPE InfiniBand NDR200 OSFP to 4xOSFP 2.5m Splitter Direct Attach Copper Cable	P45698-B25
HPE InfiniBand NDR200 OSFP to 4xOSFP 3m Splitter Direct Attach Copper Cable	P45698-B26
HPE InfiniBand NDR OSFP to 2xOSFP 1m Splitter Direct Attach Copper Cable	P45697-B22
HPE InfiniBand NDR OSFP to 2xOSFP 1.5m Splitter Direct Attach Copper Cable	P45697-B23
HPE InfiniBand NDR OSFP to 2xOSFP 2m Splitter Direct Attach Copper Cable	P45697-B24
HPE InfiniBand NDR OSFP to 2xOSFP 2.5m Splitter Direct Attach Copper Cable	P45697-B25
HPE InfiniBand NDR OSFP to 2xOSFP 3m Splitter Direct Attach Copper Cable	P45697-B26

Notes:

- Switch-Switch cables may only be used to connect between NDR switches. Splitter cables may only be used to connect switches to Host Channel Adapters (HCAs)
- Switch-side transceivers may only be used in NDR switch ports. HCA-side transceivers may only be used in HCA ports
- Multi-mode and single modes MUST not be mixed. Multi-mode transceivers MUST be used with Multi-mode fiber cables. Single-mode transceiver MUST be used with Single-mode fibers

InfiniBand Active Copper Cables

HPE InfiniBand NDR OSFP to OSFP 3m Switch-Switch Active Copper Cable	P55189-B21
HPE InfiniBand NDR OSFP to OSFP 4m Switch-Switch Active Copper Cable	P55189-B22
HPE InfiniBand NDR OSFP to OSFP 5m Switch-Switch Active Copper Cable	P55189-B23
HPE InfiniBand NDR200 OSFP to 4xOSFP 4m Splitter Active Copper Cable	P50397-B21
HPE InfiniBand NDR200 OSFP to 4xOSFP 5m Splitter Active Copper Cable	P50397-B22
HPE InfiniBand NDR OSFP to 2xOSFP 4m Splitter Active Copper Cable	P50396-B21
HPE InfiniBand NDR OSFP to 2xOSFP 5m Splitter Active Copper Cable	P50396-B22

Notes:

- Switch-Switch cables may only be used to connect between NDR switches. Splitter cables may only be used to connect switches to Host Channel Adapters (HCAs)
- Switch-side transceivers may only be used in NDR switch ports. HCA-side transceivers may only be used in HCA ports
- Multi-mode and single modes MUST not be mixed. Multi-mode transceivers MUST be used with Multi-mode fiber cables. Single-mode transceiver MUST be used with Single-mode fibers

InfiniBand Single Mode Optical Transceiver

HPE InfiniBand NDR 2x400Gb OSFP Single-mode 100m Switch-side Transceiver	P45693-B21

Notes:

- Switch-Switch cables may only be used to connect between NDR switches. Splitter cables may only be used to connect switches to Host Channel Adapters (HCAs)
- Switch-side transceivers may only be used in NDR switch ports. HCA-side transceivers may only be used in HCA ports
- Multi-mode and single modes MUST not be mixed. Multi-mode transceivers MUST be used with Multi-mode fiber cables. Single-mode transceiver MUST be used with Single-mode fibers
- Only supported from switch to switch. There is no switch to HCA support using single mode fiber.

Overview

InfiniBand Single Mode Multi Fiber Push On

HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Single-mode 3m Cable	P45731-B21
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Single-mode 5m Cable	P45731-B22
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Single-mode 10m Cable	P45731-B23
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Single-mode 15m Cable	P45731-B24
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Single-mode 20m Cable	P45731-B25
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Single-mode 30m Cable	P45731-B26

Notes:

- Switch-Switch cables may only be used to connect between NDR switches. Splitter cables may only be used to connect switches to Host Channel Adapters (HCAs)
- Switch-side transceivers may only be used in NDR switch ports. HCA-side transceivers may only be used in HCA ports
- Multi-mode and single modes MUST not be mixed. Multi-mode transceivers MUST be used with Multi-mode fiber cables. Single-mode transceiver MUST be used with Single-mode fibers

InfiniBand Multi Mode Optical Transceiver

HPE InfiniBand NDR 2x400Gb OSFP Multi-mode 50m Switch-side Transceiver	P49762-B21
HPE InfiniBand NDR 1x400Gb OSFP Multi-mode 50m HCA-side Transceiver	P49764-B21

Notes:

- Switch-Switch cables may only be used to connect between NDR switches. Splitter cables may only be used to connect switches to Host Channel Adapters (HCAs)
- Switch-side transceivers may only be used in NDR switch ports. HCA-side transceivers may only be used in HCA ports
- Multi-mode and single modes MUST not be mixed. Multi-mode transceivers MUST be used with Multi-mode fiber cables. Single-mode transceiver MUST be used with Single-mode fibers

InfiniBand Multi Mode Fiber Push On

HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Multi-mode 3m Cable	P49765-B21
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Multi-mode 5m Cable	P49765-B22
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Multi-mode 10m Cable	P49765-B23
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Multi-mode 15m Cable	P49765-B24
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Multi-mode 20m Cable	P49765-B25
HPE InfiniBand NDR 8 Fiber MPO to 8 Fiber MPO Multi-mode 30m Cable	P49765-B26
HPE InfiniBand NDR200 8 Fiber MPO to 2x4 Fiber MPO Multi-mode 3m Splitter Cable	P49766-B21
HPE InfiniBand NDR200 8 Fiber MPO to 2x4 Fiber MPO Multi-mode 5m Splitter Cable	P49766-B22
HPE InfiniBand NDR200 8 Fiber MPO to 2x4 Fiber MPO Multi-mode 10m Splitter Cable	P49766-B23
HPE InfiniBand NDR200 8 Fiber MPO to 2x4 Fiber MPO Multi-mode 15m Splitter Cable	P49766-B24
HPE InfiniBand NDR200 8 Fiber MPO to 2x4 Fiber MPO Multi-mode 20m Splitter Cable	P49766-B25
HPE InfiniBand NDR200 8 Fiber MPO to 2x4 Fiber MPO Multi-mode 30m Splitter Cable	P49766-B26

Notes:

- Switch-Switch cables may only be used to connect between NDR switches. Splitter cables may only be used to connect switches to Host Channel Adapters (HCAs)
- Switch-side transceivers may only be used in NDR switch ports. HCA-side transceivers may only be used in HCA ports
- Multi-mode and single modes MUST not be mixed. Multi-mode transceivers MUST be used with Multi-mode fiber cables. Single-mode transceiver MUST be used with Single-mode fibers

Service and Support

HPE Pointnext - Service and Support

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- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

Managed services to run your IT operations

HPE GreenLake Management Services provides services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

Recommended Services

HPE Pointnext Tech Care.

HPE Pointnext Tech Care is the new operational service experience for HPE products. Tech Care goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Pointnext Tech Care has been reimagined from the ground up to support a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Pointnext Tech Care is available in three response levels. Basic, which provides 9x5 business hour availability and a 2 hour response time. Essential which provides a 15 minute response time 24x7 for most enterprise level customers, and Critical which includes a 6 hour repair commitment where available and outage management response for severity 1 incidents.

https://www.hpe.com/services/techcare

HPE Pointnext Complete Care

HPE Pointnext Complete Care is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts. HPE Pointnext Complete Care provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

https://www.hpe.com/services/completecare

Service and Support

Warranty and Operational Support Services

Warranty and Support Services will extend to include HPE options configured with your server or storage device. The price of support service is not impacted by configuration details. HPE sourced options that are compatible with your product will be covered under your server support at the same level of coverage allowing you to upgrade freely. Installation for HPE options is available as needed. To keep support costs low for everyone, some high value options will require additional support. Additional support is only required on select high value workload accelerators, fibre switches, InfiniBand and UPS options 12KVA and over. Coverage of the UPS battery is not included under TS support services; standard warranty terms and conditions apply.

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Protect your product, beyond warranty.

Parts and Materials

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product QuickSpecs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

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Technical Specifications

Environment-Friendly Products and Approach End-of-Life Management and Recycling

Hewlett Packard Enterprise offers end-of-life **product return, trade-in, and recycling programs**, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE Directive (2012/19/EU) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the **Hewlett Packard Enterprise web** site.

These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Summary of Changes

Date	Version History	Action	Description of Change
03-Apr-2023	Version 3	Changed	Overview section was updated.
06-Mar-2023	Version 2	Changed	Overview section was updated.
19-Dec-2022	Version 1	New	QS Created

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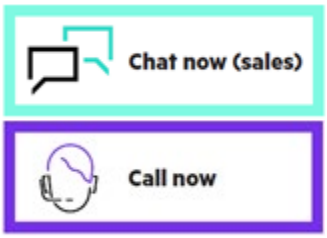

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