



NVIDIA ConnectX-6 Adapter Cards Firmware Release Notes v20.39.5172 LTS

Table of Contents

1	Release Notes Update History	5
2	Overview.....	6
2.1	Firmware Download.....	6
2.2	Document Revision History	6
3	Firmware Compatible Products	7
3.1	Supported Devices	7
3.2	Driver Software, Tools and Switch Firmware	7
4	Changes and New Features	9
4.1	Important Notes	9
4.2	Unsupported Features and Commands.....	9
4.2.1	Unsupported Features	9
4.2.2	Unsupported Commands.....	10
4.3	Customer Affecting Changes.....	10
4.3.1	Changes in This Release	10
4.3.2	Changes Planned for Future Releases	10
4.3.3	Changes in Earlier Releases.....	10
5	Bug Fixes in this Firmware Version	12
6	Known Issues	13
7	PreBoot Drivers (FlexBoot/UEFI)	23
7.1	FlexBoot Changes and New Features.....	23
7.2	UEFI Changes and Major New Features	23
8	Validated and Supported Cables and Switches	24
8.1	Validated and Supported Cables and Modules	24
8.1.1	Cables Lifecycle Legend.....	24
8.1.2	Switch and HCAs InfiniBand Cable Connectivity Matrix	24
8.1.3	Switch-to-Switch Connectivity	25
8.1.4	HCA-to-Switch Connectivity Matrix.....	25
8.1.4.1	VPI Protocol Support	26
8.1.5	HDR / 200GbE Cables	27
8.1.6	EDR / 100GbE Cables	33
8.1.7	FDR / 56GbE Cables.....	38
8.1.8	50GbE Cables.....	40

8.1.9	QDR Cables	40
8.1.10	FDR10 / 40GbE Cables	40
8.1.11	25GbE Cables.....	43
8.1.12	10GbE Cables.....	44
8.1.13	1GbE Cables	46
8.1.14	Supported 3rd Party Cables and Modules	46
8.2	Tested Switches	47
8.2.1	HDR / 200Gb/s Switches	47
8.2.2	EDR / 100Gb/s Switches.....	47
8.2.3	200GbE Switches	47
8.2.4	100GbE Switches	47
8.2.5	10/40GbE Switches.....	48
8.3	PRM Revision Compatibility.....	49
9	Supported Non-Volatile Configurations	50
10	Release Notes History.....	53
10.1	Changes and New Feature History.....	53
10.2	Bug Fixes History	55
11	Legal Notices and 3rd Party Licenses	58



This is a long-term support (LTS) release. LTS is the practice of maintaining a software product for an extended period of time (up to three years) to help increase product stability. LTS releases include bug fixes and security patches.

pdf.download



NVIDIA ConnectX-6 Dx Adapter Cards
Firmware Release Notes
v22.48.1000 (February 2026 GA
Release)

1 Release Notes Update History

Version	Date	Description
20.39.5172	May 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.

2.1 Firmware Download

Please visit the [firmware webpage](#).

2.2 Document Revision History

A list of the changes made to this document are provided in [Document Revision History](#).

3 Firmware Compatible Products

The chapter contains the following sections:

These are the release notes for the NVIDIA® ConnectX®-6 adapters firmware. This firmware supports the following protocols:

- InfiniBand - SDR, QDR, FDR, EDR, HDR100, HDR
- Ethernet - 1GbE, 10GbE, 25GbE, 40GbE, 50GbE¹, 100GbE¹, 200GbE²
- PCI Express 4.0, supporting backwards compatibility for 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.



Please make sure to use a PCIe slot that can supply the required power to the ConnectX-6 adapter card as stated in section Specifications in the adapter card's User Manual.

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-6 Firmware	20.39.5172 / 20.39.5124 / 20.39.5050 /
MLNX_OFED	23.10-7.1.8.0 / 23.10-6.1.6.1 / 23.10-5.1.4.0 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.
MLNX_EN (MLNX_OFED based code)	23.10-7.1.8.0 / 23.10-6.1.6.1 / 23.10-5.1.4.0 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.
WinOF-2	23.10.51000 / 23.10.50000 / 23.7.50000 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.
MFT	4.26.1-35 / 4.26.1-31 4.26.1-36 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.

	Supported Version
mstflint	4.26.1-35 / 4.26.1-31 4.26.1-36 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.
FlexBoot	3.7.300
UEFI	14.32.17
MLNX-OS	3.10.5002 onwards
Cumulus	5.4 onwards
NVIDIA Quantum Firmware	27.2012.1010 onwards
SwitchX-IB 2 Firmware	15.2010.5108 onwards
SwitchX-IB Firmware	11.2008.3328 onwards

4 Changes and New Features

4.1 Important Notes



SR-IOV - Virtual Functions (VF) per Port - The maximum Virtual Functions (VF) per port is 127. For further information, see [Known Issues](#).



It is recommended to enable the "above 4G decoding" BIOS setting for features that require a large amount of PCIe resources (e.g., SR-IOV with numerous VFs, PCIe Emulated Switch, Large BAR Requests).



When upgrading or changing the configuration on multi-host adapter cards, for the changes to take effect, PCIe restart must be simultaneously sent from both hosts (servers).

To do so, perform the following:

1. Shut down the server with the auxiliary card.
2. Shut down the server with the primary card.
3. Bring back the server with the primary card.
4. Bring back the server with the auxiliary card.



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
20.39.5172	
General	This version does not include any changes to the firmware content of this adapter card. The version has been updated to align with the other adapter cards in the ConnectX family.

4.2 Unsupported Features and Commands

4.2.1 Unsupported Features

The following advanced feature are unsupported in the current firmware version:

- The following service types:
 - SyncUMR
 - Mellanox transport
 - RAW IPv6
- INT-A not supported for EQs only MSI-X
- PCI VPD write flow (RO flow supported)
- Streaming Receive Queue (STRQ) and collapsed CQ
- Subnet Manager (SM) on VFs
- RoCE LAG in Multi-Host/Socket-Direct

4.2.2 Unsupported Commands

- QUERY_MAD_DEMUX
- SET_MAD_DEMUX
- CREATE_RQ - MEMORY_RQ_RMP
- MODIFY_LAG_ASYNC_EVENT

4.3 Customer Affecting Changes

4.3.1 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
xx.39.5124	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."

4.3.2 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

4.3.3 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
N/A	N/A

5 Bug Fixes in this Firmware Version

This release does not include any bug fixes.

For a list of old Bug Fixes, please see [Bug Fixes History](#).

6 Known Issues

VF Network Function Limitations in SRIOV 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)

Known Issues

Internal Ref.	Issue
357526 1	Description: When using the SLRED function to measure eye in PAM4 speed, in some cases, the eye shape will not be correlative to the link margins.
	Workaround: N/A
	Keywords: SLRE
	Discovered in Version: 20.39.1002
352586 5	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: 20.39.1002
287884 1	Description: Firmware rollback fails for the signature retransmit flow if the QPN field is configured in the mkey (as it only allows the given QP to use this Mkey) as the firmware rollback flow relies on an internal QP that uses the mkey.
	Workaround: N/A
	Keywords: Signature retransmit flow
	Discovered in Version: 20.37.1014
337423 7	Description: Before deleting a VLAN from the header (pop_vlan), make sure a VLAN is present, otherwise you may experience a undefined behavior from the hardware which will result is a system crash.
	Workaround: N/A
	Keywords: VLAN
	Discovered in Version: 20.37.1014

Internal Ref.	Issue
3171699	Description: Occasionally, after a few toggles, link may not raise when changing the speed when in loopback mode.
	Workaround: N/A
	Keywords: Link speed, loopback
	Discovered in Version: 20.37.1014
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: 20.36.1010
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: 20.36.1010
3261861	Description: Connecting an HDR device to an NDR device with Optical cables longer than 30m causes degradation in the bandwidth.
	Workaround: N/A
	Keywords: HDR-to-NDR, cables
	Discovered in Version: 20.35.1012
3209624	Description: To configure Adaptive Routing in RoCE through ROCE_ACCL access register or through cmdif mlxconfig, ROCE_ADAPTIVE_ROUTING_EN nvconfig parameter must be set.
	Workaround: N/A
	Keywords: Adaptive Routing in RoCE
	Discovered in Version: 20.34.1002
3200779	Description: Changing dynamic PCIe link width is not supported.
	Workaround: N/A
	Keywords: PCIe
	Discovered in Version: 20.34.1002
3030570	Description: "crypto policy" access registry can be modified only by the INI file.
	Workaround: N/A
	Keywords: AES_XTS
	Discovered in Version: 20.33.1048
2793880	Description: Checksum is not calculated correctly in IPoIP packet with LSO.
	Workaround: N/A
	Keywords: IPoIP, LSO, checksum
	Discovered in Version: 20.33.1048

Internal Ref.	Issue
2864238	Description: VPD cannot be accessed after firmware upgrade or reset when the following sequence is performed: 1. Upgrade to a new firmware and perform a cold reboot 2. Downgrade to an old firmware 3. Run fwreset 4. Upgrade to a new firmware 5. Run fwreset
	Workaround: Run the upgrade or reset sequence as follow: 1. Upgrade to a new firmware and perform a cold reboot 2. Downgrade to an old firmware 3. Run fwreset 4. Upgrade to a new firmware 5. <u>Perform a cold reboot</u>
	Keywords: VDP
	Discovered in Version: 20.32.1010
2616755	Description: Forward action for IPoIB is not supported on RX RDMA Flow Table.
	Workaround: N/A
	Keywords: Steering, IPoIB
	Discovered in Version: 20.32.1010
2582094	Description: When performing a stress toggle test vs. IXIA, the IXIA side is not ready for few seconds.
	Workaround: Wait for 1 sec between running the down and up commands.
	Keywords: Auto-negotiation.
	Discovered in Version: 20.31.1014
2446583	Description: On rare occasions, when both network devices are NVIDIA, PAM4 link will raise with several effective errors. These errors will not affect traffic once the link is up.
	Workaround: Clear counters once the link is up
	Keywords: Effective errors
	Discovered in Version: 20.29.2002
SF 933911	Description: PXE boot will not function if the adapter card is connected to a NVIDIA Quantum™ based switch over an HDR active optical cable.
	Workaround: Set KEEP_LINK_UP_ON_BOOT configuration to enable via mlxconfig. For further information please contact Support.
	Keywords: IB, Link Speed , Link Down, SDR , optical cable
	Discovered in Version: 20.30.1004
2239632	Description: EDR linkup time might take up to 50sec when using HDR optical cable.
	Workaround: N/A
	Keywords: Cables, EDR
	Discovered in Version: 20.28.1002

Internal Ref.	Issue
2145881	Description: FDR link is unstable when using an FDR cable in ports: #27-#34.
	Workaround: N/A
	Keywords: FDR, cables
	Discovered in Version: 20.27.6008
2149437	Description: When the SLTP configuration is wrongly set, the “Bad status” explanation will not be presented (only error indication) to the user.
	Workaround: N/A
	Keywords: SLTP configuration
	Discovered in Version: 20.27.6008
2071210	Description: mlxconfig query for the BOOT_INTERRUPT_DIS TLV shows a wrong value in the "current value" field.
	Workaround: Use "next boot" indication to see the right value.
	Keywords: mlxconfig
	Discovered in Version: 20.27.1016
1796936	Description: 200GbE Optical cables in Auto-Negotiation mode work only in 200GbE speed.
	Workaround: N/A
	Keywords: Cables
	Discovered in Version: 20.27.1016
1959529	Description: When HDR Active Copper cables are used between Quantum switches, or between Quantum switch and ConnectX-6 HCA, the counter indicating ‘Link Down’ may have a value other than zero, after the first time the cable is connected. As this may happened only at the first time, it is recommend to clear the counters after the cluster is brought up.
	Workaround: Toggle the Active Copper or Optics cables as the switch performs a reset.
	Keywords: Cables, BER
	Discovered in Version: 20.27.1016
1959529	Description: Occasionally (up to 15% of connections), the link will go down when using ACC cables P/N: MCA1J00-H003E, MCA1J00-H004E and when connecting a Quantum switch to a Quantum switch.
	Workaround: N/A
	Keywords: Cables
	Discovered in Version: 20.27.1016
1997329	Description: Downgrading from firmware v20.26.4012 to firmware v20.26.1040 and lower is not supported on Windows OSes using the mlxfwmanager tool.
	Workaround: N/A
	Keywords: mlxfwmanager, firmware downgrade
	Discovered in Version: 20.26.4012
1930619	Description: PF_BAR2 and ATS cannot be enabled together, i.e. when PF_BAR2 is enabled, ATS cannot be enabled too.
	Workaround: N/A

Internal Ref.	Issue
	Keywords: ATS, SF, BAR2, Multi GVMI Discovered in Version: 20.26.1040
-	Description: In rare cases, following a server powerup, a fatal error (device's health compromised) message might appear with ext_synd 0x8d1d. The error will be accompanied by a failure to use mlxconfig and in some cases flash burning tools. Workaround: N/A Keywords: mlxconfig, flash tool, ext_synd 0x8d1d Discovered in Version: 20.26.1040
1796936	Description: HDR split cables support only HDR speed. Workaround: N/A Keywords: Link Speed, cables, Break-Out cables Discovered in Version: 20.26.1040
1750460 / 2063991	Description: BER issues might occur when using ConnectX-6 adapter cards in 100GbE link speed, and connecting with 3rd party switch systems. Workaround: N/A Keywords: BER, 100GbE, Spectrum-2 Discovered in Version: 20.26.1040
1918749	Description: mlxlink tool displays a wrong speed when using ETH cables on ConnectX-6 adapter cards. Workaround: N/A Keywords: mlxlink Discovered in Version: 20.26.1040
1901198	Description: Firmware is not loaded on Multi-Host setups after reboot. Workaround: N/A Keywords: Firmware load, Multi-Host Discovered in Version: 20.26.1040
1842278	Description: DC LAG can function only in case there is a single PF per port without any active VFs. Workaround: N/A Keywords: DC LAG Discovered in Version: 20.26.1040
1796628	Description: Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables. Workaround: N/A Keywords: Performance, unicast loopback traffic, multicast loopback traffic Discovered in Version: 20.26.1040

Internal Ref.	Issue
1797493	Description: Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size.
	Workaround: Configure within limits (NIC PF_BAR_SIZE <= 4).
	Keywords: Multi-GVMI, Sub-Function, SFs, BAR2
	Discovered in Version: 20.26.1040
-	Description: Coherent Accelerator Processor Interface (CAPI) in ConnectX-6 firmware v20.25.7020 and above has low test coverage, however, it has no known issues.
	Workaround: N/A
	Keywords: CAPI
	Discovered in Version: 20.25.7020
-	Description: HDR optical cables and Split cables support only HDR speed.
	Workaround: N/A
	Keywords: Link Speed, cables, Break-Out cables
	Discovered in Version: 20.25.6000
1755286	Description: Port speed may change to SDR spontaneously, without a clear reason.
	Workaround: Keep the "keep_ib_link_up" bit at 0 in NVconfig to make sure the port is raised with the correct speed.
	Keywords: SDR, port speed
	Discovered in Version: 20.25.2006
1774135	Description: PXE boot is not functional when connecting a splitter cable to the host.
	Workaround: Update the SM as follow: • MLNX_OFED SM: • Set the default partition in the SM partitions.conf file as shown in the example below: Default=0x7fff,ipoib,rate=5:ALL=full; Note: "rate" must be set to "5" regardless to the other flags values. • MLNX-OS SM: Run the following CLI commands: no ib sm ib partition Default rate 5 ib sm • UFM SM: Use REST API to change default partition rate: PUT https://<some IP>/ufmRest/resources/networks/management { "qos_parameters": { "rate_limit": 900 } } As a result, /opt/ufm/files/conf/opensm/partitions.conf will include the following line: management=0x7fff,ipoib,sl=0,rate=5, defmember=full : ALL, ALL_SWITCHES=full,SELF=full;
	Keywords: PXE boot, splitter cable
	Discovered in Version: 20.25.2006

Internal Ref.	Issue
176881 4/1772 474	Description: Due to hardware limitation, REG_C cannot be passed over loopback when the FDB action is forwarded to multiple destinations.
	Workaround: N/A
	Keywords: Connection-Tracking
	Discovered in Version: 20.25.2006
177073 6	Description: When a PF or ECPF with many VFs (SR-IOV), and/or SFs (Multi-GVMI) triggers an FLR, PCIe completion timeout might occur.
	Workaround: Increase the PCIe completion timeout.
	Keywords: Multi-GVMI, SR-IOV, Sub-Function, Virtual Function, PF FLR
	Discovered in Version: 20.25.2006
171633 4	Description: When mlxconfig.PF_BAR2_EN is enabled, configuring more than 255 PCI functions will raise an assert.
	Workaround: When working with BAR2, configure SR-IOV to align to the 255 PCI functions limitation. mlxconfig.NUM_OF_VFS controls the number of configured SR-IOV VFs. e.g.: - Smart NICs: 2 External Host PFs, 2 ARM ECPFs, 125 VFs per PF. - Non-smart NICs: 2 External Host PFs, 126 VFs per PF
	Keywords: Multi-GVMI, PF_BAR2_EN, Sub-Functions, SR-IOV, VFs
	Discovered in Version: 20.25.1500 [Beta]
169921 4	Description: NODNIC VF is partially tested. It is fully tested only in ConnectX-5 adapter cards.
	Workaround: N/A
	Keywords: NODNIC VF
	Discovered in Version: 20.25.1500 [Beta]
169921 4	Description: NODNIC VF is partially tested. It is fully tested only in ConnectX-5 adapter cards.
	Workaround: N/A
	Keywords: NODNIC VF
	Discovered in Version: 20.25.1500 [Beta]
-	Description: The supported length of HDR copper cables is currently up to 2M.
	Workaround: N/A
	Keywords: HDR cables
	Discovered in Version: 20.25.1500 [Beta]
-	Description: In Ethernet mode, at 10/40GbE speeds, only NO-FEC in Force mode is supported. Other user configurations are overridden.
	Workaround: N/A
	Keywords: Ethernet, 10GbE, 40GbE, RS-FEC
	Discovered in Version: 20.25.1500 [Beta]

Internal Ref.	Issue
1574876	Description: DC RoCE LAG is functional only if the router posts VRRP address as the source MAC.
	Workaround: N/A
	Keywords: DC RoCE LAG
	Discovered in Version: 20.25.1500 [Beta]
1498399	Description: If the XRC switches between SRQ/RMPs while there is an outstanding ODP on the responder XRC QP, a CQE with an error might be generated (that is not a PFAULT abort).
	Workaround: N/A
	Keywords: XRC SRQ/RMP ODP
	Discovered in Version: 20.25.1500 [Beta]
-	Description: In some cases, the power consumption might be 10% higher than what is stated in the adapter cards User Manual.
	Workaround: Power consumption will be aligned with the User Manual statement in the next release
	Keywords: Power consumption
	Discovered in Version: 20.25.1500 [Beta]
1546492	Description: Executing the update_lid command while the IB port sniffer utility is active can stop the utility.
	Workaround: N/A
	Keywords: IB Sniffer
	Discovered in Version: 20.25.1500 [Beta]
1537898	Description: Initializing a function while the IB port sniffer utility is active can stop the utility.
	Workaround: N/A
	Keywords: IB Sniffer
	Discovered in Version: 20.25.1500 [Beta]
1414290	Description: When getting an inline scatter CQE on IB striding RQ, the stride index in the CQE will be zero.
	Workaround: N/A
	Keywords: Scatter CQE
	Discovered in Version: 20.25.1500 [Beta]
1332714/1345824	Description: The maximum “read” size of MTRC_STDB is limited to 272 Bytes.
	Workaround: Set the MTRC_STDB.read_size to the maximum value of 0x110=272 Bytes
	Keywords: Access register, MTRC_STDB, tracer to dmesg, fwtrace to dmesg
	Discovered in Version: 20.25.1500 [Beta]
1408994	Description: FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
	Workaround: N/A
	Keywords: SX NIC Flow Table
	Discovered in Version: 20.25.1500 [Beta]

Internal Ref.	Issue
1027553	Description: While using e-switch vport sVLAN stripping, the RX steering values on the sVLAN might not be accurate.
	Workaround: N/A
	Keywords: e-sw vport sVLAN stripping, RX steering
	Discovered in Version: 20.25.1500 [Beta]
1799917	Description: Untagged CVLAN packets in the Steering Flow Tables do not match the SVLAN tagged packets.
	Workaround: N/A
	Keywords: Steering Flow Tables, CVLAN/SVLAN packets
	Discovered in Version: .20.25.1500 [Beta]
1277762	Description: An Ethernet multicast loopback packet is not counted (even if it is not a local loopback packet) when running the nic_receive_steering_discard command.
	Workaround: N/A
	Keywords: Ethernet multicast loopback packet
	Discovered in Version: 20.25.1500 [Beta]
1306342	Description: Signature-accessing WQEs sent locally to the NVMeF target QPs that encounter signature errors, will not send a SIGERR CQE.
	Workaround: N/A
	Keywords: Signature-accessing WQEs, NVMeF target
	Discovered in Version: 20.25.1500 [Beta]
1168594	Description: RoCE Dual Port Mode (a.k.a Multi-Port vHCA: MPV) is not supported in Multi-Host setups.
	Workaround: N/A
	Keywords: Multi-Port vHCA, Multi-Host
	Discovered in Version: 20.25.1500 [Beta]
1072337	Description: If a packet is modified in e-sw flow steering, the SX sniffer Flow Table (of the VF) will see the sniffed packet after the modification.
	Workaround: N/A
	Keywords: SX sniffer Flow Table
	Discovered in Version: 20.25.1500 [Beta]
1171013	Description: Signature Handover Operations is not supported when FPP (Function-Per-Port) mode is disabled.
	Workaround: N/A
	Keywords: Signature Handover Operations, FPP
	Discovered in Version: 20.25.1500 [Beta]
1059975	Description: NVMeF limitation: • Transaction size - up to 128KB per IO (non-inline) • Support up to 16K connections • Support single namespace per drive • Staging buffer size must be at least 16MB in order to allow SRQ size of 64 entries

Internal Ref.	Issue
	Workaround: N/A
	Keywords: NVMeF
	Discovered in Version: 20.25.1500 [Beta]

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



NVIDIA does not support InfiniBand cables or modules not qualified or approved by NVIDIA.

8.1.2 Switch and HCAs InfiniBand Cable Connectivity Matrix

NVIDIA Quantum™ based switches and NVIDIA® ConnectX®-6 HCAs support HDR (PAM4, 50Gb/s per lane) and EDR (NRZ, 25Gb/s per lane) technologies. As the ConnectX adapter cards are identified by their maximum supported throughput (e.g. ConnectX-6 VPI 100Gb/s card can support either 2-lanes of 50Gb/s or 4-lanes of 25Gb/s), the exact connectivity will be determined by the cable that is being used.

As a reference:

Speed Mode	Speed Supported	Number of Lanes Used
HDR	200Gb/s InfiniBand	4 lanes of 50Gb/s
HDR100	100Gb/s InfiniBand	2 lanes of 50Gb/s
EDR	100Gb/s InfiniBand	4 lanes of 25Gb/s
FDR	56Gb/s	4 lanes of 14Gb/s

The following tables present the connectivity matrix, between NVIDIA Quantum based switches, ConnectX-6 HCA, and the cables.

8.1.3 Switch-to-Switch Connectivity

Switch	Switch	Cable					
		H cable DAC	H cable AOC	HDR DAC	HDR AOC	EDR DAC/AOC	FDR DAC/AOC
NVIDIA Quantum™	NVIDIA Quantum	No such cable	HDR100	HDR	HDR	EDR	N/A
NVIDIA Quantum	NVIDIA® Switch-IB®/ Switch-IB 2	N/A	N/A	EDR	N/A	EDR	N/A
NVIDIA Quantum	NVIDIA® SWITCHX®-2	N/A	N/A	N/A	N/A	N/A	FDR

8.1.4 HCA-to-Switch Connectivity Matrix

Adapter	Switch		Cable						
			Y cable DAC/AOC	HDR DAC	HDR AOC	HDR100 DAC/AOC (Copper Cables Only)	EDR DAC	EDR AOC	FDR DAC/AOC
ConnectX-6 200Gb/s	NVIDIA Quantum-2	NDR Switch	N/A	2 × HDR	2 × HDR	4 × HDR100	N/A	N/A	N/A
ConnectX-6 100Gb/s	NVIDIA Quantum-2		N/A	2 × EDR	N/A	4 × HDR100	N/A	N/A	N/A
ConnectX-4/ ConnectX-5	NVIDIA Quantum-2		N/A	2 × EDR	N/A	N/A	N/A	N/A	N/A
ConnectX-6 200Gb/s	NVIDIA Quantum	HDR Switch	HDR100	HDR	HDR	N/A	EDR	EDR	N/A
ConnectX-6 100Gb/s	NVIDIA Quantum		HDR100	EDR	EDR	N/A	EDR	EDR	N/A
ConnectX-4/ ConnectX-5	NVIDIA Quantum		N/A	EDR	N/A	N/A	EDR	EDR	FDR
ConnectX-3/ ConnectX-3 Pro	NVIDIA Quantum		N/A	N/A	N/A	N/A	N/A	FDR ^a	FDR ^a
ConnectX-6	Switch-IB/ Switch-IB 2	EDR Switch	N/A	EDR	N/A	N/A	EDR	EDR	N/A

Adapter	Switch		Cable						
			Y cable DAC/ AOC	HDR DAC	HDR AOC	HDR10 0 DAC/ AOC (Copp er Cables Only)	EDR DAC	EDR AOC	FDR DAC/ AOC
ConnectX-6	SWITCHX-2	FDR Switch	N/A	N/A	N/A	N/A	N/A	N/A	FDR

a. Connectivity between NVIDIA Quantum and ConnectX-3 and ConnectX-3 Pro is not supported when using ports #27-34.

8.1.4.1 VPI Protocol Support

ConnectX-6 VPI supports having one port as InfiniBand and the second port as Ethernet according to the following matrix of combinations.

 FDR is not supported in VPI mode.

This section provides details on the following tests:

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

Legend:

	Configuration Combination Support
V	Supported
X	Not supported

Port #1	InfiniBand
Port #2	Ethernet

	Port #2 - Ethernet
--	--------------------

	200GbE/50GbE		100GbE/25GbE		40GbE/10GbE		1GbE	
Port #1 - InfiniBand	#1	#2	#1	#2	#1	#2	#1	#2
HDR / HDR100	V	V	V	V	V	X	V	V
EDR	V	V	V	V	V	X	V	V
FDR*	X	V	X	V	X	X	X	V
QDR/SDR	V	V	V	V	V	X	V	V

* FDR is not supported in VPI mode.

Port #2	InfiniBand
Port #1	Ethernet

	Port #2 - InfiniBand							
	HDR/HDR100		EDR		FDR*		QDR	
Port #1 - Ethernet	#1	#2	#1	#2	#1	#2	#1	#2
200GbE/50GbE	V	V	V	X	V	X	V	V
100GbE/25GbE	V	V	V	X	V	X	V	V
40GbE/10GbE	V	V	V	X	V	X	V	V
1GbE	V	V	V	X	V	X	V	V

* FDR is not supported in VPI mode.

8.1.5 HDR / 200GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR	N/A	980-9I86N-00H003*	MCA1J00-H003E*	NVIDIA Active Copper cable, IB HDR, up to 200Gb/s, QSFP56, 3m, yellow pulltab	EOL [MP]
HDR	N/A	980-9I86O-00H004*	MCA1J00-H004E*	NVIDIA Active Copper cable, IB HDR, up to 200Gb/s, QSFP56, 4m, yellow pulltab	EOL [MP]
HDR	N/A	980-9I977-00H003*	MCA7J50-H003R*	NVIDIA Active copper hybrid cable, IB HDR 200Gb/s to 2xHDR100 100Gb/s, QSFP56 to 2xQSFP56, 3m, colored	EOL [MP]
HDR	N/A	980-9I978-00H004*	MCA7J50-H004R*	NVIDIA Active copper hybrid cable, IB HDR 200Gb/s to 2xHDR100 100Gb/s, QSFP56 to 2xQSFP56, 4m, colored	EOL [MP]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR	N/A	980-91979-00H005	MCA7J50-H005R	NVIDIA Active copper hybrid cable, IB HDR 200Gb/s to 2xHDR100 100Gb/s, QSFP56 to 2xQSFP56, 5m, colored	EOL [Prototype]
HDR	200GE	980-91548-00H001	MCP1650-H001E30	Nvidia Passive Copper cable, up to 200Gbps, QSFP56 to QSFP56, 1m	HVM
HDR	200GE	980-91549-00H002	MCP1650-H002E26	Nvidia Passive Copper cable, up to 200Gbps, QSFP56 to QSFP56, 2m	HVM
HDR	200GE	980-9154A-00H00A	MCP1650-H00AE30	Nvidia Passive Copper cable, up to 200Gbps, QSFP56 to QSFP56, 0.5m	HVM
HDR	200GE	980-9154B-00H01A	MCP1650-H01AE30	Nvidia Passive Copper cable, up to 200Gbps, QSFP56 to QSFP56, 1.5 m	HVM
N/A	200GE	980-9154C-00V001	MCP1650-V001E30	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 1m, black pulltab, 30AWG	LTB [HVM]
N/A	200GE	980-9154D-00V002	MCP1650-V002E26	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 2m, black pulltab, 26AWG	LTB [HVM]
N/A	200GE	980-9154E-00V002	MCP1650-V002E26_F F	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 2m, black pulltab, 26AWG	EOL [HVM]
N/A	200GE	980-9154G-00V003	MCP1650-V003E26	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 3m, black pulltab, 26AWG	EOL [HVM]
N/A	200GE	980-9154H-00V00A	MCP1650-V00AE30	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 0.5m, black pulltab, 30AWG	LTB [HVM]
N/A	200GE	980-9154I-00V01A	MCP1650-V01AE30	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 1.5m, black pulltab, 30AWG	LTB [HVM]
N/A	200GE	980-9154L-00V02A	MCP1650-V02AE26	NVIDIA Passive Copper cable, 200GbE, 200Gb/s, QSFP56, LSZH, 2.5m, black pulltab, 26AWG	LTB [HVM]
HDR	200GE	980-9139E-00H001	MCP7H50-H001R30	Nvidia Passive copper splitter cable, 200Gbps to 2x100Gbps, QSFP56 to 2xQSFP56, 1m	HVM
HDR	200GE	980-9199F-00H002	MCP7H50-H002R26	Nvidia Passive copper splitter cable, 200Gbps to 2x100Gbps, QSFP56 to 2xQSFP56, 2m	HVM
HDR	200GE	980-9198G-00H01A	MCP7H50-H01AR30	Nvidia Passive copper splitter cable, 200Gbps to 2x100Gbps, QSFP56 to 2xQSFP56, 1.5m	HVM
N/A	200GE	980-9198H-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	980-9198I-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	980-9198J-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	980-9198K-00V01A	MCP7H50-V01AR30	NVIDIA passive copper hybrid cable, 200GbE 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, colored, 1.5m, 30AWG	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
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	980-9IA3X-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 4xSFP56, colored, 3m, 26AWG	EOL [P-Rel]
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 to 4x50Gb/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	980-9I123-00H003	MFS1S00-H003-LL	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, low latency, 3m	EOL [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	980-9I449-00H005	MFS1S00-H005-LL	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, low latency, 5m	EOL [P-Rel]
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]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR	200GE	980-9I45D-00H005	MFS1S00-H005V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 5m	MP
HDR	N/A	980-9I44F-00H010	MFS1S00-H010-LL	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, low latency, 10m	EOL [P-Rel]
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	N/A	980-9I45H-00H010	MFS1S00-H010E_FF	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	980-9I44L-00H015	MFS1S00-H015-LL	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, low latency, 15m	EOL [P-Rel]
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	980-9I44Q-00H020	MFS1S00-H020-LL	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, low latency, 20m	EOL [P-Rel]
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	980-9I45X-00H030	MFS1S00-H030-LL	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, low latency, 30m	EOL [P-Rel]
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	980-9I44O-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	N/A	980-9I44I-00H130	MFS1S00-H130E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 130m	EOL [HVM]
HDR	200GE	980-9I44K-00H130	MFS1S00-H130V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 130m	MP
HDR	N/A	980-9I45L-00H150	MFS1S00-H150E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 150m	EOL [HVM]
HDR	200GE	980-9I44N-00H150	MFS1S00-H150V	Nvidia active optical cable, up to 200Gbps , QSFP56 to QSFP56, 150m	MP

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR	N/A	980-9I450-00H200	MFS1S00-H200E	NVIDIA active fiber cable, IB HDR, up to 200Gb/s, QSFP56, LSZH, black pulltab, 200m	EOL [EVT]
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] [HIBERN/ATE]
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

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
HDR	200GE	980-9I95S-00H040	MFS1S50-H040V	Nvidia active optical splitter cable, 200Gbps to 2x100Gbps , QSFP56 to 2x QSFP56, 40m	Prototype
HDR	200GE	980-9I95T-00H050	MFS1S50-H050V	Nvidia active optical splitter cable, 200Gbps to 2x100Gbps , QSFP56 to 2x QSFP56, 50m	Prototype
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	980-9I95Z-00H003	MFS1S90-H003E	NVIDIA active fiber splitter cable, IB HDR, 2x200Gb/s to 2x200Gb/s, 2xQSFP56 to 2xQSFP56 , LSZH, 3m	EOL [HVM]
HDR	N/A	980-9I960-00H005	MFS1S90-H005E	NVIDIA active fiber splitter cable, IB HDR, 2x200Gb/s to 2x200Gb/s, 2xQSFP56 to 2xQSFP56 , LSZH, 5m	EOL [HVM]
HDR	N/A	980-9I961-00H010	MFS1S90-H010E	NVIDIA active fiber splitter cable, IB HDR, 2x200Gb/s to 2x200Gb/s, 2xQSFP56 to 2xQSFP56 , LSZH, 10m	LTB [HVM]
HDR	N/A	980-9I962-00H015	MFS1S90-H015E	NVIDIA active fiber splitter cable, IB HDR, 2x200Gb/s to 2x200Gb/s, 2xQSFP56 to 2xQSFP56 , LSZH, 15m	EOL [HVM]
HDR	N/A	980-9I423-00H020	MFS1S90-H020E	NVIDIA active fiber splitter cable, IB HDR, 2x200Gb/s to 2x200Gb/s, 2xQSFP56 to 2xQSFP56 , LSZH, 20m	LTB [HVM]
HDR	N/A	980-9I424-00H030	MFS1S90-H030E	NVIDIA active fiber splitter cable, IB HDR, 2x200Gb/s to 2x200Gb/s, 2xQSFP56 to 2xQSFP56 , LSZH, 30m	EOL [HVM]
HDR	N/A	980-9I17S-00HS00	MMA1T00-HS	NVIDIA transceiver, HDR, QSFP56, MPO, 850nm, SR4, up to 100m	HVM
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



*These cables were approved for switch-to-switch connectivity. For switch-to-host connectivity there may be some issues. See Known Issue 1959529 in the Known Issues section.



*MMS1W50-HM transceiver is tested and qualified only with the following OPNs: MCX653105A-HDAT and MCX653106A-HDAT.



HDR links raise with RS_FEC.

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	FTLC9152R GPL	100Gb/s Transceiver, QSFP28, LC-LC, 850nm SWDM4 up to 100m Over Multi-Mode Fiber	EOL [MP]
N/A	100GE	980-9I620-00C001	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	980-9I621-00C002	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	980-9I625-00C005	MCP1600-C005E26L	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP28, 5m, Black, 26AWG, CA-L	HVM
N/A	100GE	980-9I626-00C00A	MCP1600-C00A	NVIDIA Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 0.5m 30AWG	EOL [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]
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

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
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	N/A	980-9I622-00E00B	MCP1600-E00BE30	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 0.75m, Black, 30AWG	EOL [HVM] [HIBERN/ATE]
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	N/A	980-9I625-00E01C	MCP1600-E01BE30	NVIDIA Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 1.25m, Black, 30AWG	EOL [HVM] [HIBERN/ATE]
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	980-9I61D-00C001	MCP7H00-G001	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1m, 30AWG	EOL [HVM]
N/A	100GE	980-9I99F-00C001	MCP7H00-G001R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 1m, 30AWG	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	100GE	980-9199G-00C001	MCP7H00-G001R30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1m, Colored, 30AWG, CA-N	LTB [HVM]
N/A	100GE	980-9199J-00C002	MCP7H00-G002R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 2m, 30AWG	EOL [HVM]
N/A	100GE	980-9199K-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	980-9199L-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	980-9199O-00C003	MCP7H00-G003R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 3m, 28AWG	EOL [HVM]
N/A	100GE	980-9199Q-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	980-9139R-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	980-9199S-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	980-9199W-00C01A	MCP7H00-G01AR	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 1.5m, 30AWG	EOL [HVM]
N/A	100GE	980-9199X-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	980-91992-00C02A	MCP7H00-G02AR	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 2.5m, 30AWG	EOL [HVM]
N/A	100GE	980-91994-00C02A	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	980-91395-00C02A	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	980-9113S-00C003	MFA1A00-C003	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 3m	HVM
N/A	100GE	980-9113X-00C005	MFA1A00-C005	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 5m	HVM
N/A	100GE	980-91134-00C010	MFA1A00-C010	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 10m	HVM
N/A	100GE	980-9113A-00C015	MFA1A00-C015	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 15m	HVM

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
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
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

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
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]
N/A	100GE	980-9I149-00CS00	MMA1B00-C100D	NVIDIA transceiver, 100GbE, QSFP28, MPO, 850nm, SR4, up to 100m, DDMI	HVM
N/A	100GE	980-9I17B-00CS00	MMA1B00-C100D_FF	NVIDIA transceiver, 100GbE, QSFP28, MPO, 850nm, SR4, up to 100m, DDMI	EOL [HVM] [HIBERN/ATE]
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



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]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
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]
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	980-9I153-00L075	MC220731V-075	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 75m	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	980-9I676-00L002	MCP170L-F002	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 2m	EOL [P-Rel]
FDR	56GE	980-9I677-00L003	MCP170L-F003	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 3m	EOL [P-Rel] [HIBERN/ATE]
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]
FDR	N/A	980-9I17M-00FS00	MMA1B00-F030D	NVIDIA transceiver, FDR, QSFP+, MPO, 850nm, SR4, up to 30m, DDMI	LTB [HVM]

8.1.8 50GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
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]
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 QDR Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy Cables OPN	Description	LifeCycle Phase
QDR	NA	980-9I66S-00Q007	MC2206125-007	NVIDIA passive copper cable, IB QDR, 40Gb/s, QSFP, 7m	EOL [HVM]

8.1.10 FDR10 / 40GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
FDR10	40GE	980-9I66U-00B004	MC2206128-004	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 4m	EOL [HVM] [HIBERN/ATE]
FDR10	40GE	980-9I66V-00B005	MC2206128-005	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 5m	EOL [HVM]
FDR10	40GE	980-9I66W-00B001	MC2206130-001	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 1m	EOL [HVM]
FDR10	40GE	980-9I66X-00B002	MC2206130-002	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 2m	EOL [HVM]
FDR10	40GE	980-9I66Y-00B003	MC2206130-003	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 3m	EOL [HVM]
FDR10	40GE	980-9I66Z-00B00A	MC2206130-00A	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 0.5m	EOL [HVM]
FDR10	N/A	980-9I140-00T003	MC2206310-003	NVIDIA active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 3m	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
FDR10	N/A	980-9I141-0 0T005	MC220631 0-005	NVIDIA active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 5m	EOL [HVM]
FDR10	N/A	980-9I142-0 0T010	MC220631 0-010	NVIDIA active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 10m	EOL [HVM]
FDR10	N/A	980-9I143-0 0T015	MC220631 0-015	NVIDIA active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 15m	EOL [HVM]
FDR10	N/A	980-9I144-0 0T020	MC220631 0-020	NVIDIA active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 20m	EOL [HVM]
FDR10	N/A	980-9I145-0 0T030	MC220631 0-030	NVIDIA active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 30m	EOL [HVM]
FDR10	N/A	980-9I147-0 0T050	MC220631 0-050	NVIDIA active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 50m	EOL [HVM]
FDR10	N/A	980-9I148-0 0T100	MC220631 0-100	NVIDIA active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 100m	EOL [HVM]
N/A	40GE	980-9I666-0 0B004	MC221012 6-004	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 4m	EOL [HVM]
N/A	40GE	980-9I667-0 0B005	MC221012 6-005	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 5m	EOL [HVM]
N/A	40GE	980-9I668-0 0B003	MC221012 8-003	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 3m	EOL [HVM]
N/A	40GE	980-9I66A-0 0B001	MC221013 0-001	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 1m	EOL [HVM]
N/A	40GE	980-9I66C-0 0B002	MC221013 0-002	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 2m	EOL [HVM]
N/A	40GE	980-9I14D-0 0B003	MC221031 0-003	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 3m	EOL [MP]
N/A	40GE	980-9I14E-0 0B005	MC221031 0-005	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 5m	EOL [MP]
N/A	40GE	980-9I14F-0 0B010	MC221031 0-010	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 10m	EOL [MP]
N/A	40GE	980-9I14G- 00B015	MC221031 0-015	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 15m	EOL [MP]
N/A	40GE	980-9I14H- 00B020	MC221031 0-020	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 20m	EOL [MP]
N/A	40GE	980-9I14I-0 0B030	MC221031 0-030	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 30m	EOL [MP]
N/A	40GE	980-9I14J-0 0B050	MC221031 0-050	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 50m	EOL [MP]
N/A	40GE	980-9I14K-0 0B100	MC221031 0-100	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 100m	EOL [MP]
FDR10	40GE	980-9I170-0 0BM00	MC221041 1-SR4E	NVIDIA optical module, 40Gb/s, QSFP, MPO, 850nm, up to 300m	EOL [HVM]
FDR10	N/A	980-9I210- 00TR00	MC221051 1-LR4	NVIDIA optical module, 40Gb/s, QSFP, LC-LC, 1310nm, LR4 up to 10km	EOL [MP]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	40GE	980-9I64V-00B005	MC260912-5-005	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 5m	EOL [P-Rel]
N/A	40GE	980-9I64W-00B001	MC260913-0-001	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 1m	EOL [HVM]
N/A	40GE	980-9I64Y-00B003	MC260913-0-003	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 3m	EOL [HVM]
N/A	40GE	980-9I72J-00B005	MC670930-9-005	NVIDIA passive fiber hybrid cable, MPO to 8xLC, 5m	EOL [HVM]
N/A	40GE	980-9I72K-00B010	MC670930-9-010	NVIDIA passive fiber hybrid cable, MPO to 8xLC, 10m	EOL [HVM]
N/A	40GE	980-9I72L-00B020	MC670930-9-020	NVIDIA passive fiber hybrid cable, MPO to 8xLC, 20m	EOL [HVM]
N/A	40GE	980-9I72M-00B030	MC670930-9-030	NVIDIA passive fiber hybrid cable, MPO to 8xLC, 30m	EOL [HVM]
N/A	40GE	980-9I66U-00B001	MCP1700-B001E	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 1m, Black Pulltab	EOL [HVM]
N/A	40GE	980-9I66V-00B002	MCP1700-B002E	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 2m, Black Pulltab	EOL [HVM]
N/A	40GE	980-9I66W-00B003	MCP1700-B003E	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 3m, Black Pulltab	EOL [HVM]
N/A	40GE	980-9I66X-00B01A	MCP1700-B01AE	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 1.5m, Black Pulltab	EOL [MP]
N/A	40GE	980-9I66Y-00B02A	MCP1700-B02AE	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 2.5m, Black Pulltab	EOL [MP]
N/A	40GE	980-9I426-00B000	MMA1B00-B150D	NVIDIA transceiver, 40GbE, QSFP+, MPO, 850nm, SR4, up to 150m, DDMI	EOL [HVM]
N/A	40GE	980-9I64X-00B01A	MCP7900-X01AA	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 1.5m, Blue Pulltab, customized label	EOL [P-Rel] [HIBERNATE]
N/A	40GE	980-9I640-00B002	MCP7904-X002A	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 2m, Black Pulltab, customized label	EOL [HVM]
N/A	40GE	980-9I641-00B003	MCP7904-X003A	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 3m, Black Pulltab, customized label	EOL [HVM] [HIBERNATE]
N/A	40GE	980-9I642-00B01A	MCP7904-X01AA	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 1.5m, Black Pulltab, customized label	EOL [HVM]
N/A	40GE	980-9I643-00B02A	MCP7904-X02AA	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 2.5m, Black Pulltab, customized label	EOL [P-Rel] [HIBERNATE]

8.1.11 25GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	25GE	980-9I78I-00A000	MAM1Q00A-QSA28	NVIDIA cable module, ETH 25GbE, 100Gb/s to 25Gb/s, QSFP28 to SFP28	HVM
N/A	25GE	980-9I63J-00A001	MCP2M00-A001	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 1m, 30AWG	EOL [HVM]
N/A	25GE	980-9I63L-00A001	MCP2M00-A001E30N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 1m, Black, 30AWG, CA-N	LTB [HVM]
N/A	25GE	980-9I63M-00A002	MCP2M00-A002	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2m, 30AWG	EOL [HVM]
N/A	25GE	980-9I63N-00A002	MCP2M00-A002E26N	NVIDIA® Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2m, Black, 26AWG, CA-N	Preliminary
N/A	25GE	980-9I63O-00A002	MCP2M00-A002E30N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2m, Black, 30AWG, CA-N	LTB [HVM]
N/A	25GE	980-9I63R-00A003	MCP2M00-A003E26N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 3m, Black, 26AWG, CA-N	EOL [HVM]
N/A	25GE	980-9I63S-00A003	MCP2M00-A003E30L	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 3m, Black, 30AWG, CA-L	LTB [HVM]
N/A	25GE	980-9I63T-00A004	MCP2M00-A004E26L	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 4m, Black, 26AWG, CA-L	EOL [HVM]
N/A	25GE	980-9I63V-00A005	MCP2M00-A005E26L	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 5m, Black, 26AWG, CA-L	LTB [HVM]
N/A	25GE	980-9I63W-00A00A	MCP2M00-A00A	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 0.5m, 30AWG	EOL [HVM]
N/A	25GE	980-9I63X-00A00A	MCP2M00-A00AE30N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 0.5m, Black, 30AWG, CA-N	EOL [HVM]
N/A	25GE	980-9I63Z-00A01A	MCP2M00-A01AE30N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 1.5m, Black, 30AWG, CA-N	LTB [HVM]
N/A	25GE	980-9I631-00A02A	MCP2M00-A02AE26N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2.5m, Black, 26AWG, CA-N	EOL [HVM]
N/A	25GE	980-9I632-00A02A	MCP2M00-A02AE30L	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2.5m, Black, 30AWG, CA-L	LTB [HVM]
N/A	25GE	980-9IA1T-00A003	MFA2P10-A003	NVIDIA active optical cable 25GbE, SFP28, 3m	EOL [HVM]
N/A	25GE	980-9I53W-00A005	MFA2P10-A005	NVIDIA active optical cable 25GbE, SFP28, 5m	EOL [HVM]
N/A	25GE	980-9I53Z-00A007	MFA2P10-A007	NVIDIA active optical cable 25GbE, SFP28, 7m	EOL [HVM]
N/A	25GE	980-9I532-00A010	MFA2P10-A010	NVIDIA active optical cable 25GbE, SFP28, 10m	EOL [HVM]
N/A	25GE	980-9I535-00A015	MFA2P10-A015	NVIDIA active optical cable 25GbE, SFP28, 15m	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	25GE	980-9I536-00A020	MFA2P10-A020	NVIDIA active optical cable 25GbE, SFP28, 20m	EOL [HVM]
N/A	25GE	980-9I539-00A030	MFA2P10-A030	NVIDIA active optical cable 25GbE, SFP28, 30m	EOL [HVM]
N/A	25GE	980-9I53A-00A050	MFA2P10-A050	NVIDIA active optical cable 25GbE, SFP28, 50m	EOL [HVM]
N/A	25GE	980-9I094-00AR00	MMA2L20-AR	NVIDIA optical transceiver, 25GbE, 25Gb/s, SFP28, LC-LC, 1310nm, LR up to 10km	MP
N/A	25GE	980-9I595-00AM00	MMA2P00-AS	NVIDIA transceiver, 25GbE, SFP28, LC-LC, 850nm, SR	HVM
N/A	25GE	980-9I34B-00AS00	MMA2P00-AS-SP	NVIDIA transceiver, 25GbE, SFP28, LC-LC, 850nm, SR, up to 100m, single package	EOL [HVM]
N/A	25GE	980-9I34D-00AS00	MMA2P00-AS_FF	NVIDIA transceiver, 25GbE, SFP28, LC-LC, 850nm, SR, up to 100m	EOL [HVM]

8.1.12 10GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	10GE	980-9I71G-00J000	MAM1Q00 A-QSA	NVIDIA cable module, ETH 10GbE, 40Gb/s to 10Gb/s, QSFP to SFP+	HVM
N/A	10GE	980-9I65P-00J005	MC230912 4-005	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 5m	EOL [P-Rel]
N/A	10GE	980-9I65Q-00J007	MC230912 4-007	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 7m	EOL [P-Rel]
N/A	10GE	980-9I65R-00J001	MC230913 0-001	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 1m	EOL [HVM]
N/A	10GE	980-9I65S-00J002	MC230913 0-002	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 2m	EOL [HVM]
N/A	10GE	980-9I65T-00J003	MC230913 0-003	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 3m	EOL [HVM]
N/A	10GE	980-9I65U-00J00A	MC230913 0-00A	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 0.5m	EOL [HVM] [HIBERN/ATE]
N/A	10GE	980-9I682-00J004	MC330912 4-004	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 4m	EOL [HVM]
N/A	10GE	980-9I683-00J005	MC330912 4-005	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 5m	EOL [HVM]
N/A	10GE	980-9I684-00J006	MC330912 4-006	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 6m	EOL [HVM]
N/A	10GE	980-9I685-00J007	MC330912 4-007	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 7m	EOL [HVM]

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	10GE	980-9I686-00J001	MC330913-0-001	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m	EOL [HVM]
N/A	10GE	980-9I688-00J002	MC330913-0-002	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m	EOL [HVM]
N/A	10GE	980-9I68B-00J003	MC330913-0-003	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m	EOL [HVM]
N/A	10GE	980-9I68F-00J00A	MC330913-0-00A	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 0.5m	EOL [HVM]
N/A	10GE	980-9I68G-00J01A	MC330913-0-0A1	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m	EOL [HVM]
N/A	10GE	980-9I68H-00J02A	MC330913-0-0A2	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m	EOL [HVM]
N/A	10GE	980-9I68A-00J001	MCP2100-X001B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m, Blue Pulltab, Connector Label	EOL [HVM] [HIBERN/ATE]
N/A	10GE	980-9I68B-00J002	MCP2100-X002B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m, Blue Pulltab, Connector Label	EOL [HVM] [HIBERN/ATE]
N/A	10GE	980-9I68C-00J003	MCP2100-X003B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m, Blue Pulltab, Connector Label	EOL [HVM]
N/A	10GE	980-9I68E-00J001	MCP2104-X001B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m, Black Pulltab, Connector Label	EOL [HVM] [HIBERN/ATE]
N/A	10GE	980-9I68F-00J002	MCP2104-X002B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m, Black Pulltab, Connector Label	EOL [HVM]
N/A	10GE	980-9I68G-00J003	MCP2104-X003B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m, Black Pulltab, Connector Label	EOL [HVM]
N/A	10GE	980-9I68H-00J01A	MCP2104-X01AB	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m, Black Pulltab, Connector Label	EOL [HVM]
N/A	10GE	980-9I68I-00J02A	MCP2104-X02AB	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m, Black Pulltab, Connector Label	EOL [HVM]
N/A	10GE	930-9O000-0000-343	MFM1T02-A-LR	NVIDIA SFP+ optical module for 10GBASE-LR	HVM
N/A	10GE	MFM1T02A-LR-F	MFM1T02-A-LR-F	NVIDIA optical module, ETH 10GbE, 10Gb/s, SFP+, LC-LC, 1310nm, LR up to 10km	HVM
N/A	10GE	930-9O000-0000-409	MFM1T02-A-SR	NVIDIA SFP+ optical module for 10GBASE-SR	HVM
N/A	10GE	MFM1T02A-SR-F	MFM1T02-A-SR-F	NVIDIA optical module, ETH 10GbE, 10Gb/s, SFP+, LC-LC, 850nm, SR up to 300m	HVM

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy OPN	Description	LifeCycle Phase
N/A	10GE	MFM1T02A-SR-P	MFM1T02A-SR-P	NVIDIA optical module, ETH 10GbE, 10Gb/s, SFP+, LC-LC, 850nm, SR up to 300m	HVM

8.1.13 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

8.1.14 Supported 3rd Party Cables and Modules

Speed	Cable OPN	Description
10GbE	FTLX8571D3BCL-ME	10gb SFP 850nm Optic Transceiver
10GbE	SP7051-HP	HP-MethodElec. 10GbE AOM
40GbE	2231254-2	Cisco 3m 40GbE copper
40GbE	AFBR-7QER15Z-CS1	Cisco 40GbE 15m AOC
40GbE	BN-QS-SP-CBL-5M	PASSIVE COPPER SPLITTER CABLE ETH 40GBE TO 4X10GBE 5M
40GbE	NDCCGJ-C402	15m (49ft) Avago AFBR-7QER15Z Compatible 40G QSFP+ Active Optical Cable
40GbE	QSFP-40G-SR-BD	Cisco 40GBASE-SR-BiDi, duplex MMF
100GbE	1AT-3Q4M01XX-12A	O-NET QSFP28 100G Active cable/module
100GbE	AQPMANQ4EDMA0784	QSFP28 100G SMF 500m Transceiver
100GbE	CAB-Q-Q-100G-3M	Passive 3 meter, QSFP+ to QSFP+ QSFP100 TWINAX 103.125Gbps-CR4
100GbE	CAB-Q-Q-100GbE-3M	Passive 3 meter , QSFP+ to QSFP+ QSFP100 TWINAX 103.125Gbps-CR4
100GbE	FCBN425QE1C30-C1	100GbE Quadwire® QSFP28 Active Optical Cable 30M
100GbE	FTLC1151RDPL	TRANSCIEVER 100GBE QSFP LR4
100GbE	FTLC9152RGPL	100G 100M QSFP28 SWDM4 OPT TRANS
100GbE	FTLC9555REPM3-E6	100m Parallel MMF 100GQSFP28Optical Transceiver
100GbE	NDAAFJ-C102	SF-NDAAFJ100G-005M
100GbE	QSFP-100G-AOC30M	30m (98ft) Cisco QSFP-100G-AOC30M Compatible 100G QSFP28 Active Optical Cable
100GbE	QSFP28-LR4-AJ	CISCO-PRE 100GbE LR4 QSFP28 Transceiver Module
100GbE	SFBR-89BDDZ-CS2	CISCO-PRE 100G AOM BiDi
100GbE	SQF1002L4LNC101P	Cisco-SUMITOMO 100GbE AOM

8.2 Tested Switches

8.2.1 HDR / 200Gb/s Switches

Speed	Switch Silicon	OPN # / Name	Description	Vendor
HDR	Quantum	MQM8700-xxx	40-port Managed Non-blocking HDR 200Gb/s InfiniBand Smart Switch	NVIDIA
HDR	Quantum	MQM8790-xxx	40-port Unmanaged, Non-blocking HDR 200Gb/s InfiniBand Smart Switch	NVIDIA

8.2.2 EDR / 100Gb/s Switches

Speed	Switch Silicon	OPN # / Name	Description	Vendor
EDR	Switch-IB	MSB7790-XXX	36-port Unmanaged EDR 100Gb/s InfiniBand Switch Systems	Mellanox
EDR	Switch-IB	MSB7700-XXX	36-port Managed EDR 100Gb/s InfiniBand Switch Systems	Mellanox
EDR	Switch-IB 2	MSB7800-XXX	36-port Managed EDR 100Gb/s InfiniBand Switch Systems	Mellanox

8.2.3 200GbE Switches

Speed	Switch Silicon	OPN # / Name	Description	Vendor
200GbE	Spectrum-3	MSN4600V-XXXX	64 QSFP56 ports, 200GbE 2U Open Ethernet Switch with Onyx	NVIDIA
200GbE	Spectrum-2	MSN3700-XXXX	32 QSFP56 ports, 200GbE Open Ethernet Switch System	NVIDIA

8.2.4 100GbE Switches

Speed	Switch Silicon	OPN # / Name	Description	Vendor
100GbE	Spectrum-3	MSN4600-XXXX	64-port Non-blocking 100GbE Open Ethernet Switch System	NVIDIA
100GbE	Spectrum-2	MSN3700C-XXXX	32-port Non-blocking 100GbE Open Ethernet Switch System	NVIDIA
100GbE	Spectrum-2	MSN3420-XXXX	48 SFP + 12 QSFP ports Non-blocking 100GbE Open Ethernet Switch System	NVIDIA
100GbE	Spectrum	MSN2410-XXXX	48-port 25GbE + 8-port 100GbE Open Ethernet Switch System	NVIDIA

Speed	Switch Silicon	OPN # / Name	Description	Vendor
100GbE	Spectrum	MSN2700-XXXX	32-port Non-blocking 100GbE Open Ethernet Switch System	NVIDIA
100GbE	N/A	QFX5200-32C-32	32-port 100GbE Ethernet Switch System	Juniper
100GbE	N/A	S6820-56HF	48 SFP+ + 8 QSFP Ports 100GbE Switch Ethernet	H3C
100GbE	N/A	CE6860-1-48S8CQ-EI	Huawei 100GbE Ethernet switch	Huawei
100GbE	N/A	7060CX-32S	32-port 100GbE Ethernet Switch System	Arista
100GbE	N/A	3232C	32-port 100GbE Ethernet Switch System	Cisco
100GbE	N/A	N9K-C9236C	36-port 100GbE Ethernet Switch System	Cisco
100GbE	N/A	93180YC-EX	48-port 25GbE + 6-port 100GbE Ethernet Switch System	Cisco
100GbE	N/A	T7032-IX7	32-port 100GbE Ethernet Switch System	Quantia

8.2.5 10/40GbE Switches

Speed	Switch Silicon	OPN # / Name	Description	Vendor
10GbE	N/A	5548UP	32x 10GbE SFP+ Switch System	Cisco
10/40GbE	N/A	7050Q	16 x 40GbE QSFP+ Switch System	Arista
10/40GbE	N/A	7050S	48x 10GbE SFP+ and 4 x 40GbE QSFP+ Switch System	Arista
10/40GbE	N/A	G8264	48x 10GbE SFP+ and 4 x 40GbE QSFP+ Switch System	Lenovo
10/40GbE	N/A	QFX3500	48x 10GbE SFP+ and 4 x 40GbE QSFP+ Switch System	Juniper
10/40GbE	N/A	S4810P-AC	48x 10GbE SFP+ and 4 x 40GbE QSFP+ Switch System	Force10
10/40GbE	N/A	3064	48x 10GbE SFP+ and 4 x 40GbE QSFP+ Switch System	Cisco
10/40GbE	N/A	8164F	48x 10GbE SFP+ and 2 x 40GbE QSFP+ Switch System	Dell
10/40GbE	N/A	S5000	48x 10GbE SFP+ and 4 x 40GbE QSFP+ Switch System	Dell
10/40GbE	N/A	3132Q	4x 10GbE SFP+ and 32 x 40GbE QSFP+ Switch System	Cisco
40GbE	N/A	7050QX	32x 40GbE QSFP+ Switch System	Arista
40GbE	N/A	G8316	16x 40GbE QSFP+ Switch System	Lenovo
40GbE	N/A	S6000	32x 40GbE QSFP+ Switch System	Dell

8.3 PRM Revision Compatibility

This firmware version complies with the following Programmer's Reference Manual:

- Adapters Programmer's Reference Manual (PRM), Rev 0.53 or later, which has Command Interface Revision 0x5. The command interface revision can be retrieved by means of the QUERY_FW command and is indicated by the field cmd_interface_rev.

9 Supported Non-Volatile Configurations

Configuration	mlxconfig Parameter Name	Class	TLV ID
NV_MEMIC_CONF	MEMIC_BAR_SIZE	GLOBAL (0)	0x6
	MEMIC_SIZE_LIMIT		
NV_HOST_CHAINING_CONF	HOST_CHAINING_MODE		0x8
	HOST_CHAINING_DESCRIPTOR		
	HOST_CHAINING_TOTAL_BUFFER_SIZE		
NV_FLEX_PARS_CONF	FLEX_PARSER_PROFILE_ENABLE		0xe
	FLEX_IPV4_OVER_VXLAN_PORT		
NV_ROCE_1_5_CONF	ROCE_NEXT_PROTOCOL		0x10
NV_INTERNAL_RESOURCE_CONF	ESWITCH_HAIRPIN_DESCRIPTOR		0x13
	ESWITCH_HAIRPIN_TOT_BUFFER_SIZE		
NV_GLOBAL_PCI_CONF	NON_PREFETCHABLE_PF_BAR		0x80
	NUM_OF_VFS		
	SRIOV_EN		
	PF_LOG_BAR_SIZE		
	VF_LOG_BAR_SIZE		
	NUM_PF_MSIX		
	NUM_VF_MSIX		
NV_TPT_CONF	INT_LOG_MAX_PAYLOAD_SIZE		0x82
NV_POWER_CONF	SW_RECOVERY_ON_ERRORS		0x88
	RESET_WITH_HOST_ON_ERRORS		
	ADVANCED_POWER_SETTINGS		
NV_GLOBAL_MASK	ece_disable_mask		0x116
NV_SW_OFFLOAD_CONFIG	CQE_COMPRESSION		0x10a
	IP_OVER_VXLAN_EN		
	PCI_ATOMIC_MODE		
	LRO_LOG_TIMEOUT0		
	LRO_LOG_TIMEOUT1		
	LRO_LOG_TIMEOUT2		
	LRO_LOG_TIMEOUT3		
	log_max_outstandng_wqe		
	NV_config.sr_enable (ConnectX-6 Dx and above)		
NV_IB_DC_CONF	LOG_DCR_HASH_TABLE_SIZE		0x190
	DCR_LIFO_SIZE		
NV_VPI_LINK_TYPE	LINK_TYPE	PHYSICAL_PORT (2)	0x12
NV_ROCE_CC	ROCE_CC_PRIO_MASK		0x107

Configuration	mlxconfig Parameter Name	Class	TLV ID
	ROCE_CC_ALGORITHM		
NV_ROCE_CC_ECN	CLAMP_TGT_RATE_AFTER_TIME_INC		0x108
	CLAMP_TGT_RATE		
	RPG_TIME_RESET		
	RPG_BYTE_RESET		
	RPG_THRESHOLD		
	RPG_MAX_RATE		
	RPG_AI_RATE		
	RPG_HAI_RATE		
	RPG_GD		
	RPG_MIN_DEC_FAC		
	RPG_MIN_RATE		
	RATE_TO_SET_ON_FIRST_CNP		
	DCE_TCP_G		
	DCE_TCP_RTT		
	RATE_REDUCE_MONITOR_PERIOD		
	INITIAL_ALPHA_VALUE		
	MIN_TIME_BETWEEN_CNPS		
	CNP_802P_PRIO		
	CNP_DSCP		
NV_LLDP_NB_CONF	LLDP_NB_DCBX		0x10a
	LLDP_NB_RX_MODE		
	LLDP_NB_TX_MODE		
NV_LLDP_NB_DCBX	DCBX_IEEE		0x18e
	DCBX_CEE		
	DCBX_WILLING		
NV_KEEP_LINK_UP	KEEP_ETH_LINK_UP		0x190
	KEEP_IB_LINK_UP		
	KEEP_LINK_UP_ON_BOOT		
	KEEP_LINK_UP_ON_STANDBY		
NV_QOS_CONF	NUM_OF_VL		0x192
	NUM_OF_TC		
	NUM_OF_PFC		
NV_MPFS_CONF	DUP_MAC_ACTION		0x196
	SRIOV_IB_ROUTING_MODE		
	IB_ROUTING_MODE		

Configuration	mlxconfig Parameter Name	Class	TLV ID
NV_HCA_CONF	PCI_WR_ORDERING	HOST-FUNCTION (3)	0x112
	MULTI_PORT_VHCA_EN		
NV_EXTERNAL_PORT_CTRL	PORT_OWNER		0x192
	ALLOW_RD_COUNTERS		
	RENEG_ON_CHANGE		
	TRACER_ENABLE		
NV_ROM_BOOT_CONF2	IP_VER		0x195
	BOOT_UNDI_NETWORK_WAIT		
NV_ROM_UEFI_CONF	UEFI_HII_EN		0x196
NV_ROM_UEFI_DEBUG_LEVEL	BOOT_DBG_LOG		0x206
	UEFI_LOGS		
NV_ROM_BOOT_CONF1	BOOT_VLAN		0x221
	LEGACY_BOOT_PROTOCOL		
	BOOT_RETRY_CNT		
	BOOT_LACP_DIS		
	BOOT_VLAN_EN		
NV_ROM_IB_BOOT_CONF	BOOT_PKEY		0x222
NV_PCI_CONF	ADVANCED_PCI_SETTINGS	HOST (7)	0x80
SAFE_MODE_CONF	SAFE_MODE_THRESHOLD		0x82
	SAFE_MODE_ENABLE		

10 Release Notes History

10.1 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
20.39.5124	
General	This version does not include any changes to the firmware content of this adapter card. The version has been updated to align with the other adapter cards in the ConnectX family.

Feature/Change	Description
20.39.5050	
General	Stability improvements.

Feature/Change	Description
20.39.4098	
General	Stability improvements.

Feature/Change	Description
20.39.3560	
General	Stability improvements.

Feature/Change	Description
20.39.3004	
General	Stability improvements.

Feature/Change	Description
20.39.2048	
Bug Fixes	See Bug Fixes in this Firmware Version section.

Feature/Change	Description
20.39.1002	
MCTP over PCIe	Enabled Management Component Transport Protocol (MCTP) over PCIe.
Expansion ROM	Added a caching mechanism to improved expansion ROM performance and to avoid any slow boot occurrences when loading the expansion ROM driver.
Reserved mkey	Added new support for reserved mkey index range. When enabled, a range of mkey indexes is reserved for mkey by name use.
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Feature/Change	Description
20.38.1900	
QKEY Mitigation in the Kernel	QKEY creation with the MSB set is available now for non-privileged users as well. To allow non-privileged users to create QKEY with MSB set, the below new module parameter was added to ib_uverbs module: • Module Parameter: <code>enforce_qkey_check</code> • Description: Force QKEY MSB check for non-privileged user on UD QP creation • Default: 0 (disabled) Note: In this release, this module parameter is disabled by default to ensure backward compatibility and give customers the opportunity to update their applications accordingly. In the upcoming release, it will be enabled by default, and later on deprecated.

Feature/Change	Description
20.38.1002	
INT Packets	Added support for forwarding INT packets to the user application for monitoring purposes by matching the BTH acknowledge request bit (bth_a).
QKEY Mitigation in the Kernel	Non-privileged users are now blocked by default from setting controlled/privileged QKEYs (QKEY with MSB set).
Bug Fixes	See Bug Fixes in this Firmware Version section.

Feature/Change	Description
20.37.1014	
Monitoring Cloud Guest RoCE Statistics on Cloud Provider	This new capability enables the VM to track and limit its Vport's activity. This is done using the new q_counters counter which enables aggregation of other Vport's from PF GVMI.
Bug Fixes	See Bug Fixes in this Firmware Version section.

10.2 Bug Fixes History



This section includes history of bug fixes of 3 major releases back. For older releases history, please refer to the relevant firmware versions Release Notes in <https://docs.mellanox.com/category/adapterfw>.

Internal Ref.	Issue
4358171	Description: Fixed an issue where enabling DIM could lead to high IRQ/s in certain scenarios.
	Keywords: vDPA, DIM
	Discovered in Version: 20.39.4098
	Fixed in Release: 20.39.5050

Internal Ref.	Issue
4152704	Description: Fixed an issue that resulted in firmware assertion 0x889f with CQ reference counter underflow.
	Keywords: Firmware assertion 0x889f
	Discovered in Version: 20.39.3560
	Fixed in Release: 20.39.4098
4000741 / 3611679	Description: Fixed an issue that resulted in RX traffic halt upon a sudden failure on the host. In this case, the following log message is presented: <i>"DETACH_FROM_MCG(0x807) timeout. Will cause a leak of a command resource / wait_func_handle_exec_timeout:1064:(pid 123313): cmd4: 2ERR_QP(0x507) No done completion"</i> .
	Keywords: RX traffic
	Discovered in Version: 20.39.3560
	Fixed in Release: 20.39.4098
4149510	Description: Fixed an issue that resulted in setup crash when <code>create_sq</code> used invalid mbox. Now the invalid mbox is replaced with a valid DB.
	Keywords: mbox
	Discovered in Version: 20.39.3560
	Fixed in Release: 20.39.4098
4149393	Description: Added address validation in MLNX OEM CMD 0x0032 (get debug info) to be 4-bytes aligned.
	Keywords: Address validation, 0x0032
	Discovered in Version: 20.39.3560
	Fixed in Release: 20.39.4098
4148357	Description: Fixed the MPLS packets discards flow when the GLOBAL pause capability is disabled.
	Keywords: Global Pause
	Discovered in Version: 20.39.3560

Internal Ref.	Issue
	Fixed in Release: 20.39.4098

Internal Ref.	Issue
3887760	Description: Fixed an issue that caused Completion Timeout to mistakenly be treated as Advisory Non-Fatal error. Now Completion Timeout is treated as uncorrectable error.
	Keywords: Completion Timeout, Advisory Non-Fatal error
	Discovered in Version: 20.39.2048
	Fixed in Release: 20.39.3560

Internal Ref.	Issue
3669258	Description: Fixed a rare issue that prevented changes in mlxconfig from taking effect upon warm reboot.
	Keywords: mlxconfig
	Discovered in Version: 20.38.1900
	Fixed in Release: 20.39.2048
3668253	Description: Removed the unmapped module in the INI to prevent firmware assert due to invalid local port (0x7f unmapped).
	Keywords: INI, firmware assert
	Discovered in Version: 20.38.1900
	Fixed in Release: 20.39.2048

Internal Ref.	Issue
3376815	Description: Fixed an issue that caused Completion Timeout to mistakenly be treated as Advisory Non-Fatal error. Now Completion Timeout is treated as uncorrectable error.
	Keywords: Completion Timeout, Advisory Non-Fatal error
	Discovered in Version: 20.38.1002
	Fixed in Release: 20.39.1002
3605363	Description: Get Temperature OEM command now always returns a unified temperature.
	Keywords: Temperature
	Discovered in Version: 20.38.1002
	Fixed in Release: 20.39.1002

Internal Ref.	Issue
3365411	Description: Fixed a link failure that occurred due to a wrong 'is_inphi_cable' indication.
	Keywords: Link failure
	Discovered in Version: 20.37.1014
	Fixed in Release: 20.38.1002
3331179	Description: Improved token calculation.
	Keywords: Token calculation
	Discovered in Version: 20.37.1014
	Fixed in Release: 20.38.1002
3491841	Description: Fixed a firmware assert that occurred when tried to verify if the module supported "swap".
	Keywords: Firmware assert
	Discovered in Version: 20.37.1014
	Fixed in Release: 20.38.1002

Internal Ref.	Issue
3233061	Description: Updated the link maintenance flow to avoid high uncorrectable error rate.
	Keywords: Error rate
	Discovered in Version: 20.31.2354
	Fixed in Release: 20.37.1014

11 Legal Notices and 3rd Party Licenses

The following are the drivers' software, tools and HCA firmware legal notices and 3rd party licenses.

The following are the drivers' software, tools and HCA firmware legal notices and 3rd party licenses.

Product	Version	Legal Notices and 3rd Party Licenses
Firmware	xx.39.5172	• HCA Firmware EULA • 3rd Party Unify Notice • License
MLNX_OFED	23.10-7.1.8.0	• License • 3rd Part Notice
MFT FreeBSD	4.26.1-36	• 3rd Party Notice • License
MFT Linux		• 3rd Party Notice • License
MFT VMware		• 3rd Party Notice • License
MFT Windows		• 3rd Party Notice • License
msfflint		• 3rd Party Notice • License

Notice

This document is provided for information purposes only and shall not be regarded as a warranty of a certain functionality, condition, or quality of a product. Neither NVIDIA Corporation nor any of its direct or indirect subsidiaries and affiliates (collectively: "NVIDIA") make any representations or warranties, expressed or implied, as to the accuracy or completeness of the information contained in this document and assumes no responsibility for any errors contained herein. NVIDIA shall have no liability for the consequences or use of such information or for any infringement of patents or other rights of third parties that may result from its use. This document is not a commitment to develop, release, or deliver any Material (defined below), code, or functionality.

NVIDIA reserves the right to make corrections, modifications, enhancements, improvements, and any other changes to this document, at any time without notice. Customer should obtain the latest relevant information before placing orders and should verify that such information is current and complete.

NVIDIA products are sold subject to the NVIDIA standard terms and conditions of sale supplied at the time of order acknowledgement, unless otherwise agreed in an individual sales agreement signed by authorized representatives of NVIDIA and customer ("Terms of Sale"). NVIDIA hereby expressly objects to applying any customer general terms and conditions with regards to the purchase of the NVIDIA product referenced in this document. No contractual obligations are formed either directly or indirectly by this document.

NVIDIA products are not designed, authorized, or warranted to be suitable for use in medical, military, aircraft, space, or life support equipment, nor in applications where failure or malfunction of the NVIDIA product can reasonably be expected to result in personal injury, death, or property or environmental damage. NVIDIA accepts no liability for inclusion and/or use of NVIDIA products in such equipment or applications and therefore such inclusion and/or use is at customer's own risk.

NVIDIA makes no representation or warranty that products based on this document will be suitable for any specified use. Testing of all parameters of each product is not necessarily performed by NVIDIA. It is customer's sole responsibility to evaluate and determine the applicability of any information contained in this document, ensure the product is suitable and fit for the application planned by customer, and perform the necessary testing for the application in order to avoid a default of the application or the product. Weaknesses in customer's product designs may affect the quality and reliability of the NVIDIA product and may result in additional or different conditions and/or requirements beyond those contained in this document. NVIDIA accepts no liability related to any default, damage, costs, or problem which may be based on or attributable to: (i) the use of the NVIDIA product in any manner that is contrary to this document or (ii) customer product designs.

No license, either expressed or implied, is granted under any NVIDIA patent right, copyright, or other NVIDIA intellectual property right under this document. Information published by NVIDIA regarding third-party products or services does not constitute a license from NVIDIA to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property rights of the third party, or a license from NVIDIA under the patents or other intellectual property rights of NVIDIA.

Reproduction of information in this document is permissible only if approved in advance by NVIDIA in writing, reproduced without alteration and in full compliance with all applicable export laws and regulations, and accompanied by all associated conditions, limitations, and notices.

THIS DOCUMENT AND ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL NVIDIA BE LIABLE FOR ANY DAMAGES, INCLUDING WITHOUT LIMITATION ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF ANY USE OF THIS DOCUMENT, EVEN IF NVIDIA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Notwithstanding any damages that customer might incur for any reason whatsoever, NVIDIA's aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the Terms of Sale for the product.

Trademarks



NVIDIA, the NVIDIA logo, and Mellanox are trademarks and/or registered trademarks of NVIDIA Corporation and/or its affiliates in the U.S. and in other countries. Other company and product names may be trademarks of the respective companies with which they are associated.

Copyright

© 2026 NVIDIA Corporation & affiliates. All Rights Reserved.

