NVIDIA ConnectX-7 Adapter Cards Firmware Release Notes v28.49.1014 (June 2026 GA Release)

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This version is not intended for GB/B customers. GB/B customers should use the designated release package to ensure full compatibility, qualification, and support alignment.

1 Release Notes Update History

Version	Date	Description
28.49.1014	June 2026	Initial release of this Release Notes version.

2 Overview

Firmware which is added at the time of manufacturing, is used to run user programs on the device and can be thought of as the software that allows hardware to run. Embedded firmware is used to control the functions of various hardware devices and systems, much like a computer's operating system (OS) controls the function of software applications. Firmware may be written into read-only memory (ROM), erasable programmable read-only memory (EPROM) or flash memory.

The ConnectX-7 smart host channel adapter (HCA) provides up to four ports of connectivity and 400Gb/s of throughput, hardware-accelerated networking, storage, security, and manageability services at data center scale for cloud, telecommunications, AI, and enterprise workloads. ConnectX-7 empowers agile and high-performance networking solutions with features such as Accelerated Switching and Packet Processing (ASAP2), advanced RoCE, GPUDirect Storage, and in-line hardware acceleration for Transport Layer Security (TLS), IP Security (IPsec), and MAC Security (MACsec) encryption and decryption. ConnectX-7 enables organizations to meet their current and future networking needs in both high-bandwidth and high-density environments.

The ConnectX-7 smart host channel adapter (HCA), featuring the NVIDIA Quantum-2 InfiniBand architecture, provides the highest networking performance available to take on the world's most challenging workloads. ConnectX-7 provides ultra-low latency, 400Gb/s throughput, and innovative NVIDIA In-Network Computing acceleration engines to provide additional acceleration to deliver the scalability and feature-rich technology needed for supercomputers, artificial intelligence, and hyperscale cloud data centers.

2.1 Firmware Download

Please visit Firmware Downloads.

2.2 Document Revision History

A list of the changes made to this document are provided in Document Revision History.

3 Firmware Compatible Products

These are the release notes for the NVIDIA® ConnectX®-7 adapters firmware. This firmware supports the following protocols:

- InfiniBand - EDR, HDR100[2], HDR[2], NDR200[2], NDR[2]
- Ethernet - 1GbE, 10GbE, 25GbE, 40GbE, 50GbE[1], 100GbE[1], 200GbE[2], 400GbE[2]
- PCI Express 5.0, supporting backwards compatibility for v4.0, v3.0, v2.0 and v1.1

[1]. Speed that supports both NRZ and PAM4 modes in Force mode and Auto-Negotiation mode.

[2]. Speed that supports PAM4 mode only.

When connecting an NVIDIA-to-NVIDIA adapter card in ETH PAM4 speeds, Auto-Neg should always be enabled.

3.1 Supported Devices

Refer to the hardware documentation for the list of supported devices.

3.2 Driver Software, Tools and Switch Firmware

The following are the drivers' software, tools, switch/HCA firmware versions tested that you can upgrade from or downgrade to when using this firmware version:

	Supported Version
ConnectX-7 Firmware	28.49.1014 / 28.48.1000 / 28.47.1088
DOCA-HOST	3.4 0 / 3.3.0 **Note:** For the list of the supported Operating Systems, please refer to the driver's Release Notes.
WinOF-2	26.4.50010 / 26.1.50000 / 25.10.51000 **Note:** For the list of the supported Operating Systems, please refer to the driver's Release Notes.
MFT	4.36.0-147 / 4.35.0-159 / 4.34.1-10 **Note:** For the list of the supported Operating Systems, please refer to the driver's Release Notes.
FlexBoot	3.9.101
UEFI	14.42.11
MLNX-OS	3.12.6000 onwards
Cumulus	5.15.0 onwards
NVIDIA Quantum-2 Firmware	31.2016.2054 onwards

4 Changes and New Features

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. NVIDIA recommends upgrading your devices' firmware to this release to improve the devices' firmware security and reliability.

To generate PLDM packages for firmware updates, users must install and use the MFT version that corresponds with the respective firmware release.

Feature/Change	Description
28.49.1014	
PCC/ZTR-RTT Congestion-Control Histogram Collection	Added support for Congestion-Control histogram collection in the PCC/ZTR-RTT algorithm. After enabling this capability, customers can read RATE and RTT histogram counters for PCC-managed flows.
ZTR_RTTCC Tunable Probe Timeout	Added a new parameter to the ZTR_RTTCC algorithm to define the probe-packet timeout threshold.
PSP Transport Packet Reformat	Added support for a new packet reformat type for PSP transport packets. This reformat removes the PSP trailer and the UDP + PSP transport headers, and updates the IP Protocol field based on the PSP next_header value.
Bug Fixes	See *Bug Fixes in this Firmware Version* section.

4.1 Customer Affecting Changes

4.1.1 Changes in This Release

This section provides a list of changes that took place in the current version and break compatibility/interface, discontinue support for features and/or OS versions, etc.

Introduced in Version	Description
N/A	N/A

4.1.2 Changes Planned for Future Releases

This section provides a list of changes that will take place in a future version of the product and will break compatibility/interface, discontinue support for features and/or OS versions, etc.

Planned for Version	Description
N/A	N/A

4.1.3 Changes in Earlier Releases

This section provides a list of changes that took place throughout the past two major releases that broke compatibility/interface, discontinued support for features and/or OS versions, etc.

For an archive of all changes, please refer to the Release Notes History section.

Introduced in Version	Description	Customer Impact and Recommendation
28.48.1000	Starting with this release, ConnectX CoRIMs/cbor files are available through the NVIDIA Attestation RIM service. RIM service documentation is available here. Bundling ConnectX CoRIMs with the firmware zip files will be retired in a future release, and customers should plan to transition to the NVIDIA RIM service.	
28.47.1026	To align with updated Microsoft UEFI Secure Boot requirements and the upcoming end-of-life of the 2011 Certificate Authority (CA), NVIDIA is transitioning to the 2023 CA. To ensure successful loading of the Expansion ROM (ExpROM) during the UEFI Secure Boot process, system BIOS and operating system trust stores must be updated to include the 2023 CA. **Note:** When performing a firmware update of ConnectX and BlueField devices the new certificate is required for Secure Boot. To continue supporting Secure Boot, systems must be updated to recognize the "Microsoft Option ROM UEFI CA 2023."	
28.47.1026	Starting with the October 2025 firmware release, and for all subsequent versions, compatibility with the older MFT releases (4.31.0-149 and 4.30.0-139) is no longer supported.	
28.46.1006	Renamed firmware-generated PLDM images to include the firmware name and PSID.	
28.43.2026	**DPA Outbox Blocking-Mode** Due to a silicon issue, as of firmware version 28.43.2026, the DPA outbox is configured to operate in non-blocking mode, causing DPA outbox requests to complete immediately without waiting for actual completion. As a result, the DPA stack must poll a "busy" bit before initiating another DPA outbox operation.	Update the firmware version to 28.43.2026 or higher or update the BF-Bundle (containing this firmware) and DOCA-Host to 2.9.x or higher. This is mandatory for customers programming the DPA (e.g., DPA with DOCA PCC, or using NVIDIA turn-key apps which utilize the DPA (virtio-net/blk/fs, NVMe).
	DPA Thread Context Due to internal-stack API changes, as of firmware v28.43.2026, DPA thread context is changed in the DPA. This affects the overlying DPA stack. As of firmware version 28.43.2026, internal-stack API changes have altered the DPA thread context, impacting the overlying DPA stack.	

4.1.4 Discontinued Features

List of features which are supported in previous generations of hardware devices.

N/A

4.2 Declared Unsupported Features

This section provides a list of features that are not supported by the software.

N/A

5 Bug Fixes in this Firmware Version

Internal Ref.	Issue
4980585 / NVBug 6084453	**Description:** Fixed an issue where NSM Get-Port-Network-Addresses returned an invalid format on B200/B300 HMC. It now follows the documented non-compact format.
	Keywords: NSM Get-Port-Network-Addresses
	Detected in version: 28.48.1000
	Fixed in Release: 28.49.1014
4971034 / 4967948	**Description:** Fixed an issue that could prevent the adapter's PCIe link from re-establishing after the host resumed from a deep power-down state. This fix improves the reliability of suspend/ resume cycles.
	Keywords: PCIe (Standby / L2-L3 link recovery)
	Detected in version: 28.48.1000
	Fixed in Release: 28.49.1014
4885134 / 4875169 / 4885137 / 4892844	**Description:** Fixed PCIe link training failures on GB200 by correcting the equalization sequence logic.
	Keywords: PCIe
	Detected in version: 28.48.1000
	Fixed in Release: 28.49.1014
4964566 / 4957757	**Description:** Fixed a DEAD IRISC assert that could occur during TLV NV_DATA flash access by suspending the watchdog while waiting for flash IPC (until timeout), preventing the assert on TLV access.
	Keywords: DEAD IRISC assert
	Detected in version: 28.48.1000
	Fixed in Release: 28.49.1014
4657767 / 4658776 / 4874764 / 4874765	**Description:** Fixed an issue where repeatedly writing NVCONFIG TLVs could cause excessive NV_DATA partition swaps during garbage collection. This rapid cycling could accelerate flash wear (end-of-life at 100,000 erases) and potentially render the device inoperable. Firmware now avoids unnecessary physical writes by returning OK when the requested configuration already exists in flash, and increases the maximum supported NV_DATA partition swaps from 100,000 to 200,000.
	Keywords: NVCONFIG TLVs
	Detected in version: 28.48.1000
	Fixed in Release: 28.49.1014
4871267 / 4871254	**Description:** Fixed an issue where ICM_RES_HW_DMFS_ENCAP_H_FW was allocated per GVMI, preventing some RTTs from using it.

Internal Ref.	Issue
	Keywords: GVMI, RTT
	Detected in version: 28.48.1000
	Fixed in Release: 28.49.1014
4774394 / 4890471 / 4890472 / 4890473	**Description:** Fixed an issue where vDPA doorbell resources were not released, which could cause failures when running other functionality after a vDPA FLR. Doorbell resources are now properly unlocked.
	Keywords: vDPA
	Detected in version: 28.48.1000
	Fixed in Release: 28.49.1014
4789601 / 4850200 / NVBug 5736447	**Description:** Fixed an issue where RDMA traffic could stall in large-scale deployments for certain source IP and UDP source-port combinations when DOCA PCC was active and no congestion-control algorithm was configured in algorithm slot 0.
	Keywords: RDMA, DOCA PCC, Congestion Control Algorithm
	Detected in version: 28.48.1000
	Fixed in Release: 28.49.1014
4796182	**Description:** Fixed an issue where the live migration target did not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
	Keywords: Live migration
	Detected in version: 28.47.1026
	Fixed in Release: 28.49.1014
4873608 / 4921307	**Description:** Fixed an issue where a precopy image was processed during the stop-copy phase, causing prolonged downtime due to a software limitation. The handling was slow because the handler performed a linear search for data; this was improved by replacing it with a faster search approach enabled via compile-time preprocessing.
	Keywords: Live Migration Downtime
	Detected in version: 28.47.1026
	Fixed in Release: 28.49.1014
4683339 / 4780301 / 4895260	**Description:** Fixed an issue where QPs established before loading DOCA PCC could exhibit inconsistent algorithm-selected behavior between ports in LAG mode after DOCA PCC is loaded.
	Keywords: Congestion Control, DOCA PCC
	Detected in version: 28.47.1026

Internal Ref.	Issue
	Fixed in Release: 28.49.1014
4867969 / 4868140	**Description:** Fixed an issue where, on ConnectX-7 Multi-ASIC systems, initializing the maximum number of VFs concurrently with large MSI-X allocations could hit ICMC resource limits; note that the 320 KB allocation remains mandatory on affected devices.
	Keywords: ICMC memory allocation
	Detected in version: 28.47.1026
	Fixed in Release: 28.49.1014

6 Known Issues

VF Network Function Limitations in SR-IOV Legacy Mode

Dual Port Device	Single Port Device
127 VF per PF (254 functions)	127

VF Network Function Limitations in Switchdev Mode

Dual Port Device	Single Port Device
127 VF per PF (254 functions)	127

VF+SF Network Function Limitations in Switchdev Mode

Dual Port Device	Single Port Device
• 127 VF per PF (254 functions) • 512 PF+VF+SF per PF (1024 functions)	• 127 VF (127 functions) • 512 PF+VF+SF per PF (512 functions)

Internal Ref.	Issue
4635705	**Description:** The power-up time of a server with multiple ConnectX NICs may be significantly longer when DMA protection is enabled in the server BIOS and the server has five or more NICs configured for InfiniBand.
	Workaround: N/A
	Keywords: Power-up time, DMA protection BIOS
	Detected in version: 28.49.1014
4285063	**Description:** mlxconfig may report incorrect default INI parameter values when queried, even though the Current and Next boot values are reported correctly.
	Workaround: N/A
	Keywords: mlxconfig
	Detected in version: 28.48.1000
4604969	**Description:** Probe packets might be dropped at the transmission stage when multiple congestion control flows are active.
	Workaround: N/A
	Keywords: PCC, RTT, probe
	Detected in version: 28.47.1026
4436870	**Description:** PCIe link speed may degrade after a disable/enable operation.
	Workaround: A manual retrain command is required to restore full speed.
	Keywords: PCIe

Internal Ref.	Issue
	Detected in version: 40.47.1026
4496642	**Description:** The timestamps (t2, t4) of the received RTT probes are taken from the free-running clock, even when ROCE_CC_RTT_TIMESTAMP_FORMAT is set to 0x02. The format of all RTT probe timestamps can be found in HCA_CAP.rtt_timestamp_format.
	Workaround: N/A
	Keywords: RTT RTC timestamp
	Detected in version: 28.47.1026
4705241	**Description:** When Quantum-2 is part of an XDR topology, serving as a leaf switch connected to NDR-based hosts, a bandwidth degradation of approximately 3–7 Gb/s is expected.
	Workaround: N/A
	Keywords: XDR, NDR, Quantum-2
	Detected in version: 28.47.1026
4705948	**Description:** When using DC as the InfiniBand transport type to perform an ib_read RDMA operation between ConnectX-7 (NDR) and ConnectX-8, a bandwidth degradation of approximately 25% may be observed when using a low number of QPs (1–16). The performance degradation diminishes as the number of QPs increases.
	Workaround: N/A
	Keywords: DC, ib_read RDMA, NDR, performance
	Detected in version: 28.47.1026
4685736	**Description:** Creating a DPA process that allocates a 128 MB data segment and loads a dynamic library may fail with syndrome 0xdc30ac.
	Workaround: Limit the DPA application’s data segment size to 64 MB.
	Keywords: DPA
	Detected in version: 28.47.1026
4628696	**Description:** When HASH LAG single QP is enabled, ib_read_bw for a single QP over hash LAG can reach up to 337 Gbps, while ib_write_bw for a single QP can achieve up to 390 Gbps.
	Workaround: N/A
	Keywords: HASH LAG single QP
	Detected in version: 28.47.1026
4657082	**Description:** PTP holdover is not supported on FireFly without SyncE; it is available only when using Servo.
	Workaround: N/A
	Keywords: PTP Holdover

Internal Ref.	Issue
	Detected in version: 28.47.1026
4394475	**Description:** The existing congestion control configuration applies globally, rather than on a per-priority basis.
	Workaround: Ensure that the configuration values for all priorities are aligned in either `mlxconfig ROCE_CC_PRIO_MASK_P$port` or `sysfs ecn/roce_rp/enable/$port`.
	Keywords: Congestion control, ROCE_CC_PRIO
	Detected in version: 28.45.1020
4063662	**Description:** The 1pps Timing Error (TE) in Noise Generation (Class B) shows a constant offset when RS-FEC is disabled in the mlxlink option.
	Workaround: N/A
	Keywords: PTP, 1PPS
	Detected in version: 28.45.1020
4303583	**Description:** The query_header_modify_pattern command may produce inaccurate results when specific fields are used.
	Workaround: N/A
	Keywords: query_header_modify_pattern command
	Detected in version: 28.45.1020
3875417	**Description:** For systems that support a large number of VFs (200 or more) and can open over a million QPs, the FLR may take about 1 second per function resulting in a driver timeout.
	Workaround: N/A
	Keywords: VFs, QPs, FLR
	Detected in version: 28.44.1204
4193036	**Description:** The initial allocation of DPA_THREAD on group affinity allocates memory for all EUs, including stack, core dump, and other resources.
	Workaround: N/A
	Keywords: DPA
	Detected in version: 28.44.1204
4030457	**Description:** This release does not support InfiniBand (IB) over Windows OS when using ConnectX-7 MCX75310AAS-NEAT and MCX75310AAC-NEAT OPNs.
	Workaround: N/A
	Keywords: InfiniBand, Windows
	Detected in version: 28.42.1000

Internal Ref.	Issue
-	**Description:** Downgrading the following adapter cards (MCX713104AS-ADAT & MCX713104AC-ADAT) to a lower version than 20.39.2048 is not supported.
	Workaround: N/A
	Keywords: Downgrade
	Discovered in Version: 28.40.1000
3728450	**Description:** SW_RESET with a pending image is currently not supported.
	Workaround: N/A
	Keywords: SW_RESET
	Discovered in Version: 28.40.1000
3614362	**Description:** When connected to a Spectrum-1 switch system using NRZ 25G optic module supporting DME in NO FEC, an EFF BER of -13 may be seen once in 200 toggles.
	Workaround: To raise the link, re-toggle the port.
	Keywords: Spectrum-1, NRZ, BER, port toggling
	Discovered in Version: 28.39.1002
3629216	**Description:** mlxfwreset level 3 command is not supported for MCX750500B-0D00 / MCX750500B-0D0K / MCX755206AS-NEAT-N P/N.
	Workaround: 1. Enable mlxfwreset level 4. `mlxfwreset -d <dev> r -l 4 -y` 2. Reboot the server.
	Keywords: mlxfwreset level 3
	Discovered in Version: 28.39.1002
-	**Description:** The I^2C clock fall time is lower than the 12ns minimum defined in the I2C-bus specification. For further information, refer to the I^2C-bus Specification, Version 7.0, October 2021, https://www.i2c-bus.org/.
	Workaround: N/A
	Keywords: I^2C clock
	Discovered in Version: 28.39.1002
3179534	**Description:** 25G/lane speeds are not supported on 200GbE optic cables.
	Workaround: N/A
	Keywords: Cables, 200GbE
	Discovered in Version: 28.39.1002

Internal Ref.	Issue
3435259	**Description:** The host enables the device to populate only 1 bus. When opening extra 2 Physical ports, moving from dual-port to quad-port, the user can open 2 less Virtual Functions.
	Workaround: N/A
	Keywords: VF, dual-port, quad-port
	Discovered in Version: 28.39.1002
3525865	**Description:** Unexpected system behavior might be observed if the driver is loaded while reset is in progress.
	Workaround: N/A
	Keywords: Sync 1 reset, firmware reset
	Discovered in Version: 28.39.1002
3363753	**Description:** The link is down when connected to the MMS1V00-WM (DR4) optical module.
	Workaround: N/A
	Keywords: 400G, link down
	Discovered in Version: 28.38.1002
3439438	**Description:** When connecting to a High Speed Traffic Generator in 400G speed, the linkup time may takes up to 3 minutes.
	Workaround: N/A
	Keywords: 400G, linkup time
	Discovered in Version: 28.38.1002
-	**Description:** When upgrading from firmware v28.35.2000 to a newer one, the default port speeds of adapter cards MCX755106AS-HEAT/ MCX755106AC-HEAT will change from InfiniBand to Ethernet.
	Workaround: To change it back to InfiniBand, please follow the instructions in the ConnectX-7 hardware User Manual.
	Keywords: Firmware upgrade, port type, MCX755106AS-HEAT/ MCX755106AC-HEAT
	Discovered in Version: 28.37.1014
3376224	**Description:** FEC override is not supported when working with NRZ speeds on PAM4 Optical modules.
	Workaround: N/A
	Keywords: FEC override, NRZ, PAM4
	Discovered in Version: 28.37.1014

Internal Ref.	Issue
3262845	**Description:** In the ConnectX-7 adapter card with P/N MCX750500B-0D0K, the "Fatal Error Reporting Enable" bit controls both the fatal and the non-fatal ERR MSG forwarding. The "Non-Fatal Error Reporting Enable" bit does not affect the ERR MSG forwarding.
	Workaround: N/A
	Keywords: Fatal Error Reporting Enable" bit, PCIe, MCX750500B-0D0K
	Discovered in Version: 28.36.1010
3329109	**Description:** MFS1S50-H003E cable supports only HDR rate when used as a split cable.
	Workaround: N/A
	Keywords: HDR, split cable, MFS1S50-H003E
	Discovered in Version: 28.36.1010
2844036	**Description:** When using the "Dual Write" feature with QP buffer bigger than the maximum outstanding WQEs (128), the data being sent on the standby QP can be corrupted.
	Workaround: Limit the QP buffer size when using "Dual Write" up to 128 WQEs.
	Keywords: Dual-write, QP
	Discovered in Version: 28.36.1010
3178339	**Description:** PCIe PML1 is disabled.
	Workaround: N/A
	Keywords: PCIe PML1
	Discovered in Version: 28.35.1012
3033910	**Description:** BAR misses caused by a memory write/read actions are not reported in the AER and the device status.
	Workaround: N/A
	Keywords: BAR miss, AER
	Discovered in Version: 28.34.4000
3140645	**Description:** 3rd party servers may hang after warm reboot due to the PCIe switch.
	Workaround: N/A
	Keywords: PCIe, 3rd party servers
	Discovered in Version: 28.34.4000
-	**Description:** Changing dynamic PCIe link width is not supported.
	Workaround: N/A
	Keywords: PCIe

Internal Ref.	Issue
	Discovered in Version: 28.34.1002
3141072	**Description:** The "max_shaper_rate" configuration query via QEEC mlxreg returns a value translated to hardware granularity.
	Workaround: N/A
	Keywords: RX Rate-Limiter, Multi-host
	Discovered in Version: 28.34.1002
2870970	**Description:** GTP encapsulation (flex parser profile 3) is limited to the NIC domain. Encapsulating in the FDB domain will render a 0-size length in GTP header.
	Workaround: N/A
	Keywords: GTP encapsulation
	Discovered in Version: 28.34.1002
3081264	**Description:** 10G/40G speeds are not supported on MFS1S00-XXXX modules (200G optics) in ConnectX-7 adapter cards.
	Workaround: N/A
	Keywords: Optical cables
	Discovered in Version: 28.33.4030
3070590	**Description:** PLL modules are not supported in ConnectX-7 ethernet adapter cards.
	Workaround: N/A
	Keywords: PLL
	Discovered in Version: 28.33.4030
3070409	**Description:** When connecting a ConnectX-7 adapter card to a ConnectX-6 Dx or an NVIDIA Spectrum-3 switch, NRZ speeds are not raised when using 200GbE optical cable.
	Workaround: Configure PHY_FEC_OVERRIDE on the ConnectX-7 side for the requested speed.
	Keywords: Optical cables, NRZ, ConnectX-6 Dx, NVIDIA Spectrum-3, 200GbE optical cable
	Discovered in Version: 28.33.4030
-	**Description:** Upgrading to firmware 28.33.2028 from any previous Engineering Sample (earlier than version 28.98.2406) must be done before installing WinOF-2 v2.90 driver and requires going through the following steps: 1. Upgrade to 28.98.2406 version while the driver is disabled. 2. Upgrade to firmware version 28.33.2028 (the driver can be enable at this stage).
	Workaround: N/A
	Keywords: Firmware upgrade

Internal Ref.	Issue
	Discovered in Version: 28.33.2028
-	**Description:** Downgrading from firmware 28.33.2028 to any previous Engineering Sample firmware is not supported.
	Workaround: N/A
	Keywords: Firmware downgrade
	Discovered in Version: 28.33.2028

7 PreBoot Drivers (FlexBoot/UEFI)

7.1 FlexBoot Changes and New Features

For further information, please refer to the FlexBoot Release Notes.

7.2 UEFI Changes and Major New Features

For further information, please refer to the UEFI Release Notes.

8 Validated and Supported Cables and Switches

8.1 Validated and Supported Cables and Modules

8.1.1 Cables Lifecycle Legend

Lifecycle Phase	Definition
EOL	End of Life
LTB	Last Time Buy
HVM	GA level
MP	GA level
P-Rel	GA level
Preliminary	Engineering Sample
Prototype	Engineering Sample

8.1.2 InfiniBand/Ethernet Support

⚠ Upon firmware upgrade, after reset, the default port configuration could be changed.

To set the right configuration, run:

```
mlxconfig -d <mst device> s LINK_TYPE_P1=1/2 LINK_TYPE_P2=1/2
```

where:

- LINK_TYPE_P1 - sets the configuring protocol for port 1
- LINK_TYPE_P2 - sets the configuring protocol for port 2
- (1/2) - values used for the different protocols:
- 1 – for InfiniBand
- 2 - for Ethernet

8.1.3 NDR / 400GbE / 800GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NDR	800GE	980-9I603-00N06A	MCA4J80-N06A-FTF	NVIDIA Active copper cable, 800(2x400) Gbps to 800(2x400) Gbps, OSFP to OSFP, 6.5m, fin to flat	Prototype
NA	400GE	980-9I693-F4NS00	MMA1Z00-NS400-T	SINGLE PORT TRANSCEIVER, 400GBPS,400GbE, QSFP112, MPO12 APC, 850NM MMF, UP TO 50M, FLAT TOP	P-Rel

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NDR	N/A	980-9I601-00N003	MCA4J80-N003-FTF	NVIDIA Active copper cable, IB twin port NDR, up to 800Gb/s, OSFP, 3m, flat to finned	MP
NDR	N/A	980-9I948-00N004	MCA7J60-N004	NVIDIA active copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP, 4m	P-Rel
NDR	N/A	980-9I949-00N005	MCA7J60-N005	NVIDIA active copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP, 5m	P-Rel
NDR	NA	980-9IA0H-00N001	MCP4Y10-N001-FTF	NVIDIA Passive Copper cable, IB twin port NDR, up to 800Gb/s, OSFP, 1m, flat to finned	MP
NDR	NA	980-9IA0L-00N00A	MCP4Y10-N00A-FLT	NVIDIA Passive Copper cable, IB twin port NDR, up to 800Gb/s, OSFP, 0.5m, flat top	MP
NDR	N/A	980-9I50D-00N004	MCA7J70-N004	NVIDIA active copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 4m	P-Rel
NDR	N/A	980-9I50E-00N005	MCA7J70-N005	NVIDIA active copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 5m	P-Rel
NDR	N/A	980-9I76G-00N004	MCA7J75-N004	NVIDIA Active copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xQSFP112, 4m	Prototype
NDR	N/A	980-9I76H-00N005	MCA7J75-N005	NVIDIA Active copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xQSFP112, 5m	Prototype
N/A	400GE	980-9I35O-00W001	MCP1660-W001E30	NVIDIA Direct Attach Copper cable, 400GbE, 400Gb/s, QSFP-DD, 1m, 30AWG	EOL [P-Rel]
N/A	400GE	980-9I35P-00W002	MCP1660-W002E26	NVIDIA Direct Attach Copper cable, 400GbE, 400Gb/s, QSFP-DD, 2m, 26AWG	EOL [P-Rel]
N/A	400GE	980-9I35Q-00W003	MCP1660-W003E26	NVIDIA Direct Attach Copper cable, 400GbE, 400Gb/s, QSFP-DD, 3m, 26AWG	EOL [P-Rel]
N/A	400GE	980-9I35R-00W00A	MCP1660-W00AE30	NVIDIA Direct Attach Copper cable, 400GbE, 400Gb/s, QSFP-DD, 0.5m, 30AWG	EOL [P-Rel]
N/A	400GE	980-9I35S-00W01A	MCP1660-W01AE30	NVIDIA Direct Attach Copper cable, 400GbE, 400Gb/s, QSFP-DD, 1.5m, 30AWG	EOL [P-Rel]
N/A	400GE	980-9I35T-00W02A	MCP1660-W02AE26	NVIDIA Direct Attach Copper cable, 400GbE, 400Gb/s, QSFP-DD, 2.5m, 26AWG	EOL [P-Rel]
NDR	N/A	980-9IA0G-00N001	MCP4Y10-N001-FLT	NVIDIA Passive Copper cable, IB twin port NDR, up to 800Gb/s, OSFP, 1m, flat top	MP
NDR	N/A	980-9IA0J-00N002	MCP4Y10-N002-FLT	NVIDIA passive Copper cable, IB twin port NDR, up to 800Gb/s, OSFP, 2m, flat top	MP
NDR	N/A	980-9IA0R-00N01A	MCP4Y10-N01A-FLT	NVIDIA passive Copper cable, IB twin port NDR, up to 800Gb/s, OSFP, 1.5m, flat top	MP
N/A	400GE	980-9I48Y-00W001	MCP7F60-W001R30	NVIDIA DAC splitter cable, 400GbE, 400Gb/s to 4x100Gb/s, QSFP-DD to 4xQSFP56, 1m, 30AWG	EOL [P-Rel]
N/A	400GE	980-9I48Z-00W002	MCP7F60-W002R26	NVIDIA DAC splitter cable, 400GbE, 400Gb/s to 4x100Gb/s, QSFP-DD to 4xQSFP56, 2m, 26AWG	EOL [P-Rel]
N/A	400GE	980-9I822-00W02A	MCP7F60-W02AR26	NVIDIA DAC splitter cable, 400GbE, 400Gb/s to 4x100Gb/s, QSFP-DD to 4xQSFP56, 2.5m, 26AWG	EOL [P-Rel]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	400GE	980-9IA3S-00W001	MCP7H60-W001R30	NVIDIA DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 1m, 30AWG	EOL [P-Rel]
N/A	400GE	980-9IA3T-00W002	MCP7H60-W002R26	NVIDIA DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 2m, 26AWG	EOL [P-Rel]
N/A	400GE	980-9IA3U-00W003	MCP7H60-W003R26	NVIDIA DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 3m, 26AWG	EOL [P-Rel]
N/A	400GE	980-9IA3V-00W01A	MCP7H60-W01AR30	NVIDIA DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 1.5m, 30AWG	EOL [P-Rel]
N/A	400GE	980-9IA3W-00W02A	MCP7H60-W02AR26	NVIDIA DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 2.5m, 26AWG	EOL [P-Rel]
NDR	N/A	980-9I432-00N001	MCP7Y00-N001	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP,1m	P-Rel
NDR	N/A	980-9I433-00N001	MCP7Y00-N001-FLT	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP,1m, flat top	P-Rel
NDR	N/A	980-9I924-00N002	MCP7Y00-N002	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP, 2m	P-Rel
NDR	N/A	980-9I925-00N002	MCP7Y00-N002-FLT	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP, 2m, flat top	P-Rel
NDR	N/A	980-9I92N-00N003	MCP7Y00-N003	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP, 3m	P-Rel
NDR	N/A	980-9I926-00N01A	MCP7Y00-N01A	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP,1.5m	P-Rel
NDR	N/A	980-9I927-00N01A	MCP7Y00-N01A-FLT	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP,1.5m, flat top	P-Rel
NDR	N/A	980-9I92O-00N02A	MCP7Y00-N02A	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xOSFP, 2.5m	P-Rel
NDR	N/A	980-9I928-00N001	MCP7Y10-N001	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xQSFP112,1m	P-Rel
NDR	N/A	980-9I929-00N002	MCP7Y10-N002	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xQSFP112,2m	P-Rel
NDR	N/A	980-9I80P-00N003	MCP7Y10-N003	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xQSFP112,3m	P-Rel
NDR	N/A	980-9I80A-00N01A	MCP7Y10-N01A	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xQSFP112,1.5m	P-Rel
NDR	N/A	980-9I80Q-00N02A	MCP7Y10-N02A	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 2x400Gb/s, OSFP to 2xQSFP112,2.5m	P-Rel
NDR	N/A	980-9I80B-00N001	MCP7Y40-N001	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xQSFP112, 1m	P-Rel

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NDR	N/A	980-9I80C-00N002	MCP7Y40-N002	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xQSFP112, 2m	P-Rel
NDR	N/A	980-9I75R-00N003	MCP7Y40-N003	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xQSFP112, 3m	P-Rel
NDR	N/A	980-9I75D-00N01A	MCP7Y40-N01A	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xQSFP112, 1.5m	P-Rel
NDR	N/A	980-9I75S-00N02A	MCP7Y40-N02A	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xQSFP112, 2.5m	P-Rel
NDR	N/A	980-9I75E-00N001	MCP7Y50-N001	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 1m	P-Rel
NDR	N/A	980-9I75F-00N001	MCP7Y50-N001-FLT	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 1m, flat top	P-Rel
NDR	N/A	980-9I46G-00N002	MCP7Y50-N002	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 2m	P-Rel
NDR	N/A	980-9I46H-00N002	MCP7Y50-N002-FLT	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 2m, flat top	P-Rel
NDR	N/A	980-9I46T-00N003	MCP7Y50-N003	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 3m	P-Rel
NDR	N/A	980-9I46I-00N01A	MCP7Y50-N01A	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 1.5m	P-Rel
NDR	N/A	980-9I46J-00N01A	MCP7Y50-N01A-FLT	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 1.5m, flat top	P-Rel
NDR	N/A	980-9I46U-00N02A	MCP7Y50-N02A	NVIDIA passive copper splitter cable, IB twin port NDR 800Gb/s to 4x200Gb/s, OSFP to 4xOSFP, 2.5m	P-Rel
NDR	N/A	980-9I73U-000003	MFP7E10-N003	NVIDIA passive fiber cable, MMF , MPO12 APC to MPO12 APC, 3m	MP
NDR	N/A	980-9I73V-000005	MFP7E10-N005	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 5m	MP
NDR	N/A	980-9I57W-000007	MFP7E10-N007	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 7m	MP
NDR	N/A	980-9I57X-00N010	MFP7E10-N010	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 10m	MP
NDR	N/A	980-9I57Y-000015	MFP7E10-N015	NVIDIA passive fiber cable, MMF , MPO12 APC to MPO12 APC, 15m	MP
NDR	N/A	980-9I57Z-000020	MFP7E10-N020	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 20m	MP
NDR	N/A	980-9I573-00N025	MFP7E10-N025	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 25m	MP

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NDR	N/A	980-9I570-00N030	MFP7E10-N030	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 30m	MP
NDR	N/A	980-9I570-00N035	MFP7E10-N035	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 35m	MP
NDR	N/A	980-9I570-00N040	MFP7E10-N040	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 40m	MP
NDR	N/A	980-9I57Y-00N050	MFP7E10-N050	NVIDIA passive fiber cable, MMF, MPO12 APC to MPO12 APC, 50m	MP
NDR	N/A	980-9I571-00N003	MFP7E20-N003	NVIDIA passive fiber cable, MMF, MPO12 APC to 2xMPO12 APC, 3m	MP
NDR	N/A	980-9I572-00N005	MFP7E20-N005	NVIDIA passive fiber cable, MMF, MPO12 APC to 2xMPO12 APC, 5m	MP
NDR	N/A	980-9I573-00N007	MFP7E20-N007	NVIDIA passive fiber cable, MMF, MPO12 APC to 2xMPO12 APC, 7m	MP
NDR	N/A	980-9I554-00N010	MFP7E20-N010	NVIDIA passive fiber cable, MMF, MPO12 APC to 2xMPO12 APC, 10m	MP
NDR	N/A	980-9I555-00N015	MFP7E20-N015	NVIDIA passive fiber cable, MMF, MPO12 APC to 2xMPO12 APC, 15m	MP
NDR	N/A	980-9I556-00N020	MFP7E20-N020	NVIDIA passive fiber cable, MMF, MPO12 APC to 2xMPO12 APC, 20m	MP
NDR	N/A	980-9I557-00N030	MFP7E20-N030	NVIDIA passive fiber cable, MMF, MPO12 APC to 2xMPO12 APC, 30m	MP
NDR	N/A	980-9I55Z-00N050	MFP7E20-N050	NVIDIA passive fiber cable, MMF, MPO12 APC to 2xMPO12 APC, 50m	MP
NDR	N/A	980-9I559-00N002	MFP7E30-N002	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 2m	MP
NDR	N/A	980-9I55A-00N003	MFP7E30-N003	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 3m	MP
NDR	N/A	980-9I55B-00N005	MFP7E30-N005	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 5m	MP
NDR	N/A	980-9I58C-00N007	MFP7E30-N007	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 7m	MP
NDR	N/A	980-9I58D-00N010	MFP7E30-N010	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 10m	MP
NDR	N/A	980-9I58E-00N015	MFP7E30-N015	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 15m	MP
NDR	N/A	980-9I58F-00N020	MFP7E30-N020	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 20m	MP
NDR	N/A	980-9I58G-00N030	MFP7E30-N030	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 30m	MP
NDR	N/A	980-9I580-00N030	MFP7E30-N040	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 40m	MP
NDR	N/A	980-9I58H-00N050	MFP7E30-N050	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 50m	MP

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NDR	N/A	980-9I581-00N050	MFP7E30-N060	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 60m	MP
NDR	N/A	980-9I582-00N050	MFP7E30-N070	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 70m	MP
NDR	N/A	980-9I58I-00N100	MFP7E30-N100	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 100m	MP
NDR	N/A	980-9I58J-00N150	MFP7E30-N150	NVIDIA passive fiber cable, SMF, MPO12 APC to MPO12 APC, 150m	MP
NDR	N/A	980-9I58K-00N003	MFP7E40-N003	NVIDIA passive fiber cable, SMF, MPO12 APC to 2xMPO12 APC, 3m	MP
NDR	N/A	980-9I58L-00N005	MFP7E40-N005	NVIDIA passive fiber cable, SMF, MPO12 APC to 2xMPO12 APC, 5m	MP
NDR	N/A	980-9I58M-00N007	MFP7E40-N007	NVIDIA passive fiber cable, SMF, MPO12 APC to 2xMPO12 APC, 7m	MP
NDR	N/A	980-9I58N-00N010	MFP7E40-N010	NVIDIA passive fiber cable, SMF, MPO12 APC to 2xMPO12 APC, 10m	MP
NDR	N/A	980-9I56O-00N015	MFP7E40-N015	NVIDIA passive fiber cable, SMF, MPO12 APC to 2xMPO12 APC, 15m	MP
NDR	N/A	980-9I56P-00N020	MFP7E40-N020	NVIDIA passive fiber cable, SMF, MPO12 APC to 2xMPO12 APC, 20m	MP
NDR	N/A	980-9I56Q-00N030	MFP7E40-N030	NVIDIA passive fiber cable, SMF, MPO12 APC to 2xMPO12 APC, 30m	MP
NDR	N/A	980-9I56R-000050	MFP7E40-N050	NVIDIA passive fiber cable, SMF, MPO12 APC to 2xMPO12 APC, 50m	MP
NDR	N/A	980-9I693-00NS00	MMA1Z00-NS400	NVIDIA single port transceiver, 400Gbps,NDR, QSFP112, MPO12 APC, 850nm MMF, up to 50m, flat top	P-Rel
NDR	N/A	980-9I51A-00NS00	MMA4Z00-NS-FLT*	NVIDIA twin port transceiver, 800Gbps,2xNDR, OSFP, 2xMPO12 APC, 850nm MMF, up to 50m, flat top	MP
NDR	N/A	980-9I51S-00NS00	MMA4Z00-NS400	NVIDIA single port transceiver, 400Gbps,NDR, OSFP, MPO12 APC, 850nm MMF, up to 50m, flat top	MP
NDR	N/A	980-9I51C-00NS00	MMA4Z00-NV4-FLT	NVIDIA twin port transceiver, 800Gbps,4xNVlink4, OSFP, 2xMPO12 APC, 850nm, flat top	Prototype
N/A	400GE	980-9I16Y-00W000	MMS1V00-WM	NVIDIA transceiver, 400GbE, QSFP-DD, MPO, 1310nm, DR4	MP
NDR	N/A	980-9I30F-00NS00	MMS4X00-NL400	NVIDIA single port transceiver, 400Gbps,NDR, OSFP, MPO12 APC, 1310nm SMF, up to 30m, flat top	EOL [Prototype]
NDR	N/A	980-9I30G-00NM00	MMS4X00-NM	NVIDIA twin port transceiver, 800Gbps,2xNDR, OSFP, 2xMPO, 1310nm SMF, up to 500m, finned	MP
NDR	N/A	980-9I301-00NM00	MMS4X00-NM-FLT	NVIDIA twin port transceiver, 800Gbps,2xNDR, OSFP, 2xMPO12 APC, 1310nm SMF, up to 500m, flat top	Prototype
NDR	N/A	980-9I30H-00NM00	MMS4X00-NS	NVIDIA twin port transceiver, 800Gbps,2xNDR, OSFP, 2xMPO12 APC, 1310nm SMF, up to 100m, finned	MP

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NDR	N/A	980-9I30I-00NM00	MMS4X00-NS-FLT	NVIDIA twin port transceiver, 800Gbps,2xNDR, OSFP, 2xMPO12 APC, 1310nm SMF, up to 100m, flat top	MP
NDR	N/A	980-9I31N-00NM00	MMS4X00-NS400	NVIDIA single port transceiver, 400Gbps,NDR, OSFP, MPO12 APC, 1310nm SMF, up to 100m, flat top	MP
NDR	NA	980-9I30L-00N000	MMS4X50-NM	NVIDIA twin port transceiver, 800Gbps, 2xFR4, 2xNDR, OSFP, 2xLC-LC, 1310nm SMF, up to 2km, finned	P-Rel
NDR	NA	980-9IA0H-00N001	MCP4Y10-N001-FTF	NVIDIA Passive Copper cable, IB twin port NDR, up to 800Gb/s, OSFP, 1m, flat to finned	MP
NDR	NA	980-9IA0L-00N00A	MCP4Y10-N00A-FLT	NVIDIA Passive Copper cable, IB twin port NDR, up to 800Gb/s, OSFP, 0.5m, flat top	MP
NDR	NA	980-9I068-00NM00	MMS1X00-NS400	NVIDIA single port transceiver, 400Gbps, NDR, QSFP112, MPO, 1310nm SMF, up to 500m, flat top	Early BOM
NA	400GE	980-9I51S-F4NS00	MMA4Z00-NS400-T	SINGLE PORT TRANSCEIVER, 400GBPS,400GbE, OSFP, MPO12 APC, 850NM MMF, UP TO 50M, FLAT TOP	P-Rel

* MMA4Z00-NS-FLT transceiver is used with the following ConnectX-7 adapter cards ONLY: MCX750500B-0D0K / MCX750500C-0D0K / MCX750500B-0D00 / MCX750500C-0D00.

8.1.4 HDR / 200GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR	NA	980-9I45A-09H035	MFS1S00-H035V	Mellanox active optical cable, up to 200Gb/s IB HDR, QSFP56, 35m	MP
HDR	NA	980-9I45G-09H090	MFS1S00-H090V	Mellanox active optical cable, up to 200Gb/s IB HDR, QSFP56, 90m	LTB [MP]
HDR	NA	980-9I45O-00H200	MFS1S00-H200E	Mellanox active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 200m	EOL [EVT]
HDR	200GE	980-9I548-00H001	MCP1650-H001E30	Nvidia Passive Copper cable, up to 200Gbps, QSFP56 to QSFP56, 1m	HVM
HDR	200GE	980-9I549-00H002	MCP1650-H002E26	Nvidia Passive Copper cable, up to 200Gbps, QSFP56 to QSFP56, 2m	HVM
HDR	200GE	980-9I54A-00H00A	MCP1650-H00AE30	Nvidia Passive Copper cable, up to 200Gbps, QSFP56 to QSFP56, 0.5m	HVM
HDR	200GE	980-9I54B-00H01A	MCP1650-H01AE30	Nvidia Passive Copper cable, up to 200Gbps, QSFP56 to QSFP56, 1.5 m	HVM
N/A	200GE	980-9I54C-00V001	MCP1650-V001E30	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 1m, black pulltab, 30AWG	LTB [HVM]
N/A	200GE	980-9I54D-00V002	MCP1650-V002E26	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 2m, black pulltab, 26AWG	LTB [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	200GE	980-9I54G-00V003	MCP1650-V003E26	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 3m, black pulltab, 26AWG	EOL [HVM]
N/A	200GE	980-9I54H-00V00A	MCP1650-V00AE30	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 0.5m, black pulltab, 30AWG	LTB [HVM]
N/A	200GE	980-9I54I-00V01A	MCP1650-V01AE30	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 1.5m, black pulltab, 30AWG	LTB [HVM]
N/A	200GE	980-9I54L-00V02A	MCP1650-V02AE26	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 2.5m, black pulltab, 26AWG	LTB [HVM]
HDR	200GE	980-9I39E-00H001	MCP7H50-H001R30	Nvidia Passive copper splitter cable, 200Gbps to 2x100Gbps, QSFP56 to 2xQSFP56, 1m	HVM
HDR	200GE	980-9I99F-00H002	MCP7H50-H002R26	Nvidia Passive copper splitter cable, 200Gbps to 2x100Gbps, QSFP56 to 2xQSFP56, 2m	HVM
HDR	200GE	980-9I98G-00H01A	MCP7H50-H01AR30	Nvidia Passive copper splitter cable, 200Gbps to 2x100Gbps, QSFP56 to 2xQSFP56, 1.5m	HVM
N/A	200GE	980-9I98H-00V001	MCP7H50-V001R30	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, colored, 1m, 30AWG	LTB [HVM]
N/A	200GE	980-9I98I-00V002	MCP7H50-V002R26	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, colored, 2m, 26AWG	LTB [HVM]
N/A	200GE	980-9I98J-00V003	MCP7H50-V003R26	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, colored, 3m, 26AWG	EOL [HVM]
N/A	200GE	980-9I98K-00V01A	MCP7H50-V01AR30	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, colored, 1.5m, 30AWG	EOL [HVM]
N/A	200GE	980-9I98M-00V02A	MCP7H50-V02AR26	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, colored, 2.5m, 26AWG	LTB [HVM]
N/A	200GE	980-9I98O-00V002	MCP7H60-C002	NVIDIA DAC splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP-DD to 2xQSFP28, colored pulltabs, 2m	EOL [P-Rel]
N/A	200GE	980-9IA3P-00V003	MCP7H60-C003	NVIDIA DAC splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP-DD to 2xQSFP28, colored pulltabs, 3m	EOL [P-Rel]
N/A	200GE	980-9IA3X-00V001	MCP7H70-V001R30	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 4x50Gb/s, QSFP56 to 4xSFP56, colored, 1m, 30AWG	EOL [P-Rel]
N/A	200GE	980-9IA3Y-00V002	MCP7H70-V002R26	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 4x50Gb/s, QSFP56 to 4xSFP56, colored, 2m, 26AWG	EOL [P-Rel]
N/A	200GE	980-9I43Z-00V003	MCP7H70-V003R26	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 4x50Gb/s, QSFP56 to 4x4SFP56, colored, 3m, 26AWG	EOL [P-Rel]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	200GE	980-9I430-00V01A	MCP7H70-V01AR30	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 4x50Gb/s, QSFP56 to 4xSFP56, colored, 1.5m, 30AWG	EOL [P-Rel]
N/A	200GE	980-9I431-00V02A	MCP7H70-V02AR26	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to4x50Gb/s, QSFP56 to 4xSFP56, colored, 2.5m, 26AWG	EOL [P-Rel]
HDR	200GE	980-9I46K-00H001	MCP7Y60-H001	NVIDIA passive copper splitter cable, 400(2x200)Gbps to 2x200Gbps, OSFP to 2xQSFP56, 1m, fin to flat	MP
HDR	200GE	980-9I46L-00H002	MCP7Y60-H002	NVIDIA passive copper splitter cable, 400(2x200)Gbps to 2x200Gbps, OSFP to 2xQSFP56, 2m, fin to flat	MP
HDR	200GE	980-9I93M-00H01A	MCP7Y60-H01A	NVIDIA passive copper splitter cable, 400(2x200)Gbps to 2x200Gbps, OSFP to 2xQSFP56, 1.5m, fin to flat	MP
HDR	200GE	980-9I93N-00H001	MCP7Y70-H001	NVIDIA passive copper splitter cable, 400(2x200)Gbps to 4x100Gbps, OSFP to 4xQSFP56, 1m, fin to flat	MP
HDR	200GE	980-9I93O-00H002	MCP7Y70-H002	NVIDIA passive copper splitter cable, 400(2x200)Gbps to 4x100Gbps, OSFP to 4xQSFP56, 2m, fin to flat	MP
HDR	200GE	980-9I47P-00H01A	MCP7Y70-H01A	NVIDIA passive copper splitter cable, 400(2x200)Gbps to 4x100Gbps, OSFP to 4xQSFP56, 1.5m, fin to flat	MP
HDR	N/A	980-9I41X-00H003	MFA7U10-H003	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 3m	P-Rel
HDR	N/A	980-9I11Z-00H005	MFA7U10-H005	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 5m	P-Rel
HDR	N/A	980-9I111-00H010	MFA7U10-H010	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 10m	P-Rel
HDR	N/A	980-9I113-00H015	MFA7U10-H015	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 15m	P-Rel
HDR	N/A	980-9I115-00H020	MFA7U10-H020	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 20m	P-Rel
HDR	N/A	980-9I117-00H030	MFA7U10-H030	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 30m	P-Rel
HDR	N/A	980-9I124-00H003	MFS1S00-H003E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 3m	EOL [HVM]
HDR	200GE	980-9I457-00H003	MFS1S00-H003V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 3m	MP
HDR	N/A	980-9I45A-00H005	MFS1S00-H005E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 5m	EOL [HVM]
HDR	200GE	980-9I45D-00H005	MFS1S00-H005V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 5m	MP

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR	N/A	980-9I45G-00H010	MFS1S00-H010E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 10m	EOL [HVM]
HDR	200GE	980-9I45J-00H010	MFS1S00-H010V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 10m	MP
HDR	N/A	980-9I45M-00H015	MFS1S00-H015E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 15m	EOL [HVM]
HDR	200GE	980-9I45O-00H015	MFS1S00-H015V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 15m	MP
HDR	N/A	980-9I45R-00H020	MFS1S00-H020E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 20m	EOL [HVM]
HDR	200GE	980-9I45T-00H020	MFS1S00-H020V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 20m	MP
HDR	N/A	980-9I45Y-00H030	MFS1S00-H030E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 30m	EOL [HVM]
HDR	200GE	980-9I440-00H030	MFS1S00-H030V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 30m	MP
HDR	N/A	980-9I455-00H050	MFS1S00-H050E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 50m	EOL [HVM]
HDR	200GE	980-9I447-00H050	MFS1S00-H050V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 50m	MP
HDR	N/A	980-9I44G-00H100	MFS1S00-H100E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 100m	EOL [HVM]
HDR	200GE	980-9I44H-00H100	MFS1S00-H100V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 100m	MP
HDR	200GE	980-9I44K-00H130	MFS1S00-H130V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 130m	MP
N/A	200GE	980-9I44P-00V003	MFS1S00-V003E	NVIDIA active fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pulltab, 3m	LTB [HVM]
N/A	200GE	980-9I45Q-00V005	MFS1S00-V005E	NVIDIA active fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pulltab, 5m	LTB [HVM]
N/A	200GE	980-9I45R-00V010	MFS1S00-V010E	NVIDIA active fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pulltab, 10m	LTB [HVM]
N/A	200GE	980-9I44S-00V015	MFS1S00-V015E	NVIDIA active fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pulltab, 15m	LTB [HVM]
N/A	200GE	980-9I44T-00V020	MFS1S00-V020E	NVIDIA active fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pulltab, 20m	LTB [HVM]
N/A	200GE	980-9I44U-00V030	MFS1S00-V030E	NVIDIA active fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pulltab, 30m	LTB [HVM]
N/A	200GE	980-9I44V-00V050	MFS1S00-V050E	NVIDIA active fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pulltab, 50m	LTB [HVM]
N/A	200GE	980-9I44W-00V100	MFS1S00-V100E	NVIDIA active fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pulltab, 100m	EOL [HVM] [HIBERNATE]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR	N/A	980-9I452-00H003	MFS1S50-H003E	NVIDIA active fiber splitter cable, IB HDR, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56 , LSZH, 3m	EOL [HVM]
HDR	200GE	980-9I445-00H003	MFS1S50-H003V	Nvidia active optical splitter cable, 200Gbps to 2x100Gbps , QSFP56 to 2x QSFP56, 3m	HVM
HDR	N/A	980-9I956-00H005	MFS1S50-H005E	NVIDIA active fiber splitter cable, IB HDR, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56 , LSZH, 5m	EOL [HVM]
HDR	200GE	980-9I969-00H005	MFS1S50-H005V	Nvidia active optical splitter cable, 200Gbps to 2x100Gbps , QSFP56 to 2x QSFP56, 5m	HVM
HDR	N/A	980-9I95A-00H010	MFS1S50-H010E	NVIDIA active fiber splitter cable, IB HDR, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56 , LSZH, 10m	EOL [HVM]
HDR	200GE	980-9I96D-00H010	MFS1S50-H010V	Nvidia active optical splitter cable, 200Gbps to 2x100Gbps , QSFP56 to 2x QSFP56, 10m	HVM
HDR	N/A	980-9I95E-00H015	MFS1S50-H015E	NVIDIA active fiber splitter cable, IB HDR, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56 , LSZH, 15m	EOL [HVM]
HDR	200GE	980-9I96H-00H015	MFS1S50-H015V	Nvidia active optical splitter cable, 200Gbps to 2x100Gbps , QSFP56 to 2x QSFP56, 15m	HVM
HDR	N/A	980-9I95I-00H020	MFS1S50-H020E	NVIDIA active fiber splitter cable, IB HDR, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56 , LSZH, 20m	EOL [HVM]
HDR	200GE	980-9I96L-00H020	MFS1S50-H020V	Nvidia active optical splitter cable, 200Gbps to 2x100Gbps , QSFP56 to 2x QSFP56, 20m	HVM
HDR	N/A	980-9I95M-00H030	MFS1S50-H030E	NVIDIA active fiber splitter cable, IB HDR, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56 , LSZH, 30m	EOL [HVM]
HDR	200GE	980-9I96P-00H030	MFS1S50-H030V	Nvidia active optical splitter cable, 200Gbps to 2x100Gbps , QSFP56 to 2x QSFP56, 30m	HVM
N/A	200GE	980-9I95Q-00V003	MFS1S50-V003E	NVIDIA active fiber splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, black pulltab, 3m	EOL [HVM]
N/A	200GE	980-9I96R-00V005	MFS1S50-V005E	NVIDIA active fiber splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, black pulltab, 5m	EOL [HVM]
N/A	200GE	980-9I96S-00V010	MFS1S50-V010E	NVIDIA active fiber splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, black pulltab, 10m	EOL [HVM]
N/A	200GE	980-9I96T-00V015	MFS1S50-V015E	NVIDIA active fiber splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, black pulltab, 15m	EOL [HVM]
N/A	200GE	980-9I95U-00V020	MFS1S50-V020E	NVIDIA active fiber splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, black pulltab, 20m	EOL [HVM]
N/A	200GE	980-9I95V-00V030	MFS1S50-V030E	NVIDIA active fiber splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, black pulltab, 30m	EOL [HVM]
HDR	N/A	980-9I17S-00HS00	MMA1T00-HS	NVIDIA transceiver, HDR, QSFP56, MPO, 850nm, SR4, up to 100m	HVM

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	200GE	980-9I20T-00V000	MMA1T00-VS	NVIDIA transceiver, 200GbE, up to 200Gb/s, QSFP56, MPO, 850nm, SR4, up to 100m	HVM
HDR	N/A	980-9I055-00H000	MMS1W50-HM	NVIDIA transceiver, IB HDR, up to 200Gb/s, QSFP56, LC-LC, 1310nm, FR4	MP
HDR	N/A	980-9I41X-00H003	MFA7U10-H003	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 3m	P-Rel
HDR	N/A	980-9I11Z-00H005	MFA7U10-H005	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 5m	P-Rel
HDR	N/A	980-9I111-00H010	MFA7U10-H010	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 10m	P-Rel
HDR	N/A	980-9I113-00H015	MFA7U10-H015	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 15m	P-Rel
HDR	N/A	980-9I115-00H020	MFA7U10-H020	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 20m	P-Rel
HDR	N/A	980-9I117-00H030	MFA7U10-H030	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 30m	P-Rel
HDR	NA	980-9I45E-09H070	MFS1S00-H070V	NVIDIA active optical cable, up to 200Gb/s IB HDR, QSFP56, LSZH, 70m	MP
HDR	NA	980-9I41Y-00H003	MFA7U10-H003-FLT	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 3m, flat top	P-Rel
HDR	NA	980-9I110-00H005	MFA7U10-H005-FLT	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 5m, flat top	P-Rel
HDR	NA	980-9I112-00H010	MFA7U10-H010-FLT	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 10m, flat top	P-Rel
HDR	NA	980-9I114-00H015	MFA7U10-H015-FLT	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 15m, flat top	P-Rel
HDR	NA	980-9I116-00H020	MFA7U10-H020-FLT	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 20m, flat top	P-Rel
HDR	NA	980-9I118-00H030	MFA7U10-H030-FLT	NVIDIA AOC splitter, IB twin port HDR, 400Gb/s to 2x200Gb/s, OSFP to 2xQSFP56, 30m, flat top	P-Rel

8.1.5 HDR100 Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR100	NA	980-9I41Z-00H003	MFA7U40-H003	NVIDIA AOC splitter, 200(2x100)Gbps to 2x100Gbps, OSFP to 2xQSFP56, 3m, fin to flat	P-Rel
HDR100	NA	980-9I111-00H005	MFA7U40-H005	NVIDIA AOC splitter, 200(2x100)Gbps to 2x100Gbps, OSFP to 2xQSFP56, 5m, fin to flat	P-Rel
HDR100	NA	980-9I113-00H010	MFA7U40-H010	NVIDIA AOC splitter, 200(2x100)Gbps to 2x100Gbps, OSFP to 2xQSFP56, 10m, fin to flat	P-Rel

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR100	NA	980-9I115-00H015	MFA7U40-H015	NVIDIA AOC splitter, 200(2x100)Gbps to 2x100Gbps, OSFP to 2xQSFP56, 15m, fin to flat	P-Rel
HDR100	NA	980-9I117-00H020	MFA7U40-H020	NVIDIA AOC splitter, 200(2x100)Gbps to 2x100Gbps, OSFP to 2xQSFP56, 20m, fin to flat	P-Rel
HDR100	NA	980-9I119-00H030	MFA7U40-H030	NVIDIA AOC splitter, 200(2x100)Gbps to 2x100Gbps, OSFP to 2xQSFP56, 30m, fin to flat	P-Rel

8.1.6 EDR / 100GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	100GE	980-9I90Z-00C000	FTLC9152RGPL	100Gb/s Transceiver, QSFP28, LC-LC, 850nm SWDM4 up to 100m Over Multi-Mode Fiber	EOL [MP]
N/A	100GE	980-9I62O-00C001	MCP1600-C001	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 1m 30AWG	EOL [HVM]
N/A	100GE	980-9I620-00C001	MCP1600-C001E30N	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 1m, Black, 30AWG, CA-N	HVM
N/A	100GE	980-9I62S-00C001	MCP1600-C001LZ	NVIDIA Passive Copper Cable, ETH 100GbE, 100Gb/s, QSFP, 1m, LSZH, 30AWG	EOL [MP]
N/A	100GE	980-9I621-00C002	MCP1600-C002	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 2m 30AWG	EOL [HVM]
N/A	100GE	980-9I622-00C002	MCP1600-C002E26N	NVIDIA® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 2m, Black, 26AWG, CA-N	Preliminary
N/A	100GE	980-9I62V-00C002	MCP1600-C002E30N	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 2m, Black, 30AWG, CA-N	HVM
N/A	100GE	980-9I62X-00C003	MCP1600-C003	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 3m 28AWG	EOL [HVM]
N/A	100GE	980-9I62Z-00C003	MCP1600-C003E26N	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 3m, Black, 26AWG, CA-N	EOL [HVM]
N/A	100GE	980-9I620-00C003	MCP1600-C003E30L	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 3m, Black, 30AWG, CA-L	HVM
N/A	100GE	980-9I622-00C003	MCP1600-C003LZ	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, 3m, LSZH, 26AWG	EOL [MP]
N/A	100GE	980-9I625-00C005	MCP1600-C005E26L	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 5m, Black, 26AWG, CA-L	HVM
N/A	100GE	980-9I627-00C00A	MCP1600-C00AE30N	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 0.5m, Black, 30AWG, CA-N	EOL [HVM]
N/A	100GE	980-9I629-00C00B	MCP1600-C00BE30N	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 0.75m, Black, 30AWG, CA-N	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	100GE	980-9I62B-00C01A	MCP1600-C01A	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 1.5m 30AWG	EOL [HVM]
N/A	100GE	980-9I62C-00C01A	MCP1600-C01AE30N	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 1.5m, Black, 30AWG, CA-N	HVM
N/A	100GE	980-9I62G-00C02A	MCP1600-C02A	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 2.5m 30AWG	EOL [HVM]
N/A	100GE	980-9I62H-00C02A	MCP1600-C02AE26N	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 2.5m, Black, 26AWG, CA-N	EOL [HVM]
N/A	100GE	980-9I62I-00C02A	MCP1600-C02AE30L	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28,2.5m, Black, 30AWG, CA-L	HVM
N/A	100GE	980-9I62M-00C03A	MCP1600-C03A	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 3.5m 26AWG	EOL [P-Rel]
EDR	100GE	980-9I62P-00C001	MCP1600-E001	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1m 30AWG	EOL [HVM]
EDR	N/A	980-9I62Q-00E001	MCP1600-E001E30	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 1m, Black, 30AWG	HVM
EDR	100GE	980-9I62S-00C002	MCP1600-E002	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2m 28AWG	EOL [HVM]
EDR	N/A	980-9I62T-00E002	MCP1600-E002E26	NVIDIA® Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 2m, Black, 26AWG	Preliminary
EDR	N/A	980-9I62U-00E002	MCP1600-E002E30	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 2m, Black, 30AWG	HVM
EDR	100GE	980-9I62V-00C003	MCP1600-E003	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 3m 26AWG	EOL [HVM]
EDR	N/A	980-9I62W-00E003	MCP1600-E003E26	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 3m, Black, 26AWG	HVM
EDR	N/A	980-9I62Y-00E004	MCP1600-E004E26	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 4m, Black, 26AWG	EOL [HVM]
EDR	N/A	980-9I62Z-00E005	MCP1600-E005E26	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 5m, Black, 26AWG	HVM
EDR	N/A	980-9I620-00E00A	MCP1600-E00A	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 0.5m 30AWG	EOL [HVM]
EDR	N/A	980-9I621-00E00A	MCP1600-E00AE30	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 0.5m, Black, 30AWG	EOL [HVM]
EDR	100GE	980-9I623-00C01A	MCP1600-E01A	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1.5m 30AWG	EOL [HVM]
EDR	N/A	980-9I624-00E01A	MCP1600-E01AE30	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 1.5m, Black, 30AWG	HVM
EDR	100GE	980-9I626-00C02A	MCP1600-E02A	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2.5m 26AWG	EOL [HVM]
EDR	N/A	980-9I627-00E02A	MCP1600-E02AE26	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 2.5m, Black, 26AWG	HVM

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	100GE	980-9I645-00C001	MCP7F00-A001R	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pulltabs, 1m, 30AWG	EOL [HVM]
N/A	100GE	980-9I486-00C001	MCP7F00-A001R30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 1m, Colored, 30AWG, CA-N	LTB [HVM]
N/A	100GE	980-9I48A-00C002	MCP7F00-A002R	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pulltabs, 2m, 30AWG	EOL [HVM]
N/A	100GE	980-9I48B-00C002	MCP7F00-A002R30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2m, Colored, 30AWG, CA-N	LTB [HVM]
N/A	100GE	980-9I48G-00C003	MCP7F00-A003R26N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m, Colored, 26AWG, CA-N	EOL [HVM]
N/A	100GE	980-9I48H-00C003	MCP7F00-A003R30L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m, Colored, 30AWG, CA-L	LTB [HVM]
N/A	100GE	980-9I48J-00C005	MCP7F00-A005R26L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 5m, Colored, 26AWG, CA-L	LTB [HVM]
N/A	100GE	980-9I48M-00C01A	MCP7F00-A01AR	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pulltabs,1.5m, 30AWG	EOL [HVM]
N/A	100GE	980-9I48N-00C01A	MCP7F00-A01AR30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 1.5m, Colored, 30AWG, CA-N	LTB [HVM]
N/A	100GE	980-9I48S-00C02A	MCP7F00-A02AR26N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, Colored, 26AWG, CA-N	EOL [HVM]
N/A	100GE	980-9I48T-00C02A	MCP7F00-A02AR30L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, Colored, 30AWG, CA-L	LTB [HVM]
N/A	100GE	980-9I48U-00C02A	MCP7F00-A02ARLZ	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, LSZH, Colored, 28AWG	EOL [P-Rel]
N/A	100GE	980-9I48X-00C03A	MCP7F00-A03AR26L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3.5m, Colored, 26AWG, CA-L	EOL [HVM]
N/A	100GE	980-9I61C-00C005	MCP7H00-G00000	NVIDIA® passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 5m, Colored, 26AWG, CA-L	Preliminary
N/A	100GE	980-9I99G-00C001	MCP7H00-G001R30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1m, Colored, 30AWG, CA-N	LTB [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	100GE	980-9I99K-00C002	MCP7H00-G002R26N	NVIDIA® passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2m, Colored, 26AWG, CA-N	Preliminary
N/A	100GE	980-9I99L-00C002	MCP7H00-G002R30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2m, Colored, 30AWG, CA-N	LTB [HVM]
N/A	100GE	980-9I99Q-00C003	MCP7H00-G003R26N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 3m, Colored, 26AWG, CA-N	EOL [HVM]
N/A	100GE	980-9I39R-00C003	MCP7H00-G003R30L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 3m, Colored, 30AWG, CA-L	LTB [HVM]
N/A	100GE	980-9I99S-00C004	MCP7H00-G004R26L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 4m, Colored, 26AWG, CA-L	EOL [HVM]
N/A	100GE	980-9I99X-00C01A	MCP7H00-G01AR30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1.5m, Colored, 30AWG, CA-N	LTB [HVM]
N/A	100GE	980-9I994-00C02A	MCP7H00-G02AR26N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2.5m, Colored, 26AWG, CA-N	EOL [HVM]
N/A	100GE	980-9I395-00C02A	MCP7H00-G02AR30L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2.5m, Colored, 30AWG, CA-L	LTB [HVM]
N/A	100GE	980-9I13S-00C003	MFA1A00-C003	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 3m	HVM
N/A	100GE	980-9I13X-00C005	MFA1A00-C005	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 5m	HVM
N/A	100GE	980-9I134-00C010	MFA1A00-C010	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 10m	HVM
N/A	100GE	980-9I13A-00C015	MFA1A00-C015	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 15m	HVM
N/A	100GE	980-9I13F-00C020	MFA1A00-C020	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 20m	HVM
N/A	100GE	980-9I13N-00C030	MFA1A00-C030	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 30m	HVM
N/A	100GE	980-9I130-00C050	MFA1A00-C050	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 50m	HVM
N/A	100GE	980-9I13B-00C100	MFA1A00-C100	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 100m	LTB [HVM]
EDR	N/A	980-9I13D-00E001	MFA1A00-E001	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1m	HVM
EDR	N/A	980-9I13F-00E003	MFA1A00-E003	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 3m	HVM

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
EDR	N/A	980-9I13J-00E005	MFA1A00-E005	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 5m	HVM
EDR	N/A	980-9I13M-00E007	MFA1A00-E007	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 7m	LTB [HVM]
EDR	N/A	980-9I13O-00E010	MFA1A00-E010	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 10m	HVM
EDR	N/A	980-9I13R-00E010	MFA1A00-E010_FF	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 10m	EOL [HVM] [HIBERN/ ATE]
EDR	N/A	980-9I13S-00E015	MFA1A00-E015	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 15m	HVM
EDR	N/A	980-9I13V-00E020	MFA1A00-E020	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 20m	HVM
EDR	N/A	980-9I13Y-00E030	MFA1A00-E030	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 30m	HVM
EDR	N/A	980-9I133-00E050	MFA1A00-E050	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 50m	HVM
EDR	N/A	980-9I135-00E100	MFA1A00-E100	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 100m	LTB [HVM]
N/A	100GE	980-9I37H-00C003	MFA7A20-C003	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 3m	EOL [HVM]
N/A	100GE	980-9I37I-00C005	MFA7A20-C005	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 5m	EOL [HVM]
N/A	100GE	980-9I40J-00C010	MFA7A20-C010	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 10m	EOL [HVM]
N/A	100GE	980-9I40K-00C020	MFA7A20-C020	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 20m	EOL [HVM]
N/A	100GE	980-9I40L-00C002	MFA7A20-C02A	NVIDIA® active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 2.5m	Preliminary
N/A	100GE	980-9I40M-00C003	MFA7A20-C03A	NVIDIA® active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 3.5m	Preliminary
N/A	100GE	980-9I40N-00C003	MFA7A50-C003	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m	EOL [HVM]
N/A	100GE	980-9I40O-00C005	MFA7A50-C005	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 5m	EOL [HVM]
N/A	100GE	980-9I49P-00C010	MFA7A50-C010	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 10m	EOL [HVM]
N/A	100GE	980-9I49Q-00C015	MFA7A50-C015	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 15m	EOL [HVM]
N/A	100GE	980-9I49R-00C020	MFA7A50-C020	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 20m	EOL [HVM]
N/A	100GE	980-9I49S-00C030	MFA7A50-C030	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 30m	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	100GE	980-9I149-00CS00	MMA1B00-C100D	NVIDIA transceiver, 100GbE, QSFP28, MPO, 850nm, SR4, up to 100m, DDMI	HVM
N/A	100GE	980-9I17D-00CS00	MMA1B00-C100T	NVIDIA® transceiver, 100GbE, QSFP28, MPO, 850nm, up to 100m, OTU4	Preliminary
EDR	N/A	980-9I17L-00E000	MMA1B00-E100	NVIDIA transceiver, IB EDR, up to 100Gb/s, QSFP28, MPO, 850nm, SR4, up to 100m	HVM
N/A	100GE	980-9I17P-00CR00	MMA1L10-CR	NVIDIA optical transceiver, 100GbE, 100Gb/s, QSFP28, LC-LC, 1310nm, LR4 up to 10km	HVM
N/A	100GE	980-9I17Q-00CM00	MMA1L30-CM	NVIDIA optical module, 100GbE, 100Gb/s, QSFP28, LC-LC, 1310nm, CWDM4, up to 2km	MP
N/A	100GE	980-9I16X-00C000	MMS1C10-CM	NVIDIA active optical module, 100Gb/s, QSFP, MPO, 1310nm, PSM4, up to 500m	EOL [MP]
N/A	100GE	980-9I042-00C000	MMS1V70-CM	NVIDIA transceiver, 100GbE, QSFP28, LC-LC, 1310nm, DR1	P-Rel
N/A	100GE	980-9I53X-00C000	SPQ-CE-ER-CDFL-M	40km 100G QSFP28 ER Optical Transceiver	P-Rel
N/A	100GE	980-9I63F-00CM00	X65406	NVIDIA® optical module, 100GbE, 100Gb/s, QSFP28, LC-LC, 1310nm, CWDM4, up to 2km	Preliminary

EDR links raise with RS-FEC.

8.1.7 FDR / 56GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
FDR	56GE	980-9I679-00L004	MC2207126-004	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 4m	EOL [HVM]
FDR	56GE	980-9I67A-00L003	MC2207128-003	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 3m	EOL [HVM]
FDR	56GE	980-9I67C-00L02A	MC2207128-0A2	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2.5m	EOL [MP]
FDR	56GE	980-9I67D-00L001	MC2207130-001	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1m	EOL [HVM]
FDR	56GE	980-9I67E-00L002	MC2207130-002	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2m	EOL [HVM]
FDR	56GE	980-9I67F-00L00A	MC2207130-00A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 0.5m	EOL [HVM]
FDR	56GE	980-9I67G-00L01A	MC2207130-0A1	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1.5m	EOL [HVM]
FDR	56GE	980-9I15U-00L003	MC220731V-003	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 3m	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
FDR	56GE	980-9I15V-00L005	MC220731V-005	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 5m	EOL [HVM]
FDR	56GE	980-9I15W-00L010	MC220731V-010	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 10m	EOL [HVM]
FDR	56GE	980-9I15X-00L015	MC220731V-015	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 15m	EOL [HVM]
FDR	56GE	980-9I15Y-00L020	MC220731V-020	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 20m	EOL [HVM]
FDR	56GE	980-9I15Z-00L025	MC220731V-025	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 25m	EOL [HVM]
FDR	56GE	980-9I150-00L030	MC220731V-030	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 30m	EOL [HVM]
FDR	56GE	980-9I151-00L040	MC220731V-040	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 40m	EOL [HVM] [HIBERN/ATE]
FDR	56GE	980-9I152-00L050	MC220731V-050	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 50m	EOL [HVM]
FDR	56GE	980-9I154-00L100	MC220731V-100	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 100m	EOL [HVM]
FDR	56GE	980-9I675-00L001	MCP170L-F001	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 1m	EOL [P-Rel]
FDR	56GE	980-9I678-00L00A	MCP170L-F00A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 0.5m	EOL [P-Rel]
FDR	56GE	980-9I679-00L01A	MCP170L-F01A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 1.5m	EOL [P-Rel] [HIBERN/ATE]

8.1.8 50GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	50GE	980-9I79O-00G000	MAM1Q00A-QSA56	NVIDIA cable module, ETH 50GbE, 200Gb/s to 50Gb/s, QSFP56 to SFP56	EOL [POR]
N/A	50GE	980-9I873-00G001	MCP2M50-G001E30	NVIDIA Passive Copper cable, 50GbE, 50Gb/s, SFP56, LSZH, 1m, black pulltab, 30AWG	EOL [P-Rel]
N/A	50GE	980-9I874-00G002	MCP2M50-G002E26	NVIDIA Passive Copper cable, 50GbE, 50Gb/s, SFP56, LSZH, 2m, black pulltab, 26AWG	EOL [P-Rel]
N/A	50GE	980-9I875-00G003	MCP2M50-G003E26	NVIDIA Passive Copper cable, 50GbE, 50Gb/s, SFP56, LSZH, 3m, black pulltab, 26AWG	EOL [P-Rel]
N/A	50GE	980-9I876-00G00A	MCP2M50-G00AE30	NVIDIA Passive Copper cable, 50GbE, 50Gb/s, SFP56, LSZH, 0.5m, black pulltab, 30AWG	EOL [P-Rel]
N/A	50GE	980-9I877-00G01A	MCP2M50-G01AE30	NVIDIA Passive Copper cable, 50GbE, 50Gb/s, SFP56, LSZH, 1.5m, black pulltab, 30AWG	EOL [P-Rel]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	50GE	980-9I878-00G02A	MCP2M50-G02AE26	NVIDIA Passive Copper cable, 50GbE, 50Gb/s, SFP56, LSZH, 2.5m, black pulltab, 26AWG	EOL [P-Rel]

8.1.9 40GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NA	40GE	980-9I72H-00B010	MCA7J70-C003	NVIDIA passive fiber hybrid cable, MPO to 8xLC, 10m	Preliminary

8.1.10 25GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NA	25GE	980-9I78I-00A000	MAM1Q00A-QSA28	Mellanox cable module, ETH 25GbE, 100Gb/s to 25Gb/s, QSFP28 to SFP28	LTB [HVM]
NA	25GE	980-9I63L-00A001	MCP2M00-A001E30N	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 1m, Black, 30AWG, CA-N	EOL [HVM]
NA	25GE	980-9I63O-00A002	MCP2M00-A002E30N	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2m, Black, 30AWG, CA-N	EOL [HVM]
NA	25GE	980-9I63R-00A003	MCP2M00-A003E26N	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 3m, Black, 26AWG, CA-N	EOL [HVM]
NA	25GE	980-9I63S-00A003	MCP2M00-A003E30L	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 3m, Black, 30AWG, CA-L	EOL [HVM]
NA	25GE	980-9I63T-00A004	MCP2M00-A004E26L	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 4m, Black, 26AWG, CA-L	EOL [HVM]
NA	25GE	980-9I63V-00A005	MCP2M00-A005E26L	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 5m, Black, 26AWG, CA-L	EOL [HVM]
NA	25GE	980-9I63X-00A00A	MCP2M00-A00AE30N	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 0.5m, Black, 30AWG, CA-N	EOL [HVM]
NA	25GE	980-9I63Z-00A01A	MCP2M00-A01AE30N	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 1.5m, Black, 30AWG, CA-N	EOL [HVM]
NA	25GE	980-9I631-00A02A	MCP2M00-A02AE26N	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2.5m, Black, 26AWG, CA-N	EOL [HVM]
NA	25GE	980-9I632-00A02A	MCP2M00-A02AE30L	Mellanox Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2.5m, Black, 30AWG, CA-L	EOL [HVM]
NA	25GE	980-9IA1T-00A003	MFA2P10-A003	Mellanox active optical cable 25GbE, SFP28, 3m	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NA	25GE	980-9I53W-00A005	MFA2P10-A005	Mellanox active optical cable 25GbE, SFP28, 5m	EOL [HVM]
NA	25GE	980-9I53Z-00A007	MFA2P10-A007	Mellanox active optical cable 25GbE, SFP28, 7m	EOL [HVM]
NA	25GE	980-9I532-00A010	MFA2P10-A010	Mellanox active optical cable 25GbE, SFP28, 10m	EOL [HVM]
NA	25GE	980-9I535-00A015	MFA2P10-A015	Mellanox active optical cable 25GbE, SFP28, 15m	EOL [HVM]
NA	25GE	980-9I536-00A020	MFA2P10-A020	Mellanox active optical cable 25GbE, SFP28, 20m	EOL [HVM]
NA	25GE	980-9I539-00A030	MFA2P10-A030	Mellanox active optical cable 25GbE, SFP28, 30m	EOL [HVM]
NA	25GE	980-9I53A-00A050	MFA2P10-A050	Mellanox active optical cable 25GbE, SFP28, 50m	EOL [HVM]
NA	25GE	980-9I094-00AR00	MMA2L20-AR	Mellanox optical transceiver, 25GbE, 25Gb/s, SFP28, LC-LC, 1310nm, LR up to 10km	EOL [MP]
NA	25GE	980-9I595-00AM00	MMA2P00-AS	Mellanox transceiver, 25GbE, SFP28, LC-LC, 850nm, SR	HVM
NA	25GE	980-9I34B-00AS00	MMA2P00-AS-SP	Mellanox transceiver, 25GbE, SFP28, LC-LC, 850nm, SR, up to 100m, single package	EOL [HVM]

8.1.11 10GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NA	10GE	980-9I71G-00J000	MAM1Q00A-QSA	Mellanox cable module, ETH 10GbE, 40Gb/s to 10Gb/s, QSFP to SFP+	LTB [HVM]
NA	10GE	980-9I682-00J004	MC3309124-004	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 4m	EOL [HVM]
NA	10GE	980-9I683-00J005	MC3309124-005	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 5m	EOL [HVM]
NA	10GE	980-9I684-00J006	MC3309124-006	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 6m	EOL [HVM]
NA	10GE	980-9I685-00J007	MC3309124-007	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 7m	EOL [HVM]
NA	10GE	980-9I686-00J001	MC3309130-001	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m	EOL [HVM]
NA	10GE	980-9I688-00J002	MC3309130-002	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m	EOL [HVM]
NA	10GE	980-9I68B-00J003	MC3309130-003	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
NA	10GE	980-9I68F-00J00A	MC3309130-00A	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 0.5m	EOL [HVM]
NA	10GE	980-9I68G-00J01A	MC3309130-0A1	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m	EOL [HVM]
NA	10GE	980-9I68H-00J02A	MC3309130-0A2	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m	EOL [HVM]
NA	10GE	980-9I68C-00J003	MCP2100-X003B	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m, Blue Pulltab, Connector Label	EOL [HVM]
NA	10GE	980-9I68F-00J002	MCP2104-X002B	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m, Black Pulltab, Connector Label	EOL [HVM]
NA	10GE	980-9I68G-00J003	MCP2104-X003B	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m, Black Pulltab, Connector Label	EOL [HVM]
NA	10GE	980-9I68I-00J02A	MCP2104-X02AB	Mellanox passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m, Black Pulltab, Connector Label	EOL [HVM]
NA	10GE	MFM1T02A-LR-F	MFM1T02A-LR-F	Mellanox optical module, ETH 10GbE, 10Gb/s, SFP+, LC-LC, 1310nm, LR up to 10km	HVM
NA	10GE	MFM1T02A-SR-F	MFM1T02A-SR-F	Mellanox optical module, ETH 10GbE, 10Gb/s, SFP+, LC-LC, 850nm, SR up to 300m	HVM
NA	10GE	MFM1T02A-SR-P	MFM1T02A-SR-P	Mellanox optical module, ETH 10GbE, 10Gb/s, SFP+, LC-LC, 850nm, SR up to 300m	HVM

8.1.12 1GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	1GE	980-9I270-00IM00	MC3208011-SX	NVIDIA Optical module, ETH 1GbE, 1Gb/s, SFP, LC-LC, SX 850nm, up to 500m	EOL [P-Rel]
N/A	1GE	980-9I251-00IS00	MC3208411-T	NVIDIA module, ETH 1GbE, 1Gb/s, SFP, Base-T, up to 100m	HVM

8.1.13 Supported 3rd Party Cables and Modules

> ⚠ Third-party devices that have not been qualified by NVIDIA may be used; however, please be aware that no performance guarantees are provided.
> Any issues that arise will require initiating a new feature request process for third-party support.

Data Rate	Cable P/N	Description
800GE	C-OSG8CNSxxx-N00	INNOLIGHT 800G DR8 OSFP TO 2X400G QSFP112 DR4 BREAKOUT AOC
800GE	EOLO-138HG-5H-DR2	EOPTOLINK 800G OSFP MODULE
800GE	RTXM600-710	ACCELINK 800G OSFP TO 2X400G QSFP112 BREAKOUT AOC
800GE	T-RS8CNT-NMT	INNOLIGHT 800G DR8 OSFP RHS, DUAL MPO-12 APC
800GE	EOLO-138HG-5H-DR2	EOPTOLINK 800G 2XDR4 MODULE
800GE	CAC8XXXX1A2B ? C2-XA	CREDO 800G OSFP TO 2X400G OSFP ACC
800GE	CAC8XXXX1A2N ? C1-XA	CREDO 800G OSFP TO 2X400G QSFP112 ACC
400GE	C-DQ8FNM005-N00	MELLANOX SELECT 400GBE QSFP-DD AOC 5M
400GE	C-DQ8FNM050-N00	MELLANOX SELECT 400GBE QSFP-DD AOC 5M
400GE	QDD-400G-SR8	400GBASE-SR8 QSFP-DD PAM4 850NM 100M DOM MTP/MPO-16 MMF OPTICAL TRANSCEIVER MODULE
400GE	DMQ8811A-EC05	QSFP-DD AOC 100M
400GE	SPTSHP2PMCBE	400GBASE-DR4 , 500M
400GE	AAQD2QP2400C003	AOI 400G BREAKOUT TO 2X200G BREAKOUT AOC
400GE	AQQLBCQ4EDLA1729	AOI 400G FR4 QSFP112 MODULE
400GE	ATRF-C020	HGTECH 200G QSFP56 AOC 20M
400GE	C-DQF8FNMxxx-N00	INNOLIGHT 400G QSFP-DD TO 2X200G QSFP56 BREAKOUT AOC
400GE	C-GD4CNS010-N00	INNOLIGHT 400G QSFP112 TO 400G QSFP-DD AOC
400GE	CTF4XFR4CS1-01	INNOLIGHT 400G-FR4 MODULE
400GE	EOLO-134HG-5H-B	EOPTOLINK 400G OSFP DR4 MODULE
400GE	FCBN950QE1C05	FINISAR 400G QSFP-DD TO 2X200G QSFP56 BREAKOUT AOC 5M
400GE	FCBN950QE1C20	FINISAR 400G QSFP-DD TO 2X200G QSFP56 BREAKOUT AOC 20M

Data Rate	Cable P/N	Description
400GE	QDD-2Q200-CU3M	CISCO 400G QSFP-DD TO 2X200G BREAKOUT DAC 3M
400GE	QDD-4ZQ100-CU1M	CISCO 400G QSFP-DD TO 4X100G BREAKOUT DAC 1M
400GE	RTXM500-910	ACCELINK 400G QSFP-DD TO 2X200G QSFP56 BREAKOUT AOC 10M
400GE	RTXM600-610	ACCELINK 400G QSFP-DD TO QSFP112 AOC
400GE	T-GQ4CNT-N00	INNOLIGHT 400G QSFP112 FR4 MODULE, LC
400GE	T-RS4CNH-NFL	INNOLIGHT 400G (BRCM LASER)
400GE	T-RS4CNH-NFM	INNOLIGHT 400G (SUMI LASER)
400GE	T-OH4CNT-N00	INNOLIGHT 400G DR4+ QSFP112 MODULE
400GE	EOLO-134HG-5H-DR2	EOPTOLINK 400G DR4 MODULE
400GE	OM3638SX100	HUAWEI 400G QSFP112 SR4 MODULE
400GE	MTRQ-4S105	GENUINE 400G QSFP112 SR4 MODULE
400GE	LMQ8621-PC+	HISENSE 400G QSFP112 SR4
400GE	AQF400C11311S50	ATI 400G DR4 QSFP112
400GE	EOLQ-134HG-5H-M1	EOPTOLINK 400G DR4 QSFP112
400GE	C-DQF8FNM005-N00	INNOLIGHT 400G QSFP-DD TO 2X200G AOC
400GE	RTXM600-4220	ACCELINK 2X200G QSFP112 AOC BREAKOUT
400GE	C-GQQ4CNSxxx-NTC	INNOLIGHT 2X200G QSFP112 AOC BREAKOUT
400GE	RTXM600-308	ACCELINK 400G QSFP112 SR4
400GE	FTCD4528E1PCM	FINISAR 400G DR4 QSFP112
400GE	VST-Q4ARMX2Q56MX-O3M	PROLABS 400G Q-DD TO 2X200G QSFP56 AOC
200GE	R5Z83A	200GB QSFP56 MPO SR4 100M
200GE	L6WQF102-SD-R	3M DAC, 200G TO 2X100G
200GE	MFS1S00-H030V	200G AOC
200GE	MFS1S00-H003V	200G AOC
200GE	R5Z84A	200GB QSFP56 LC CWDM4 FR4 XCVR
200GE	RTXM500-905	400G-2X200G SPLIT 5M AOC CABLES (400G QSFP-DD BREAKING OUT TO 2X 200G QSFP56)
200GE	DEF8504-2C06-MB3	QSFP-DD ACTIVE OPTICAL CABLE (AOC) TO 2XQSFP-28 ACTIVE OPTICAL CABLE BREAK-OUT
200GE	NDYRYH-0003	400GGTO 2X200FG QSFP DD - 2X QSFP CABLE ASSEMBLY, PASSIVE, 27AWG, 3M, 56G / LANE, JACKET

Data Rate	Cable P/N	Description
200GE	DME8811-EC07	400G-2X200G SPLIT 7M AOC CABLES (400G QSFP-DD BREAKING OUT TO 2X 200G QSFP56
200GE	NDYRYF-0001	400G TO 2X200G, QSFP DD - 2X QSFP56 CABLE ASSEMBLY, PASSIVE, 30AWG, 1M
200GE	NDYRYH-0002	400G TO 2X200G, QSFP DD - 2X QSFP56 CABLE ASSEMBLY, PASSIVE, 27AWG, 2M
200GE	NDYRFH-0003	AMPHENOL QSFP DD - 2X QSFP CABLE ASSEMBLY, PASSIVE, 27AWG, 3M, 28G / LANE, JACKET
200GE	R8M49A	HPE 400GBE TO 2X200G QSFP-DD TO 2XQSFP56 5M ACTIVE OPTICAL CABLE
200GE	R8M50A	HPE 400GBE TO 2X200G, QSFP-DD TO 2XQSFP56 15M ACTIVE OPTICAL CABLE
200GE	NDAAXG-0002	AMPHENOL 200G QSFP CABLE ASSEMBLY, PASSIVE, 28AWG, 2M, 56G / LANE, JACKET
200GE	NDYRYF-0006	AMPHENOL 400G TO 2X200G QSFP DD - 2X QSFP CABLE ASSEMBLY, PASSIVE, 30AWG, 0.5M, 56G / LANE, JACKET
200GE	EOLQ-132HG-5H-M3	EOPTOLINK 200G QSFP112 DR2 MODULE
200GE	QSFP-200-CU3M	CISCO 200G QSFP56 DAC 3M
200GE	RTXM500-301-F1	ACCELINK 200G QSFP56 SR4
200GE	RTXM600-338-R0	ACCELINK 200G QSFP112 VR2 MODULE
200GE	T-FX4FNS-N00	INNOLIGHT 200G QSFP56 SR4 MODULE
200GE	T-GP2CNH-NR0	INNOLIGHT 200G QSFP112 DR2 MODULE, MPO-12
200GE	TR-HM4M085V-CF21	CREALIGHT 200G QSFP112 VR2 MODULE
200GE	QSFP-200-CU3M	200G QSFP56 TO QSFP56 PASSIVE COPPER CABLE, 3M
200GE	EOLQ-132HG-5H-M3	EOPTOLINK 200G DR2 QSFP112
200GE	T-GP2CNH-NR0	INNOLIGHT 200G DR2 QSFP112
200GE	QSFP-200G-SR4-S	CISCO 200G SR4 MODULE
200GE	MTRQ-2D504-01	HGTECH QSFP112 DR2 MODULE
200GE	HM4M085V-CXXX	CREALIGHT 200G SR2 QSFP112 MODULE
200GE	MTRQ-2V054-01	HGTECH 200G VR2 QSFP112 MODULE
200GE	NJAAKK-N911	AMPHENOL 200G DAC
100GE	FTLC1151RDPL	TRANSCIEVER 100GBE QSFP LR4
100GE	AFBR-89CDDZ	TRANSCIEVER 100GBE QSFP SR4
100GE	10137498-2010LF	PASSIVE COPPER CABLE ETH 100GBE QSFP 1M
100GE	10137498-2005LF	HPE 100G 2M COPPER CABLE
100GE	10137499-4050LF	PASSIVE COPPER CABLE ETH 100GBE QSFP 5M

Data Rate	Cable P/N	Description
100GE	CAB-Q-Q-100G-3M	PASSIVE COPPER CABLE ETH 100GBE QSFP 3M
100GE	FCBN425QE1C10-C1	AOC 100GBE QSFP 1M
100GE	SO-QSFP28-LR4	TRANSCIEVER 100GBE QSFP LR4
100GE	QSFP-40/100-SRBD	TRANSCIEVER 100GBE QSFP BI DIRECTIONAL (BIDIR)
100GE	FTLC9152RGPL	TRANSCEIVER 100GBE QSFP SWDM4
100GE	TR-FC13L-N00	100G QSFP28 OPTICAL TRANSCEIVERS QSFP28 LR4
100GE	NDAAFJ-C102	CISCO AMPHENOL SF-NDAAFJ100G-005M
100GE	TR-VC13T-N00	INNOLIGHT 100G OPTICAL TRANSCEIVER QSFP28 PSM4 TR-VC13T-N00,UP TO 2KM TRANSMISSI
100GE	FCBR425QF1C01	CBL ASSY 4X25G ETH QSFP 1M
100GE	FTLC9551REPM	100M PARALLEL MMF 100G QSFP28 OPTICAL TRANSCEIVER
100GE	RTXM420-550	MPO TYPE 210 M OM3 300 M OM4
100GE	RTXM420-551	100M PARALLEL MMF 100G QSFP28 OPTICAL TRANSCEIVER
100GE	FTLC9551REPM-H1	QSFP28 ACTIVE OPTICAL CABLE HIGH-SPEED INPUT-OUTPUT CONNECTORS 100G ETHERNET OFNP 1 METER
100GE	FOQQD33P00001	QSFP28 CWDM4, SINGLE RATE PULL TAB 100GBE 2KM OPTICAL TRANSCEIVER
100GE	LQ210CR-CPA2	QSFP28 CWDM4, SINGLE RATE PULL TAB 100GBE 2KM OPTICAL TRANSCEIVER
100GE	FCBN425QE1C01	100G QUADWIRE QSFP28 ACTIVE OPTICAL CABLE
100GE	AFBR-89CDDZ-JU1	100G QUADWIRE QSFP28 ACTIVE OPTICAL CABLE
100GE	AFBR-89CEDZ	100GBE QSFP28 PLUGGABLE, PARALLEL FIBER-OPTICS TRANSCEIVER MODULE, EXTENDED REACH 300M
100GE	FTLC9555REPM3-E6	FIBER OPTIC TRANSMITTERS, RECEIVERS, TRANSCEIVERS XCVR,QSFP28,100M,100GBASE-SR4
100GE	FCBR425QF1C03	4X25G, FULL-DUPLEX, ETHERNET, QSFP CABLE ENDS
100GE	FOQQD33P00009	CABLE ASSEMBLY, QSFP TO QSFP, OM 3 PLENUM, ACTIVE OPTICAL, 100GBPS, 2M
100GE	FOQQD33P00010	CABLE ASSEMBLY, QSFP TO QSFP, OM 3 PLENUM, ACTIVE OPTICAL, 100GBPS, 3M
100GE	NDAAFF-C403	CABLE ASSEMBLY UL 20276 3M 30AWG QSFP+ TO QSFP+ 38 TO 38 POS M-M BAG
100GE	NDAAFJ-M203	QSFP28GB 26AWG, 3METER PASSIVE
100GE	NDARHF-M206	QSFP28 TO 2X QSFP28 COPPER SPLITTER CABLE ASSEMBLIES 100G/200G, HIGH SPEED INPUT OUTPUT CONNECTORS, QSFP28GB 30AWG, 2.5METER PASSIVE.
100GE	AQPA9N09ADLN0817	ACTIVE OPTICAL CABLE 100G QSFP28
100GE	AQPA9N12ADLN0778	QSFP28 AOC 100G MMF 850NM TRANSCEIVER
100GE	AQPA9N35ADLN0817	ACTIVE OPTICAL CABLE 100G QSFP28

Data Rate	Cable P/N	Description
100GE	AQPMANQ4EDMA0784	QSFP28 100G SMF 500M TRANSCEIVER
100GE	AQPMANQ4EDMA0871	QSFP28 100G SMF 500M TRANSCEIVER
100GE	AFBR-89CDDZ-CS1	AVAGO AFBR-89CDDZ COMPATIBLE 100GBASE-SR4 QSFP28 850NM
100GE	DHZZjj-KCCC-030	200G QSFP56 TO 2X100G QSFP56 DIRECT ATTACH CABLE
100GE	SFBR-89BDDZ-CS2	100G AOM BIDI
100GE	SFBR-89BDDZ-CS4	100G AOM BIDI
100GE	SQF1002L4LNC101P	CISCO-SUMITOMO 100GBE AOM
100GE	ET7402-SR4	100G QSFP28 OPTICAL TRANSCEIVER
100GE	FCBN425QE2C05	4X25G, FULL-DUPLEX, ETHERNET, QSFP CABLE ENDS
100GE	FCBR425QE1C10-HP	FIBRE OPTIC CABLE ASSEMBLIES 4X25G, FULL-DUPLEX, ETHERNET, QSFP CABLE ENDS
100GE	DQF8503-4C01	4X25.78GB/S QSFP28 ACTIVE OPTICAL CABLE
100GE	DQF8503-4C05	4X25.78GB/S QSFP28 ACTIVE OPTICAL CABLE
100GE	10137628-4050LF	HPE 100GBE QSFP28 DAC 5M CABLE - 100GB/S DIRECT ATTACH COPPER QUAD
100GE	RTXM420-005	QSFP28 100G
100GE	TF-FC010-N00	100G OPTICAL TRANSCEIVER QSFP28 PARALLEL ACTIVE OPTICAL CABLE
100GE	DQF8503-4C23	QSFP28 AOCS 7M
100GE	TR-ZC13T-N00	QSFP28 FR1 (PAM4)
100GE	1002971151	ZQSFP+-TO-ZQSFP+ CABLE ASSEMBLY, 30 AWG, 1.50M LENGTH
100GE	1003461071	ZQSFP+TO 2ZQSFP+50G CBL ASSY 0.7
100GE	1003461076	ZQSFP+-TO-2 ZQSFP+ PASSIVE CABLE ASSEMBLY, 100 GBPS-TO-(2) 50 GBPS
100GE	1003461101	ZQSFP+ TO 2ZQSFP+ 50G CBL
100GE	1003461106	ZQSFP+-TO-2 ZQSFP+ PASSIVE CABLE ASSEMBLY, 100 GBPS-TO-(2) 50 GBPS, LOW-SMOKE ZERO-HALOGEN CABLE, 30 AWG, 1.0M LENGTH
100GE	1003463156	ZQSFP+-TO-2 ZQSFP+ PASSIVE CABLE ASSEMBLY, 100 GBPS-TO-(2) 50 GBPS, LOW-SMOKE ZERO-HALOGEN CABLE, 26 AWG, 1.50M LENGTH
100GE	1003463301	ZQSFP+-TO-2 ZQSFP+ PASSIVE CABLE ASSEMBLY, 100 GBPS-TO-(2) 50 GBPS, 26 AWG, 3.0M LENGTH
100GE	1AT-3Q4M01XX-12A	QSFP28 100G ACTIVE CABLE/MODULE
100GE	1AT-3Q3Q9211-01A	100G QSFP28 CWDM4 PN: 1AT-3Q3Q9211-01A TRANSCEIVER MODULE
100GE	ATRQ-A007	QSFP28 AOCS 7M

Data Rate	Cable P/N	Description
100GE	DQF8503-4C07	7M 100GB/S QSFP28 ACTIVE OPTICAL CABLES AOC DQF8503-4C10 100GBE
100GE	DQF8503-4C10	10M 100GB/S QSFP28 ACTIVE OPTICAL CABLES AOC DQF8503-4C10 100GBE
100GE	FCBN425QE2C07	100GBASE-AOC QSFP28 TO QSFP28 DIRECT ATTACH CABLE, 7M
100GE	FCBN425QE2C10	100GBASE-AOC QSFP28 TO QSFP28 DIRECT ATTACH CABLE, 10M
100GE	NDARXJ-B303	3M DAC, 200G TO 2X100G
100GE	RTXM420-010	QSFP28 AOCS 10M
100GE	SPQCEERCDFLM	100G ER QSFP28, UP TO 40KM SINGLE MODE TRANSCEIVER
100GE	SPQCELRCDFB	100G LR4 QSFP28, UP TO 10KM SINGLE MODE TRANSCEIVER
100GE	QSFP-SR4-AJ	
100GE	AQPLBND3EDLA1457	100G FR1
100GE	EOLQ-131HG-O-026	100G FR1
100GE	SPTSLP3SLCDF	100G DR1
100GE	QSFP28-FR-C	QSFP28, FR, 1310NM, 100G, 2KM, SMF, LC, DDM
100GE	QSFP28-SR4-AJ	QSFP28, SR4, 850NM, 100G, 100M, MMF, MPO12, C-TEMP
100GE	SPTSBP4LLCDF	QSFP28 100G LR4
100GE	JNP-QSFP-100G-LR	100GBASE LR4 QSFP28 TRANSCEIVER, LC, 10KM OVER SMF, JNP-QSFP-100G-LR4-LU
100GE	QSFP-100G-CWDM4	100GBASE CWDM4 QSFP TRANSCEIVER, LC, 2KM OVER SMF, JNP-QSFP-100G-CWDM4-LU
100GE	QSFP-100G-SR4-I	100GBASE-SR4 QSFP, MPO, 100M OVER OM4 MMF INDUSTRIAL TEMPERATURE RANGE, QSFP-100G-SR4-I-LU
100GE	QSFP-100G-SR4-LU	100GBASE-SR4 QSFP, QSFP-100G-SR4-LU
100GE	SPTSBP4LLCDF	QSFP28 100G LR4
100GE	QSFP-100G-DR-LU	100GBASE DR QSFP TRANSCEIVER, LC, 500M OVER SMF, QSFP-100G-DR-S-LU
100GE	NDYSV2-0003	400G TO 4X 100G QSFP DD - 4X QSFP56 CABLE ASSEMBLY, LINEAR ACTIVE, 30AWG, 3M, 56G / LANE, JACKET
100GE	NDYSV2-0008	400G TO 4X 100G QSFP DD - 4X QSFP CABLE ASSEMBLY, LINEAR ACTIVE, 30AWG, 2.5M, 56G / LANE, JACKET
100GE	NDYSYF-0001	400G TO 4X100G QSFP DD - 4X QSFP56 CABLE ASSEMBLY, PASSIVE, 30AWG, 1M
100GE	TR-ZC13H-NML	100G QSFP28 DR1 TRANSCEIVER
100GE	FCBN425QE2C02	HPE (FINISAR PN FCBN425QE2C02) 100G QUADWIRE QSFP28 ACTIVE OPTICAL CABLE, 2M
100GE	S2T38A	HPE (FINISAR PN FCBN425QN2C05) 100G QSFP28 5M E-TEMP AOC
100GE	DQF8503-4C03	QSFP28 100G ACTIVE OPTICAL CABLE (AOC),3M, MM
100GE	FCBN425QF1C01	QSFP28 100G ACTIVE OPTICAL CABLE (AOC), 1M, MM

Data Rate	Cable P/N	Description
100GE	FCBN425QE2C30	HPE (FINISAR PN FCBN425QE2C30) 100G QUADWIRE QSFP28 ACTIVE OPTICAL CABLE, 30M
100GE	NDAAFF-0003	AMPHENOL 100G, QSFP28 CABLE ASSEMBLY, PASSIVE, 30AWG, 3M, 28G / LANE, JACKET
100GE	NDYSYH-0003	AMPHENOL 400G TO 4X100G, QSFP DD - 4X QSFP CABLE ASSEMBLY, PASSIVE, 27AWG, 3M, 56G / LANE, JACKET
100GE	ATRQ-A010	HGTECH 100G QSFP28 AOC 10M
100GE	FCBN425QE1C30-C1	QUADWIRE 100GBE QSFP28 30M AOC
100GE	QSFP-100G-AOC30M	CISCO 100G QSFP28 AOC 30M
100GE	QSFP28-LR4-AJ	CISCO 100G LR4 QSFP28 MODULE
100GE	RTXM420-007	ACCELINK 100G QSFP28 AOCS 7M
100GE	FTLC9555REPM3-HD	FINISAR 100G SR4 MODULE
100GE	740-088320	JUNIPER 100G FR1 QSFP28 MODULE
100GE	DMM8211X-DCxx	ACCELINK 100G AOC QSFP56 TO DSFP
100GE	RTXM520-2xx	ACCELINK 100G AOC QSFP56 TO DSFP
40GE	L45593-D118-B50	PASSIVE COPPER CABLE ETH 40GBE QSFP 3M
40GE	QSFP-H40G-CU1M	PASSIVE COPPER CABLE ETH 40GBE QSFP 1M
40GE	QSFP-40G-SR-BD	TRANSCIEVER 40GBE QSFP BI DIRECTIONAL (BIDIR)
40GE	AFBR-7QER15Z-CS1	CISCO 40GE 15M AOC
40GE	QAOC-40G4F1A25-C	CISCO-DELTA 25M 40GBE AOC
40GE	QSFP-H40G-CU1M	QSFP-H40G-CU1M
40GE	FTL410QD2C-HZ	40BASE-SR4/10GBASE-SR 300M QSFP+ GEN2 OPTICAL TRANSCEIVER MODULE
40GE	QSFP-40G-SRBD	ARISTA NETWORKS QSFP-40G-SRBD COMPATIBLE 40GBASE-SR BI-DIRECTIONAL QSFP+ OPTICAL TRANSCEIVER MODULE FOR DUPLEX MMF
40GE	AFBR-79EBPZ-HP8	40G BIDIRECTIONAL MMF QSFP+ TRANSCEIVER MODULE
40GE	NDCCGJ-C402	15M (49FT) AVAGO AFBR-7QER15Z COMPATIBLE 40G QSFP+ ACTIVE OPTICAL CABLE
40GE	L45593-D118-D30	PASSIVE COPPER CABLE ETH 40GBE QSFP 3M
40GE	DQF8501-4C01	QSFP+ SR4 4X10.3125GB/S QSFP+ SR4 ACTIVE OPTICAL CABLE
40GE	606770005	INTEL QSFP 40GBASE CR4
40GE	FTL4C1QE1C	40G LR4 QSFP+, UP TO 10KM SINGLE MODE TRANSCEIVER

Data Rate	Cable P/N	Description
40GE	JNP-QSFP-40G-LR4	40GBASE-LR4 QSFP+ 1310NM 10KM LC OVER SMF, JNP-QSFP-40G-LR4-LU
25GE	SFP-H25G-CU2M	15M (49FT) AVAGO AFBR-7QER15Z COMPATIBLE 40G QSFP+ ACTIVE OPTICAL CABLE
10GE	FTLX8570D3BCL-C2	TRANSCIEVER 10GBE SFP SR
10GE	QSFP-4SFP10G-CU5M	QSFP-4SFP10G-CU5M
10GE	DM7053	METHOD ELECTRONICS 10G BASE-T
10GE---100GE	FCBN425QE1C30-C1	CISCO FINISAR CABLE ASSY QSFP28 M-M 30M
FDR	FTL414QB2N-E5	TRANSCIEVER FDR QSFP SR4

8.2 Tested Switches

8.2.1 NDR / 400GbE Switches

Speed	NVIDIA SKU	Legacy OPN	Description
NDR	920-9B210-00FN-xxx	QM9790	NVIDIA Quantum-2 based NDR InfiniBand EVB Switch, 64 NDR ports, 32 OSFP ports, non-blocking switching capacity of 51.2Tbps, 2 Power Supplies (AC), Standard depth, Unmanaged, P2C airflow, Rail Kit, RoHS6
NDR	920-9B210-00FN-xxx	QM9700	NVIDIA Quantum 2 based NDR InfiniBand Switch, 64 NDR ports, 32 OSFP ports, 2 Power Supplies (AC), Standard depth, Managed, P2C airflow, Rail Kit
400GbE	920-9N42F-00RI-xxx	SN5600	NVIDIA Spectrum-4 based 800GbE 2U Open Ethernet switch with ONIE and NOS Authentication, 64 OSFP ports and 1 SFP28 port, 2 power supplies (AC), x86 CPU, Secure-boot, standard depth, C2P airflow, Tool-less Rail Kit
400GbE	920-9N301-00xB-xxx	SN4700	NVIDIA Spectrum-3 based 400GbE, 1U Open Ethernet switch, 32xQSFP-DD ports, x86 CPU, standard depth
400GbE	920-9N312-00xB-xxx	SN4410	NVIDIA Spectrum-3 based 400GbE 1U Open Ethernet switch, 24 QSFPDD28 and 8 QSFP-DD ports, 2 Power Supplies (AC), x86 CPU, standard depth
400GbE	N/A	Wedge 400	Meta: Wedge 400-48X 400GbE Data Center Switch
400GbE	N/A	Cisco Nexus 3432D-S	Cisco Nexus 3432D-S, 32 fixed 400-Gigabit Ethernet QSFP-DD ports with backward compatibility for QSFP56, QSFP28, and QSFP+

8.2.2 HDR / 200GbE Switches

Speed	NVIDIA SKU	Legacy OPN	Description
HDR	920-9B110-00FH-xxx	MQM8700	NVIDIA Quantum HDR InfiniBand Switch, 40 QSFP56 ports, 2 Power Supplies (AC), x86 dual core, standard depth, P2C airflow, Rail Kit
HDR	920-9B110-00FH-xxx	MQM8790	NVIDIA Quantum HDR InfiniBand Switch, 40 QSFP56 ports, 2 Power Supplies (AC), unmanaged, standard depth, P2C airflow, Rail Kit
200GbE	920-9N302-00xA-xxx	MSN4600V	NVIDIA Spectrum-3 based 200GbE 2U Open Ethernet switch, 64 QSFP56 ports, 2 Power Supplies (AC), x86 CPU, standard depth
200GbE	920-9N210-C1x7-xxx	MSN3700	NVIDIA Spectrum-2 based 200GbE Open Ethernet switch, 32 QSFP56 ports, x86 CPU, standard depth

8.2.3 100GbE Switches

Speed	NVIDIA SKU	Legacy OPN	Description
100GbE	920-9N302-00xA-xxx / 920-9N302-00x7-xxx	SN4600-XXXX	64-port Non-blocking 100GbE Open Ethernet Switch System
100GbE	920-9N201-00x7-xxx	SN3700C-XXXX	32-port Non-blocking 100GbE Open Ethernet Switch System
100GbE	920-9N213-00x7-xxx	SN3420-XXXX	48 SFP + 12 QSFP ports Non-blocking 100GbE Open Ethernet Switch System
100GbE	920-9N101-00x7-xxx	SN2700-XXXX	32-port Non-blocking 100GbE Open Ethernet Switch System
100GbE	N/A	QFX5200-32C-32	32-port 100GbE Ethernet Switch System
100GbE	N/A	7060CX-32S	32-port 100GbE Ethernet Switch System
100GbE	N/A	3232C	32-port 100GbE Ethernet Switch System
100GbE	N/A	N9K-C9236C	36-port 100GbE Ethernet Switch System
100GbE	N/A	93180YC-EX	48-port 25GbE + 6-port 100GbE Ethernet Switch System
100GbE	N/A	S6820-56HF	H3C S6850-56HF L3 Ethernet Switch with 48 SFP28 Ports and 8 QSFP28 Ports
100GbE	N/A	BMS T7032-IX7	32 QSFP28 ports support for 10/25/40/50/100GbE

9 Release Notes History

9.1 Changes and New Feature History

⚠ This section includes history of changes and new feature of 3 major releases back. For older releases history, please refer to the relevant firmware versions.

Feature/Change	Description
28.48.1000	
DOCA PCC	The DOCA PCC NP application now enables the NIC to insert the RTT response transmit timestamp in hardware, reducing software-induced jitter and improving the accuracy and consistency of RTT measurements.
DPA Process Limit Update	The system-wide limit for DPA processes has been reduced to **30**. This total includes both user processes across all GVMIs and internal ProgCC processes. The `max_dpa_processes` value reported to the user is calculated as: `max_dpa_processes=30-number_of_progcc_processes`
MAD Access to ADP Retransmission Histogram Registers	Added MAD (Management Datagram) access to the new Adaptive Retransmission Histogram registers. Users can configure the histogram by issuing VSP MAD GET/SET operations to ADP_RETX_HISTOGRAM_CONFIG (0xC01D), and retrieve histogram data via VSP MAD GET to ADP_RETX_HISTOGRAM_READ (0xC01E) (using the required VSP MAD header values and TLV format). This enables configuring and collecting adaptive retransmission timeout statistics through the MAD interface.
Host Rate Limiting Support Above 255 Gbps	Host rate limiting has been extended to support bandwidth values above 255 Gbps. To remove the previous cap, a new `max_bw_value_msb` field was added to `est_global`, providing additional MSB bits to represent higher bandwidth values. With this enhancement, firmware and host tooling can correctly configure and report rate limits beyond 255 Gbps on high-speed links.
PLDM PDR Repository Change Event Support	PLDM now supports the PDR Repository Change event type, enabling notification to the BMC when PDRs change. With this flow, the BMC can detect cable insertion/removal events. Refer to DSP0248 for details.
Parallel Save/Load Support for VF Migration	Added support for running save and load operations in parallel, enabling multiple contexts (e.g., multiple VFs) to be checkpointed and restored concurrently instead of serially. This reduces overall migration time and improves scalability in environments that need to migrate or recover many VFs at once.
NVGRE VSID Modify-Header Support	Extended packet modify-header operations to support `set` and `copy` actions on the NVGRE VSID (Virtual Subnet Identifier). A new field, `TUNNEL_HDR_DW_2` (0x84), enables dynamic VSID modification, adding header rewrite support for NVGRE tunnel traffic in addition to existing filtering capabilities.
VHCA Migration State Output	Added a new output field, `migration_state`, to `QUERY_VHCA_MIGRATION_STATE`. Software uses this field to make live-migration flow decisions, specifically to signal when it is not a good time to transition into the stop-copy stage.

Feature/Change	Description
28.48.1000	
Bug Fixes	See *Bug Fixes in this Firmware Version* section.

Feature/Change	Description
28.47.1088	
Bug Fixes	See *Bug Fixes in this Firmware Version* section.

Feature/Change	Description
28.47.1026	
Separate Lossless Buffer for Priorities 3 and 4	Added support for multiple lossless buffer configurations in PFC. The firmware now automatically calculates buffer sizes and maps priorities to their respective buffers.
DPA Partition Creation	Access control was added to ensure that only the VHCA instance that created a DPA partition is permitted to modify or delete it.
DPA TIMER	DPA TIMER functionality has been exposed through the MTCTR access register, allowing direct access by applications.
DPA Manifest	A new DPA Manifest mechanism was introduced to define and manage application permissions.
Passing Metadata Registers between the NIC Layer and the E-Switch (esw) Layer	This enhancement enables seamless metadata propagation across layers, allowing flow steering rules and packet processing logic to share contextual information such as flow identifiers, source context, or policy tags. It improves coordination between NIC and E-Switch pipelines, enabling more flexible traffic handling and advanced offload capabilities.
Parallel Suspends of VFs	Added support for parallel suspend operations across multiple VFs.
Enable/Disable ECN in Upstream	Added the ability to enable or disable ECN in the upstream by allowing the MODIFY_CONG_STATUS and QUERY_CONG_STATUS commands in mlx5_fwctl.
ADP-RETX Timeout Profile	Firmware now allows the ADP-RETX timeout profile to be configured even when there are open QPs.
RTT RTC Timestamp	Added support for using the real-time clock to fill the request and response timestamps in hardware-generated RTT packets. To enable this feature, set `REAL_TIME_CLOCK_ENABLE` in **mlxconfig** and configure `ROCE_CC_RTT_TIMESTAMP_FORMAT` to `0x02 (REAL_TIME)`. For additional details, see Known Issue 4496642 in the *Known Issues* section.
SPDM (Security Protocol and Data Model) Measurements	The SPDM (Security Protocol and Data Model) measurements reporting mechanism has been updated to comply with version 1.2.0 of the SPDM specification. For further information refer to https://docs.nvidia.com/networking/display/dpunicattestation/connectx-7+measurements
Warm Boot when UPT VMs are Active	Added support for warm boot when UPT VMs are active, allowing the system to reboot without requiring a full shutdown of running VMs.
Bug Fixes	See *Bug Fixes in this Firmware Version* section.

Feature/Change	Description
28.46.3048	
Security Hardening Enhancements	This release contains important reliability improvements and security hardening enhancements. NVIDIA recommends upgrading your devices firmware to this release to improve the devices' firmware security and reliability.

Feature/Change	Description
28.46.1006	
PCIe Congestion Events	Added support for the general PCIe congestion object to monitor and receive events related to inbound and outbound PCIe congestion. A threshold can be configured to specify when the firmware should send an event to the software. This capability is activated by setting the mlxconfig parameter `PCIE_CONGESTION_MONITOR`.
Reading the Board ID from the EEPROM	Enabled reading the board ID from the EEPROM on the pluggable board and adjusting the configuration accordingly. For a 2×QSFP112 board (`board_id=4`), the firmware replaces the default 1×OSFP configuration with support for 2 QSFP ports.
Safely Identify DPUs/SmartNICs is a Machine and PCIe Slot	A new access register is introduced that accepts a type, length, and R/W command. • **Write operation:** Allocates a new ICMC buffer of the specified size (aligned to 64B) and stores the provided data. If a buffer for the given type already exists, the data in the ICMC is overwritten, and the locked area is adjusted accordingly • **Read operation:** If a buffer exists, its data is copied out. If not, the access register returns a size of 0 or an explicit error The length can be stored within the data in the ICMC, and the type is mapped to 256B chunks (due to access register limitations), so the VA of the buffer is calculated as `(base + (type << 8))`. The first 4 bytes store a validity flag and the length. If length storage is unnecessary (e.g., null-terminated data), a hardware read can use a cache-line hit as a validity bit. This feature is designed for limited use cases and does not address multi-host scenarios or broader ICMC utilization implications.
RSS with Crypto Offload	Added support for RSS with crypto offload enabling the NIC to parallelize packet processing across CPU cores while performing encryption/decryption in hardware. Additionally, introduced a new l4_type_ext parameter with values: 0 (None), 1 (TCP), 2 (UDP), 3 (ICMP).
Incoming NC-SI Messages Validation for the payload_len Field	Added an extra validation for the payload_len field in incoming NC-SI messages. Previously, invalid packets might have been accepted; now, such packets are silently dropped.
Bug Fixes	See *Bug Fixes in this Firmware Version* section.

9.2 Bug Fixes History

⚠ This section includes history of 3 major releases back. For older releases history, please refer to the relevant firmware versions.

Internal Ref.	Issue
4578581 / 4626296	**Description:** Fixed an interoperability issue where, when ConnectX-7 communicates with ConnectX-8 using the probe-based algorithm, bandwidth could become extremely low due to probe packets being dropped.
	Keywords: Interoperability, Congestion Control, RTT
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4786813	**Description:** Fixed an issue where the DPA kernel used unsafe ICM access during process creation/modification, which could cause the DPA kernel to hang during FLR.
	Keywords: DPA kernel, FLR
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4804664 / 4806969	**Description:** Fixed an issue in the User Debugger “query caps” where it returned only the number of capabilities, not the capability bitmap.
	Keywords: User Debugger “query caps”
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4859700 / NVbug 5828711	**Description:** Fixed an issue caused by a race condition in standby/boot power sequencing. In certain timing windows, port power-down could be delayed such that the power-up flow detected the port still transitioning to power-down, causing the sequence to fail and leaving the port stuck in a powered-down state.
	Keywords: PXE boot
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4484662	**Description:** Fixed an issue where mlxlink reported 0 values for SNR (media and host) due to incorrect local port mapping in firmware and an incorrect page number used by MFT.
	Keywords: mlxlink
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4744039	**Description:** Fixed an issue where, due to an SMBus release race condition, the I^2C bus could become stuck.
	Keywords: SMBus, I^2C bus
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000

Internal Ref.	Issue
4773490 / 4823336	**Description:** Fixed an issue where fuse values were not aligned with the updated values burned across different ConnectX-7 setups.
	Keywords: Fuse values
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4532684 / 4635872 / 4794865 / 4794866 / 4794867 / NVbug 5385446	**Description:** Fixed an issue by improving the ADP-RETX algorithm to avoid re-arming without performing a retransmission.
	Keywords: ADP-RETX algorithm
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4727303 / 4718947	**Description:** Fixed an issue in the steering definers used for LAG with IPv6 traffic.
	Keywords: LAG, IPv6 traffic, steering
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4663915	**Description:** Fixed an issue where a spurious CNP was sent in response to an out-of-sequence packet.
	Keywords: PCC, CNP, OOS, RP, NP
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4450570 / 4780432 / 4780433	**Description:** Fixed an issue where the root complex sent MCTP-over-PCI messages before a BDF was assigned, causing responses to be sent with BDF 0. The fix ensures that MCTP messages routed by ID are ignored until a valid BDF is assigned.
	Keywords: MCTP-over-PCI, BDF, MCTP messages
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
4809134 / 4824635	**Description:** Fixed an issue where the steering tables were not updated after enabling partial Spectrum-X capabilities (BTH.AR) via LLPD.
	Keywords: Steering tables, LLDP
	Detected in version: 28.47.1026
	Fixed in Release: 28.48.1000
2169950	**Description:** When decapsulation on a packet occurs, the FCS indication is not calculated correctly.
	Keywords: FCS
	Discovered in Version: 28.42.1000
	Fixed in Release: 28.48.1000
3735988	**Description:** In IB system, RTT_response_sl feature does not work with Sniffer tools (e.g., Wireshark/Tcpdump/).
	Keywords: Health buffer, sniffer, RTT
	Discovered in Version: 28.40.1000

Internal Ref.	Issue
	Fixed in Release: 28.48.1000

Internal Ref.	Issue
4608544	**Description:** Fixed an issue where, in rare live migration scenarios, a delayed doorbell triggered a false timeout alarm.
	Keywords: Live migration, doorbell, timeout alarm
	Detected in version: 28.46.1006
	Fixed in Release: 28.47.1088
4648642	**Description:** Fixed a rare issue in which destroying PCC NP configuration objects could result in assert 0x8175 being logged in dmesg.
	Keywords: Assert 0x8175, PCC NP
	Detected in version: 28.47.1026
	Fixed in Release: 28.47.1088
4718947	**Description:** Fixed an issue in the steering definers used for LAG with IPv6 traffic.
	Keywords: LAG, IPv6 traffic, steering
	Detected in version: 28.47.1026
	Fixed in Release: 28.47.1088
4690503	**Description:** Fixed an issue where creating a DPA process that uses 128 MB of data caused the dynamic library to fail with syndrome 0xdc30ac. The BSS section of the DPA application is now limited to 64 MB.
	Keywords: DPA process, BSS
	Detected in version: 28.47.1026
	Fixed in Release: 28.47.1088
4683823	**Description:** Some diagnostic data counters share hardware resources and cannot be configured simultaneously since 64-bit counter formats (e.g., DIAG_DATA_PARAMS_CONTEXT.output_format set to FORMAT_0 or FORMAT_1) consume more hardware resources per counter.
	Keywords: DOCA Telemetry Diagnostics
	Detected in version: 28.47.1026
	Fixed in Release: 28.47.1088

Internal Ref.	Issue
4570205	**Description:** Fixed a firmware issue where the ZTR_RTTCC algorithm parameters AI and HAI did not support a sufficient range.
	Keywords: PCC, ZTR_RTTCC
	Detected in version: 28.46.1006
	Fixed in Release: 28.47.1026

Internal Ref.	Issue
4629077	**Description:** Fixed an issue where coalescing regular SX events with SX RTT events under ZTR_RTTCC could keep improper event fields, which could impact congestion control behavior.
	Keywords: PCC, ZTR_RTTCC
	Detected in version: 28.46.1006
	Fixed in Release: 28.47.1026
4683328	**Description:** Fixed an issue in the ZTR_RTTCC algorithm where probe-abortion handling could behave improperly under high-stress network conditions, ensuring proper congestion control and stable traffic performance.
	Keywords: PCC, ZTR_RTTCC
	Detected in version: 28.46.1006
	Fixed in Release: 28.47.1026
4501554	**Description:** Fixed an assertion failure that could occur with the E-Switch uplink in specific configurations where the e-switch was disabled and Path Migration was active or GVMIs were using SRQ loopback in SQs. The issue occurred because the firmware attempted to perform cleanup operations when the uplink configuration lacked sufficient capacity. Now, when the E-Switch is disabled and no actions are available in the uplink STE, the firmware connects to the uplink STE instead of copying it.
	Keywords: Path migration, steering
	Detected in version: 28.46.1006
	Fixed in Release: 28.47.1026
4506854	**Description:** Added Scaling Factor "read" field. To obtain correct values in mlxlink, MFT version 4.33.0 or later is required.
	Keywords: Scaling Factor, mlxlink, MFT
	Detected in version: 28.46.1006
	Fixed in Release: 28.47.1026
4540897	**Description:** Added a recovery mechanism for I^2C failures. In case of an I^2C communication failure, the system now automatically attempts to recover and reinitialize the I/O expander to maintain continuous operation.
	Keywords: I2C failures, recovery mechanism
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.47.1026
4560691	**Description:** Fixed an issue in the MCTP SMBus configuration to ensure proper initialization and reliable communication between firmware components using the SMBus transport.
	Keywords: MCTP SMBus configuration
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.47.1026
4529293	**Description:** Fixed an issue where, during failover or restart, the SM sending a PortInfo MAD to the HCA firmware triggered reinitialization of port buffers, momentarily halting ingress traffic and causing packet drops. The firmware now avoids reconfiguring port buffers when the new configuration matches the current one.
	Keywords: OpenSM

Internal Ref.	Issue
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.47.1026
4683346	**Description:** Fixed an issue where, under the ZTR_RTTCC algorithm, a flow that reached its minimum rate due to heavy congestion would not recover its rate once the congestion cleared.
	Keywords: PCC, ZTR_RTTCC
	Discovered in Version: 28.46.1006
	Fixed in Release: 28.47.1026
4213025	**Description:** Fixed an issue where destroying or modifying a DPA partition from a non-owner VHCA was incorrectly allowed, such actions are now properly disallowed.
	Keywords: VHCA
	Discovered in Version: 28.46.1006
	Fixed in Release: 28.47.1026
4133425	**Description:** Fixed an issue where PTP was not supported when the port speed was configured to 1G.
	Keywords: PTP
	Discovered in Version: 28.46.1006
	Fixed in Release: 28.47.1026

Internal Ref.	Issue
4603774	**Description:** Fixed an issue where the adapter card could drop NC-SI over MCTP commands when padding bytes were present after the NC-SI checksum.
	Keywords: NC-SI
	Discovered in Version: 28.46.1006
	Fixed in Release: 28.46.3048

Internal Ref.	Issue
4501157 / 4257750	**Description:** Fixed a critical issue with a live firmware patch.
	Keywords: Live firmware patch
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4516394	**Description:** Fixed an uncleared state caused performance degradation after migration when there were significant differences in resource allocation by ensuring the state is cleared beforehand.
	Keywords: Performance
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006

Internal Ref.	Issue
4286902	**Description:** Fixed a race condition in DPA process termination during the exception flow, where a failed process could be missed and not reported to the user.
	Keywords: DPA
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4420567	**Description:** Removed an unnecessary and partially incorrect firmware check that blocked valid action list permutations allowed by the PRM. Validation of these permutations remains the responsibility of the software.
	Keywords: Header actions
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4443601	**Description:** Fixed a firmware issue where PXE failed to boot when both LAG ports were up.
	Keywords: PXE, LAG
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4443601	**Description:** Fixed a firmware issue where PXE failed to boot when both LAG ports were up.
	Keywords: PXE, LAG
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4475307	**Description:** Fixed an issue where PCC DCQCN used incorrect parameter values when link speed was 400Gbps or higher.
	Keywords: PCC DCQCN, congestion control
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4480427	**Description:** Fixed incorrect calculation of start address and mode for the CQE buffer in DPA CQ, which could cause CQEs to be written to the wrong address when the buffer is not 4K-aligned and spans a second page boundary.
	Keywords: CQ, CQE Buffer, DPA
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4490103	**Description:** Fixed the restart timing for the OSFP connector at 400 kHz I2C frequency.
	Keywords: Restart timing, OSFP, I2C frequency
	Discovered in Version: 28.44.1036
	Fixed in Release: 28.46.1006
4416919	**Description:** Updated Diagnostic Counters interface to prevent the following counters from being cleared after read: `pcie_link_latency_total_read_packet` and `pcie_link_latency_total_read_ns`.
	Keywords: Diagnostic Counters interface

Internal Ref.	Issue
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4520774	**Description:** Fixed an issue preventing `adp_retx` profile in the ROCE_ACCL access register from being set when there are outstanding QPs on the PF or VF.
	Keywords: ROCE_ACCL access register, QPs, PF, VF
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4403143	**Description:** Fixed an issue where `CREATE_DPA_PROCESS` could fail if a `DESTROY_DPA_PROCESS` (still running during destroy) was executed on a different VHCA. Also addressed a possible failure of `CREATE_DPA_PROCESS` after FLR.
	Keywords: DPA_PROCESS, FLR
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4388371	**Description:** Fixed an issue where an uninitialized pport in the SLRG command, when using the SMP interface, caused an assertion failure.
	Keywords: SLRG, SMP interface, pport
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4531558	**Description:** Fixed inconsistent LED behavior where the LED color for max speed was yellow and green otherwise, contrary to specification, due to a swapped GPIO mapping between control and PHY LEDs in the INI file.
	Keywords: LED
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4470053	**Description:** Fixed an issue with vQoS parameter configuration to improve latency handling for large messages.
	Keywords: vQoS, latency
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4366117	**Description:** Configuring a small MTU leads to fragmentation of packets critical for the PXE boot process. As a result, the PXE boot filters mistakenly discard these packets, causing the PXE boot to fail.
	Keywords: PXE boot filters
	Detected in version: 28.45.1020
	Fixed in Release: 28.46.1006
4475307	**Description:** Fixed an issue where PCC DCQCN used incorrect parameter values when link speed was 400Gbps or higher.
	Keywords: PCC DCQCN, congestion control.
	Detected in version: 28.45.1020

Internal Ref.	Issue
	Fixed in Release: 28.46.1006
4486431	**Description:** Fixed an issue where issuing multiple parallel queries of DPA_THREAD objects with the same object ID could fail.
	Keywords: DPA
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006
4497103	**Description:** Fixed the setting of the adaptive retransmission profile.
	Keywords: Adaptive retransmission profile
	Discovered in Version: 28.45.1020
	Fixed in Release: 28.46.1006

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