




NVIDIA BlueField-2 DPU Firmware Release Notes v24.35.3502 LTS

Table of Contents

1	Release Notes Update History.....	4
2	Overview	5
2.1	Firmware Download	5
2.2	Document Revision History	5
3	Firmware Compatible Products	6
3.1	Supported Devices	6
3.1.1	Validated and Supported 100GbE Cables	10
3.1.2	Validated and Supported 56GbE Cables	14
3.1.3	Validated and Supported 40GbE Cables	15
3.1.4	Validated and Supported 25GbE Cables	17
3.1.5	Validated and Supported 10GbE Cables	18
3.1.6	Validated and Supported 1GbE Cables.....	19
3.1.7	Validated and Supported HDR Cables.....	20
3.1.8	Validated and Supported EDR Cables	20
3.1.9	Validated and Supported FDR Cables	21
3.1.10	Validated and Supported QDR Cables.....	23
4	Changes and New Features.....	24
4.1	Changes and New Feature in this Firmware Version.....	24
5	Bug Fixes in this Firmware Version.....	25
6	Known Issues.....	26
7	PreBoot Drivers (FlexBoot/UEFI)	29
7.1	FlexBoot Changes and New Features	29
7.2	UEFI Changes and Major New Features.....	29
8	Release Notes History	30
8.1	Changes and New Feature History	30
8.2	Bug Fixes History.....	34
9	Legal Notices and 3rd Party Licenses	38

 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.

1 Release Notes Update History

Revision	Date	Description
24.35.3502	December 31, 2022	Initial release of this Release Notes version, This version introduces Bug Fixes .

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.

NVIDIA BlueField-2 DPU provides innovative acceleration, security, and efficiency in every host. BlueField-2 data center infrastructure combines the power of the NVIDIA ConnectX®-6 Dx with programmable Arm® cores and hardware offloads for software-defined storage, networking, security, and management workloads.

NVIDIA BlueField-2 also delivers superior performance, security, and reduced TCO for cloud computing platforms, enabling organizations to efficiently build and operate virtualized, containerized, and bare-metal infrastructures at massive scale.

2.1 Firmware Download

Please visit [Firmware Downloads](#).

2.2 Document Revision History

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

3 Firmware Compatible Products

These are the release notes for the NVIDIA® BlueField-2 SmartNICs firmware. This firmware supports the following protocols:

- InfiniBand - 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.

3.1 Supported Devices

NVIDIA SKU	Legacy OPN	PSID	Description
P1004/699210040230	N/A	NVD0000000015	BlueField-2 A30X; P1004 SKU 205; Generic; GA100; 24GB HBM2e; PCIe passive Dual Slot 230W GEN4; DPU Crypto ON W/ Bkt; 1 Dongle; Black; HF; VCPD
900-9D219-0086-ST1	MBF2M516A-CECOT	MT_0000000375	BlueField-2 E-Series DPU 100GbE Dual-Port QSFP56; PCIe Gen4 x16; Crypto and Secure Boot Enabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D219-0086-ST0	MBF2M516A-EECOT	MT_0000000376	BlueField-2 E-Series DPU 100GbE/EDR/HDR100 VPI Dual-Port QSFP56; PCIe Gen4 x16; Crypto and Secure Boot Enabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D219-0056-ST1	MBF2M516A-EENOT	MT_0000000377	BlueField-2 E-Series DPU 100GbE/EDR/HDR100 VPI Dual-Port QSFP56; PCIe Gen4 x16; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D206-0053-SQ0	MBF2H332A-AENOT	MT_0000000539	BlueField-2 P-Series DPU 25GbE Dual-Port SFP56; PCIe Gen4 x8; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; HHHL
900-9D206-0063-ST2	MBF2H332A-AEEOT	MT_0000000540	BlueField-2 P-Series DPU 25GbE Dual-Port SFP56; PCIe Gen4 x8; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; HHHL
900-9D206-0083-ST3	MBF2H332A-AECOT	MT_0000000541	BlueField-2 P-Series DPU 25GbE Dual-Port SFP56; PCIe Gen4 x8; Crypto and Secure Boot Enabled; 16GB on-board DDR; 1GbE OOB management; HHHL
900-9D219-0066-ST0	MBF2M516A-EEEOT	MT_0000000559	BlueField-2 E-Series DPU 100GbE/EDR/HDR100 VPI Dual-Port QSFP56; PCIe Gen4 x16; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; FHHL

NVIDIA SKU	Legacy OPN	PSID	Description
900-9D219-0056-SN1	MBF2M516A-CENOT	MT_0000000560	BlueField-2 E-Series DPU 100GbE Dual-Port QSFP56; PCIe Gen4 x16; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D219-0066-ST2	MBF2M516A-CEEOT	MT_0000000561	BlueField-2 E-Series DPU 100GbE Dual-Port QSFP56; PCIe Gen4 x16; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D219-0006-ST0	MBF2H516A-CEEOT	MT_0000000702	BlueField-2 DPU 100GbE Dual-Port QSFP56; PCIe Gen4 x16; Crypto; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D219-0056-ST2	MBF2H516A-CENOT	MT_0000000703	BlueField-2 DPU 100GbE Dual-Port QSFP56; PCIe Gen4 x16; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D219-0066-ST3	MBF2H516A-EEEOT	MT_0000000704	BlueField-2 DPU 100GbE/EDR/HDR100 VPI Dual-Port QSFP56; PCIe Gen4 x16; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D219-0056-SQ0	MBF2H516A-EENOT	MT_0000000705	BlueField-2 DPU 100GbE/EDR/HDR100 VPI Dual-Port QSFP56; PCIe Gen4 x16; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D250-0038-ST1	MBF2M345A-HESOT	MT_0000000715	BlueField-2 E-Series DPU; 200GbE/HDR single-port QSFP56; PCIe Gen4 x16; Secure Boot Enabled; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; HHHH
900-9D250-0048-ST1	MBF2M345A-HECOT	MT_0000000716	BlueField-2 E-Series DPU; 200GbE/HDR single-port QSFP56; PCIe Gen4 x16; Secure Boot Enabled; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; HHHH
900-9D218-0073-ST1	MBF2H512C-AESOT	MT_0000000723	BlueField-2 P-Series DPU 25GbE Dual-Port SFP56; integrated BMC; PCIe Gen4 x8; Secure Boot Enabled; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D218-0083-ST2	MBF2H512C-AECOT	MT_0000000724	BlueField-2 P-Series DPU 25GbE Dual-Port SFP56; integrated BMC; PCIe Gen4 x8; Secure Boot Enabled; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; FHHL
900-9D208-0086-ST4	MBF2M516C-EECOT	MT_0000000728	BlueField-2 E-Series DPU 100GbE/EDR/HDR100 VPI Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; Tall Bracket; FHHL

NVIDIA SKU	Legacy OPN	PSID	Description
900-9D208-0086-SQ0	MBF2H516C-CECOT	MT_0000000729	BlueField-2 P-Series DPU 100GbE Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; Tall Bracket; FHHL
900-9D208-0076-ST5	MBF2M516C-CESOT	MT_0000000731	BlueField-2 E-Series DPU 100GbE Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; Tall Bracket; FHHL
900-9D208-0076-ST6	MBF2M516C-EESOT	MT_0000000732	BlueField-2 E-Series DPU 100GbE/EDR/HDR100 VPI Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; Tall Bracket; FHHL
900-9D208-0086-ST3	MBF2M516C-CECOT	MT_0000000733	BlueField-2 E-Series DPU 100GbE Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Enabled; 16GB on-board DDR; 1GbE OOB management; Tall Bracket; FHHL
900-9D208-0076-ST2	MBF2H516C-EESOT	MT_0000000737	BlueField-2 P-Series DPU 100GbE/EDR/HDR100 VPI Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; Tall Bracket; FHHL
900-9D208-0076-ST1	MBF2H516C-CESOT	MT_0000000738	BlueField-2 P-Series DPU 100GbE Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management; Tall Bracket; FHHL
900-9D218-0083-ST4	MBF2H532C-AECOT	MT_0000000765	BlueField-2 P-Series DPU 25GbE Dual-Port SFP56; integrated BMC; PCIe Gen4 x8; Secure Boot Enabled; Crypto Enabled; 32GB on-board DDR; 1GbE OOB management; FHHL
900-9D218-0073-ST0	MBF2H532C-AESOT	MT_0000000766	BlueField-2 P-Series DPU 25GbE Dual-Port SFP56; integrated BMC; PCIe Gen4 x8; Secure Boot Enabled; Crypto Disabled; 32GB on-board DDR; 1GbE OOB management; FHHL
900-9D208-0076-ST3	MBF2H536C-CESOT	MT_0000000767	BlueField-2 P-Series DPU 100GbE Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Disabled; 32GB on-board DDR; 1GbE OOB management; FHHL
900-9D208-0086-ST2	MBF2H536C-CECOT	MT_0000000768	BlueField-2 P-Series DPU 100GbE Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled; Crypto Enabled; 32GB on-board DDR; 1GbE OOB management; FHHL

NVIDIA SKU	Legacy OPN	PSID	Description
900-9D250-0048-ST0	MBF2M355A-VECOT	MT_0000000786	BlueField-2 E-Series DPU; 200GbE single-port QSFP56; PCIe Gen4 x16; Secure Boot Enabled; Crypto Enabled; 32GB on-board DDR; 1GbE OOB management
900-9D250-0038-ST3	MBF2M355A-VESOT	MT_0000000787	BlueField-2 E-Series DPU; 200GbE single-port QSFP56; PCIe Gen4 x16; Secure Boot Enabled; Crypto Disabled; 32GB on-board DDR; 1GbE OOB management
900-9D218-0073-ST4	MBF2H512C-AEUOT	MT_0000000972	BlueField-2 P-Series DPU 25GbE Dual-Port SFP56; integrated BMC; PCIe Gen4 x8; Secure Boot Enabled with UEFI disabled; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management
900-9D208-0076-STA	MBF2H516C-CEUOT	MT_0000000973	BlueField-2 P-Series DPU 100GbE Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled with UEFI disabled; Crypto Disabled; 16GB on-board DDR; 1GbE OOB management
900-9D208-0076-STB	MBF2H536C-CEUOT	MT_0000001008	BlueField®-2 P-Series DPU 100GbE Dual-Port QSFP56; integrated BMC; PCIe Gen4 x16; Secure Boot Enabled with UEFI Disabled; Crypto Disabled; 32GB on-board DDR; 1GbE OOB management; Tall Bracket; FHHL



Please be aware that not all firmware binaries contain FlexBoot or UEFI, support may vary between cards.

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
NVIDIA BlueField-2 Firmware	24.35.3502 / 24.35.3006 / 24.35.2000
BlueField DPU OS Software	3.9.7
MLNX_OFED	5.8-4.0.8.0 / 5.8-3.0.7.0 / 5.8-2.0.3.0 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.
MLNX_EN (MLNX_OFED based code)	5.8-4.0.8.0 / 5.8-3.0.7.0 / 5.8-2.0.3.0 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.
WinOF-2	3.10.52010 / 3.10.51000 / 3.10.50000 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.

	Supported Version
MFT	4.22.1-406 / 4.22.1-307 / 4.22.1 Note: For the list of the supported Operating Systems, please refer to the driver's Release Notes.
FlexBoot	3.6.902 Note: Please be aware that not all firmware binaries contain FlexBoot or UEFI, support may vary between cards.
UEFI	14.29.15 Note: Please be aware that not all firmware binaries contain FlexBoot or UEFI, support may vary between cards.
MLNX-OS	3.10.5002 onwards
Cumulus	5.4 onwards
NVIDIA Quantum-2 Firmware	31.2010.5108 onwards
NVIDIA Quantum Firmware	27.2010.5108 onwards

Validated and Supported Cables and Modules

3.1.1 Validated and Supported 100GbE Cables

Speed	Part Number	Marketing Description
100GbE	MCP1600-C001	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 1m 30AWG
100GbE	MCP1600-C001E30N	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 1m, black, 30AWG, CA-N
100GbE	MCP1600-C001LZ	NVIDIA passive copper Cable, ETH 100GbE, 100Gb/s, QSFP, 1m, LSZH, 30AWG
100GbE	MCP1600-C002	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 2m 30AWG
100GbE	MCP1600-C002E30N	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 2m, black, 30AWG, CA-N
100GbE	MCP1600-C003	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 3m 28AWG
100GbE	MCP1600-C003E26N	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 3m, black, 26AWG, CA-N
100GbE	MCP1600-C003E30L	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 3m, black, 30AWG, CA-L
100GbE	MCP1600-C003LZ	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, 3m, LSZH, 26AWG
100GbE	MCP1600-C005AM	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, 5m, 26AWG
100GbE	MCP1600-C005E26L	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 5m, black, 26AWG, CA-L

Speed	Part Number	Marketing Description
100GbE	MCP1600-C00A	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 0.5m 30AWG
100GbE	MCP1600-C00AE30N	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 0.5m, black, 30AWG, CA-N
100GbE	MCP1600-C00BE30N	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 0.75m, black, 30AWG, CA-N
100GbE	MCP1600-C01A	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 1.5m 30AWG
100GbE	MCP1600-C01AE30N	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 1.5m, black, 30AWG, CA-N
100GbE	MCP1600-C02A	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 2.5m 30AWG
100GbE	MCP1600-C02AE26N	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 2.5m, black, 26AWG, CA-N
100GbE	MCP1600-C02AE30L	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP28, 2.5m, black, 30AWG, CA-L
100GbE	MCP1600-C03A	NVIDIA passive copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 3.5m 26AWG
100GbE	MCP1600-E001	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1m 30AWG
100GbE	MCP1600-E002	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2m 28AWG
100GbE	MCP1600-E003	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 3m 26AWG
100GbE	MCP1600-E01A	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1.5m 30AWG
100GbE	MCP1600-E02A	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2.5m 26AWG
100GbE	MCP7F00-A001R	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pull-tabs, 1m, 30AWG
100GbE	MCP7F00-A001R30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 1m, colored, 30AWG, CA-N
100GbE	MCP7F00-A002R	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pull-tabs, 2m, 30AWG
100GbE	MCP7F00-A002R30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2m, colored, 30AWG, CA-N
100GbE	MCP7F00-A003R26N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m, colored, 26AWG, CA-N
100GbE	MCP7F00-A003R30L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m, colored, 30AWG, CA-L

Speed	Part Number	Marketing Description
100GbE	MCP7F00-A005R26L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 5m, colored, 26AWG, CA-L
100GbE	MCP7F00-A01AR	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pull-tabs, 1.5m, 30AWG
100GbE	MCP7F00-A01AR30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 1.5m, colored, 30AWG, CA-N
100GbE	MCP7F00-A02AR26N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, colored, 26AWG, CA-N
100GbE	MCP7F00-A02AR30L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, colored, 30AWG, CA-L
100GbE	MCP7F00-A02ARLZ	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, LSZH, colored, 28AWG
100GbE	MCP7F00-A03AR26L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3.5m, colored, 26AWG, CA-L
100GbE	MCP7H00-G001	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1m, 30AWG
100GbE	MCP7H00-G001R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pull-tabs, 1m, 30AWG
100GbE	MCP7H00-G001R30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1m, colored, 30AWG, CA-N
100GbE	MCP7H00-G002R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pull-tabs, 2m, 30AWG
100GbE	MCP7H00-G002R30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2m, colored, 30AWG, CA-N
100GbE	MCP7H00-G003R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pull-tabs, 3m, 28AWG
100GbE	MCP7H00-G003R26N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 3m, colored, 26AWG, CA-N
100GbE	MCP7H00-G003R30L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 3m, colored, 30AWG, CA-L
100GbE	MCP7H00-G004R26L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 4m, colored, 26AWG, CA-L

Speed	Part Number	Marketing Description
100GbE	MCP7H00-G01AR	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pull-tabs, 1.5m, 30AWG
100GbE	MCP7H00-G01AR30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1.5m, colored, 30AWG, CA-N
100GbE	MCP7H00-G02AR	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pull-tabs, 2.5m, 30AWG
100GbE	MCP7H00-G02AR26N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2.5m, colored, 26AWG, CA-N
100GbE	MCP7H00-G02AR30L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2.5m, colored, 30AWG, CA-L
100GbE	MFA1A00-C003	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 3m
100GbE	MFA1A00-C005	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 5m
100GbE	MFA1A00-C010	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 10m
100GbE	MFA1A00-C015	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 15m
100GbE	MFA1A00-C020	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 20m
100GbE	MFA1A00-C030	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 30m
100GbE	MFA1A00-C050	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 50m
100GbE	MFA1A00-C100	NVIDIA active fiber cable, ETH 100GbE, 100Gb/s, QSFP, LSZH, 100m
100GbE	MFA7A20-C003	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 3m
100GbE	MFA7A20-C005	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 5m
100GbE	MFA7A20-C010	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 10m
100GbE	MFA7A20-C020	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 20m
100GbE	MFA7A50-C003	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m
100GbE	MFA7A50-C005	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 5m
100GbE	MFA7A50-C010	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 10m

Speed	Part Number	Marketing Description
100GbE	MFA7A50-C015	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 15m
100GbE	MFA7A50-C020	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 20m
100GbE	MFA7A50-C030	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 30m
100GbE	MMA1B00-C100D	NVIDIA transceiver, 100GbE, QSFP28, MPO, 850nm, SR4, up to 100m, DDMI
100GbE	MMA1B00-C100D_FF	NVIDIA transceiver, 100GbE, QSFP28, MPO, 850nm, SR4, up to 100m, DDMI
100GbE	MMA1L10-CR	NVIDIA optical transceiver, 100GbE, 100Gb/s, QSFP28, LC-LC, 1310nm, LR4 up to 10km
100GbE	MMA1L30-CM	NVIDIA optical module, 100GbE, 100Gb/s, QSFP28, LC-LC, 1310nm, CWDM4, up to 2km
100GbE	MMS1C10-CM	NVIDIA active optical module, 100Gb/s, QSFP, MPO, 1310nm, PSM4, up to 500m

3.1.2 Validated and Supported 56GbE Cables

Speed	Part Number	Marketing Description
56GbE	MC2207126-004	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 4m
56GbE	MC2207128-003	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 3m
56GbE	MC2207128-0A2	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2.5m
56GbE	MC2207130-001	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1m
56GbE	MC2207130-002	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2m
56GbE	MC2207130-00A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 0.5m
56GbE	MC2207130-0A1	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1.5m
56GbE	MC220731V-003	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 3m
56GbE	MC220731V-005	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 5m
56GbE	MC220731V-010	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 10m
56GbE	MC220731V-015	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 15m
56GbE	MC220731V-020	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 20m

Speed	Part Number	Marketing Description
56GbE	MC220731V-025	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 25m
56GbE	MC220731V-030	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 30m
56GbE	MC220731V-040	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 40m
56GbE	MC220731V-050	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 50m
56GbE	MC220731V-075	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 75m
56GbE	MC220731V-100	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 100m
56GbE	MCP1700-F001C	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1m, Red pull-tab
56GbE	MCP1700-F001D	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1m, Yellow pull-tab
56GbE	MCP1700-F002C	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2m, Red pull-tab
56GbE	MCP1700-F002D	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2m, Yellow pull-tab
56GbE	MCP1700-F003C	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 3m, Red pull-tab
56GbE	MCP1700-F003D	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 3m, Yellow pull-tab
56GbE	MCP170L-F001	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 1m
56GbE	MCP170L-F002	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 2m
56GbE	MCP170L-F003	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 3m
56GbE	MCP170L-F00A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 0.5m
56GbE	MCP170L-F01A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 1.5m

3.1.3 Validated and Supported 40GbE Cables

Speed	Part Number	Marketing Description
40GbE	MC2206128-004	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 4m
40GbE	MC2206128-005	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 5m
40GbE	MC2206130-001	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 1m

Speed	Part Number	Marketing Description
40GbE	MC2206130-002	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 2m
40GbE	MC2206130-003	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 3m
40GbE	MC2206130-00A	NVIDIA passive copper cable, VPI, up to 40Gb/s, QSFP, 0.5m
40GbE	MC2210126-004	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 4m
40GbE	MC2210126-005	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 5m
40GbE	MC2210128-003	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 3m
40GbE	MC2210130-001	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 1m
40GbE	MC2210130-002	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 2m
40GbE	MC2210310-003	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 3m
40GbE	MC2210310-005	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 5m
40GbE	MC2210310-010	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 10m
40GbE	MC2210310-015	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 15m
40GbE	MC2210310-020	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 20m
40GbE	MC2210310-030	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 30m
40GbE	MC2210310-050	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 50m
40GbE	MC2210310-100	NVIDIA active fiber cable, ETH 40GbE, 40Gb/s, QSFP, 100m
40GbE	MC2210411-SR4E	NVIDIA optical module, 40Gb/s, QSFP, MPO, 850nm, up to 300m
40GbE	MC2609125-005	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 5m
40GbE	MC2609130-001	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 1m
40GbE	MC2609130-003	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 3m
40GbE	MCP1700-B001E	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 1m, black pull-tab
40GbE	MCP1700-B002E	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 2m, black pull-tab
40GbE	MCP1700-B003E	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 3m, black pull-tab

Speed	Part Number	Marketing Description
40GbE	MCP1700-B01AE	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 1.5m, black pull-tab
40GbE	MCP1700-B02AE	NVIDIA passive copper cable, ETH 40GbE, 40Gb/s, QSFP, 2.5m, black pull-tab
40GbE	MCP7900-X01AA	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 1.5m, blue pull-tab, customized label
40GbE	MCP7904-X002A	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 2m, black pull-tab, customized label
40GbE	MCP7904-X003A	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 3m, black pull-tab, customized label
40GbE	MCP7904-X01AA	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 1.5m, black pull-tab, customized label
40GbE	MCP7904-X02AA	NVIDIA passive copper hybrid cable, ETH 40GbE to 4x10GbE, QSFP to 4xSFP+, 2.5m, black pull-tab, customized label
40GbE	MMA1B00-B150D	NVIDIA transceiver, 40GbE, QSFP+, MPO, 850nm, SR4, up to 150m, DDMI

3.1.4 Validated and Supported 25GbE Cables

Speed	Part Number	Marketing Description
25GbE	MAM1Q00A-QSA28	NVIDIA cable module, ETH 25GbE, 100Gb/s to 25Gb/s, QSFP28 to SFP28
25GbE	MCP2M00-A001	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 1m, 30AWG
25GbE	MCP2M00-A001E30N	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 1m, black, 30AWG, CA-N
25GbE	MCP2M00-A002	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 2m, 30AWG
25GbE	MCP2M00-A002E30N	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 2m, black, 30AWG, CA-N
25GbE	MCP2M00-A003E26N	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 3m, black, 26AWG, CA-N
25GbE	MCP2M00-A003E30L	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 3m, black, 30AWG, CA-L
25GbE	MCP2M00-A004E26L	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 4m, black, 26AWG, CA-L
25GbE	MCP2M00-A005E26L	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 5m, black, 26AWG, CA-L
25GbE	MCP2M00-A00A	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 0.5m, 30AWG

Speed	Part Number	Marketing Description
25GbE	MCP2M00-A00AE30N	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 0.5m, black, 30AWG, CA-N
25GbE	MCP2M00-A01AE30N	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 1.5m, black, 30AWG, CA-N
25GbE	MCP2M00-A02AE26N	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 2.5m, black, 26AWG, CA-N
25GbE	MCP2M00-A02AE30L	NVIDIA passive copper cable, ETH, up to 25Gb/s, SFP28, 2.5m, black, 30AWG, CA-L
25GbE	MFA2P10-A003	NVIDIA active optical cable 25GbE, SFP28, 3m
25GbE	MFA2P10-A005	NVIDIA active optical cable 25GbE, SFP28, 5m
25GbE	MFA2P10-A007	NVIDIA active optical cable 25GbE, SFP28, 7m
25GbE	MFA2P10-A010	NVIDIA active optical cable 25GbE, SFP28, 10m
25GbE	MFA2P10-A015	NVIDIA active optical cable 25GbE, SFP28, 15m
25GbE	MFA2P10-A020	NVIDIA active optical cable 25GbE, SFP28, 20m
25GbE	MFA2P10-A030	NVIDIA active optical cable 25GbE, SFP28, 30m
25GbE	MFA2P10-A050	NVIDIA active optical cable 25GbE, SFP28, 50m
25GbE	MMA2P00-AS	NVIDIA transceiver, 25GbE, SFP28, LC-LC, 850nm, SR, up to 150m

3.1.5 Validated and Supported 10GbE Cables

Speed	Part Number	Marketing Description
10GbE	MAM1Q00A-QSA	NVIDIA cable module, ETH 10GbE, 40Gb/s to 10Gb/s, QSFP to SFP+
10GbE	MC2309124-005	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 5m
10GbE	MC2309124-007	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 7m
10GbE	MC2309130-001	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 1m
10GbE	MC2309130-002	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 2m
10GbE	MC2309130-003	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 3m
10GbE	MC2309130-00A	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 0.5m
10GbE	MC3309124-004	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 4m
10GbE	MC3309124-005	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 5m
10GbE	MC3309124-006	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 6m

Speed	Part Number	Marketing Description
10GbE	MC3309124-007	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 7m
10GbE	MC3309130-001	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m
10GbE	MC3309130-002	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m
10GbE	MC3309130-003	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m
10GbE	MC3309130-00A	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 0.5m
10GbE	MC3309130-0A1	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m
10GbE	MC3309130-0A2	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m
10GbE	MCP2100-X001B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m, blue pull-tab, connector label
10GbE	MCP2100-X002B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m, blue pull-tab, connector label
10GbE	MCP2100-X003B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m, blue pull-tab, connector label
10GbE	MCP2101-X001B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m, Green pull-tab, connector label
10GbE	MCP2104-X001B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m, black pull-tab, connector label
10GbE	MCP2104-X002B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m, black pull-tab, connector label
10GbE	MCP2104-X003B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m, black pull-tab, connector label
10GbE	MCP2104-X01AB	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m, black pull-tab, connector label
10GbE	MCP2104-X02AB	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m, black pull-tab, connector label
N/A	MFM1T02A-LR	NVIDIA SFP+ optical module for 10GBASE-LR
N/A	MFM1T02A-SR	NVIDIA SFP+ optical module for 10GBASE-SR

3.1.6 Validated and Supported 1GbE Cables

Speed	Part Number	Marketing Description
1GbE	MC3208011-SX	NVIDIA optical module, ETH 1GbE, 1Gb/s, SFP, LC-LC, SX 850nm, up to 500m
1GbE	MC3208411-T	NVIDIA module, ETH 1GbE, 1Gb/s, SFP, Base-T, up to 100m

3.1.7 Validated and Supported HDR Cables

Speed	Part Number	Marketing Description
HDR	MCP7H50-H001R30	NVIDIA passive copper hybrid cable, IB HDR 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, colored, 1m, 30AWG
HDR	MCP7H50-H002R26	NVIDIA passive copper hybrid cable, IB HDR 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, colored, 2m, 26AWG
HDR	MCP7H50-H01AR30	NVIDIA passive copper hybrid cable, IB HDR 200Gb/s to 2x100Gb/s, QSFP56 to 2xQSFP56, LSZH, colored, 1.5m, 30AWG

3.1.8 Validated and Supported EDR Cables

Speed	Part Number	Marketing Description
EDR	MCP1600-E001	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1m 30AWG
EDR	MCP1600-E001E30	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 1m, black, 30AWG
EDR	MCP1600-E002	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2m 28AWG
EDR	MCP1600-E002E30	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 2m, black, 30AWG
EDR	MCP1600-E003	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 3m 26AWG
EDR	MCP1600-E003E26	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 3m, black, 26AWG
EDR	MCP1600-E004E26	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 4m, black, 26AWG
EDR	MCP1600-E005E26	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 5m, black, 26AWG
EDR	MCP1600-E00A	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 0.5m 30AWG
EDR	MCP1600-E00AE30	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 0.5m, black, 30AWG
EDR	MCP1600-E00BE30	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 0.75m, black, 30AWG
EDR	MCP1600-E01A	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1.5m 30AWG
EDR	MCP1600-E01AE30	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 1.5m, black, 30AWG
EDR	MCP1600-E01BE30	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 1.25m, black, 30AWG

Speed	Part Number	Marketing Description
EDR	MCP1600-E02A	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2.5m 26AWG
EDR	MCP1600-E02AE26	NVIDIA passive copper cable, IB EDR, up to 100Gb/s, QSFP28, 2.5m, black, 26AWG
EDR	MFA1A00-E001	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1m
EDR	MFA1A00-E003	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 3m
EDR	MFA1A00-E005	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 5m
EDR	MFA1A00-E010	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 10m
EDR	MFA1A00-E010_FF	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 10m
EDR	MFA1A00-E015	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 15m
EDR	MFA1A00-E020	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 20m
EDR	MFA1A00-E030	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 30m
EDR	MFA1A00-E050	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 50m
EDR	MFA1A00-E100	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 100m
EDR	MMA1B00-E100	NVIDIA transceiver, IB EDR, up to 100Gb/s, QSFP28, MPO, 850nm, SR4, up to 100m

3.1.9 Validated and Supported FDR Cables

Speed	Part Number	Marketing Description
FDR	MC2207126-004	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 4m
FDR	MC2207128-003	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 3m
FDR	MC2207128-0A2	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2.5m
FDR	MC2207130-001	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1m
FDR	MC2207130-002	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2m
FDR	MC2207130-00A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 0.5m
FDR	MC2207130-0A1	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1.5m

Speed	Part Number	Marketing Description
FDR	MC220731V-003	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 3m
FDR	MC220731V-005	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 5m
FDR	MC220731V-010	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 10m
FDR	MC220731V-015	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 15m
FDR	MC220731V-020	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 20m
FDR	MC220731V-025	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 25m
FDR	MC220731V-030	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 30m
FDR	MC220731V-040	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 40m
FDR	MC220731V-050	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 50m
FDR	MC220731V-075	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 75m
FDR	MC220731V-100	NVIDIA active fiber cable, VPI, up to 56Gb/s, QSFP, 100m
FDR	MCP1700-F001C	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1m, Red pull-tab
FDR	MCP1700-F001D	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 1m, Yellow pull-tab
FDR	MCP1700-F002C	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2m, Red pull-tab
FDR	MCP1700-F002D	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 2m, Yellow pull-tab
FDR	MCP1700-F003C	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 3m, Red pull-tab
FDR	MCP1700-F003D	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, 3m, Yellow pull-tab
FDR	MCP170L-F001	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 1m
FDR	MCP170L-F002	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 2m
FDR	MCP170L-F003	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 3m
FDR	MCP170L-F00A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 0.5m
FDR	MCP170L-F01A	NVIDIA passive copper cable, VPI, up to 56Gb/s, QSFP, LSZH, 1.5m

3.1.10 Validated and Supported QDR Cables

Speed	Part Number	Marketing Description
QDR	MC2206125-007	NVIDIA passive copper cable, IB QDR, 40Gb/s, QSFP,7m

4 Changes and New Features

4.1 Changes and New Feature in this Firmware Version

Feature/Change	Description
24.35.3502	
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

5 Bug Fixes in this Firmware Version

For bug fixes prior to version 24.33.1048, please refer to the [NVIDIA BlueField-2 DPU documentation](#).

Internal Ref.	Issue
3670349	Description: Fixed an issue that prevented the Power Controller Control bit in the Slot Control register from returning to default when forcing the Unplug sequence.
	Keywords: Power Controller Control
	Discovered in Version: 24.35.2000
	Fixed in Release: 24.35.3502
3670324	Description: Fixed an assert with ext_synd as 0x8ce5 during a power cycle process for a virtio case on the customized server with an independent power supply.
	Keywords: virtio, assert
	Discovered in Version: 24.35.2000
	Fixed in Release: 24.35.3502

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
<ul style="list-style-type: none"> • 127 VF per PF (254 functions) • 512 PF+VF+SF per PF (1024 functions) 	<ul style="list-style-type: none"> • 127 VF (127 functions) • 512 PF+VF+SF per PF (512 functions)

For known issues prior to version

24.33.1048

, please refer to the NVIDIA BlueField-2 DPU [documentation](#).

Internal Ref.	Issue
3525865	Description: Unexpected system behavior might be observed if the driver is loaded while reset is in progress.
	Workaround: N/A
	Keywords: Sync 1 reset, firmware reset
	Discovered in Version: 24.35.3006
3512352	Description: Firmware reset sync 1 is currently not working properly. Occasionally, running it does not reset to the device.
	Workaround: N/A
	Keywords: Firmware reset sync 1
	Discovered in Version: 24.35.3006
3267506	Description: CRC is included in the traffic byte counters as a port byte counter.
	Workaround: N/A
	Keywords: Counters, CRC
	Discovered in Version: 24.35.2000

Internal Ref.	Issue
3147454	<p>Description: Multi PF is not supported in NVIDIA BlueField-2 Multi-Host environments. Setting 4 PFs (mlxconfig NUM_OF_PF-4) on a Multi-Host environment may trigger firmware asserts and the ARcatVerM may hang.</p> <p>Workaround: N/A</p> <p>Keywords: Multi PF</p> <p>Discovered in Version: 24.34.1002</p>
2169950	<p>Description: When decapsulation on a packet occurs, the FCS indication is not calculated correctly.</p> <p>Workaround: N/A</p> <p>Keywords: FCS</p> <p>Discovered in Version: 24.34.1002</p>
3141072	<p>Description: The "max_shaper_rate" configuration query via QEEC mlxreg returns a value translated to hardware granularity.</p> <p>Workaround: N/A</p> <p>Keywords: RX Rate-Limiter, Multi-host</p> <p>Discovered in Version: 24.34.1002</p>
3106146	<p>Description: Live migration of MPV affiliated function pair is not supported when port numbers are changed. Each function should stay on the same port number as before migration.</p> <p>Workaround: N/A</p> <p>Keywords: MPV live migration</p> <p>Discovered in Version: 24.34.1002</p>
2870970	<p>Description: GTP encapsulation (flex parser profile 3) is limited to the NIC domain. Encapsulating in the FDB domain will render a 0-size length in GTP header.</p> <p>Workaround: N/A</p> <p>Keywords: GTP encapsulation</p> <p>Discovered in Version: 24.34.1002</p>
2661049	<p>Description: Asynchronous reboot of Arm while the RSHIM driver is active may cause Poisoned Completion to return and consequently cause a host crash.</p> <p>Workaround: N/A</p> <p>Keywords: RSHIM driver</p> <p>Discovered in Version: 24.33.1048</p>
2899026 / 2853408	<p>Description: Some pre-OS environments may fail when sensing a hot plug operation during their boot stage.</p> <p>Workaround: N/A</p> <p>Keywords: BIOS; Hot plug; Virtio-net</p> <p>Discovered in Version: 24.33.1048</p>

Internal Ref.	Issue
2870213	Description: Servers do not recover after configuring <code>PCI_SWITCH_EMULATION_NUM_PORT</code> to 32 followed by power cycle.
	Workaround: N/A
	Keywords: VirtIO-net; power cycle
	Discovered in Version: 24.33.1048
2855592	Description: When working with 3rd party device (e.g., Paragon) in 25GbE speed, the 25GbE speed must be configured in force mode.
	Workaround: N/A
	Keywords: Force mode, 3rd party devices, 25GbE
	Discovered in Version: 24.33.1048
2850003	Description: Occasionally, when rising a logical link, the link recovery counter is increase by 1.
	Workaround: N/A
	Keywords: Link recovery counter
	Discovered in Version: 24.33.1048
2616755	Description: Forward action for IPoIB is not supported on RX RDMA Flow Table.
	Workaround: N/A
	Keywords: Steering, IPoIB
	Discovered in Version: 24.33.1048

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 Release Notes History

8.1 Changes and New Feature History

Feature/Change	Description
24.35.3006	
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Feature/Change	Description
24.35.2000	
PCC Algorithm	Enables the users to collect more information from NP to RP for PCC algorithm. To achieve this, the NP ingress bytes information was added to the RTT response packet sent from the NP side.
HPCC: Support per-IP and per-QP methods	Enables the user to configure the PCC algorithm shaper coalescing mode using nvconfig to select CC algorithm shaper coalescing for IB and ROCE. The new parameters are <code>IB_CC_SHAPER_COALESCE</code> and <code>ROCE_CC_SHAPER_COALESCE</code> .
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Feature/Change	Description
24.35.1012	
HPCC, Programmable Congestion Control	HPCC related configurations in is now supported via the mlxconfig utility.
UDP	Added support for copy modify header steering action to/from the UDP field.
Resource Dump	Added the following resource dump segments: <ul style="list-style-type: none"> • <code>SEG_HW_STE_FULL</code> that includes dump to STE and all its dependencies • <code>SEG_FW_STE_FULL</code> that include dump to FW_STE and to HW_STE_FULL in range
Striding WQE - Headroom and Tail-room	As the software requires additional space before and after a packet is scattered for its processing for stridden RQ, the hardware will allocate the required room while scattering packets to spare a copy.
Connections per Second (CPS)	Improved security offload's Connections per Second (CPS) rate using the general object DEK (PSP TLS etc).
VirtIO vDPA Performance Virtualization	Increased the VirtIO hardware offload message rate to 20/20 MPPS for 256 virtual devices by optimizing the datapath application code.
Open SNAPI: Communication Channel	Open SNAPI steering hop optimization: <ul style="list-style-type: none"> • Only packets with dmac/dlid 0 will enter the SNAPI steering channel. Meaning if the Open SNAPI communication channel exists, all other traffic will have only 1 steering hop penalty • SW must use dlid/dmac == 0 in address vector of a SNAPI QP • cross eSwitch, Open SNAPI is now allowed if LAG is enabled
SHA Calculations	Added support for SHA calculations via the MMO engine.
UPT Performance	Optimized latency for UPT traffic.

Feature/Change	Description
24.35.1012	
NONDNIC, LAG	Added LAG support on NODNIC interfaces to enable traffic functionality on other ports after the LAG is enabled.
QoS Priority Trust Default State	QoS priority trust default state can now be changed using the new nvconfig below: <ul style="list-style-type: none"> • QOS_TRUST_STATE_P1 • QOS_TRUST_STATE_P2 The values that can be used to set the default state are: <ul style="list-style-type: none"> • TRUST_PORT • TRUST_PCP • TRUST_DSCP • TRUST_DSCP_PCP
VirtIO Full Emulation	Implemented a transitional device which supports both drivers conforming to the spec 1.x and allows legacy drivers to support virtio legacy driver (virtio 0.95).
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Feature/Change	Description
24.34.1002	
LLDP Properties Implementation on RDE	Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
PPS Offset	Added a 22 nanosecond of propagation delay to the cable delay of the PPS signal when using PPS out.
Programmable CC, PPCC, MAD, IBCC	Added support for PPCC register with bulk operations, MAD for algorithm configuration and tunable parameters.
Programmable Counters	Added support for programmable counters for PCC via PPCC register and MAD.
Bug Fixes	See <i>Bug Fixes</i> section.

Feature/Change	Description
24.33.1048	
NVIDIA BlueField-2 DPU NIC Operation Mode	In this mode, the DPU behaves exactly like a ConnectX SmartNIC from the perspective of the external host. As part of this operation mode, this new capability allows the host Physical Function: <ul style="list-style-type: none"> • to supply pages to the Host eSwitch functions • to execute the same flows as a Host PF on a regular ConnectX device For further information, see section "NVIDIA BlueField-2 DPU NIC Operation Mode" in this document.
200Gb/s Throughput on Crypto Capable Devices	Enabled 200Gb/s out-of-the-box throughput on crypto capable devices. Note: If any crypto offloads is in use, 200Gb/s throughput can be achieved only after the next firmware reset

Feature/Change	Description
24.33.1048	
VF Migration	Added support for VF migration. The hypervisor can now suspend its VF, meaning from that point the VF cannot perform action such as send/receive traffic or run any command. In this firmware version only the suspend resume mode is supported (on the same VM).
MADs	Added a new MAD of class SMP that has the attributes <code>hierarchy_Info</code> as defined in the IB Specification and is used to query the hierarchy information stored on the node and the physical port.
NV Configurations via the Relevant Reset Flow	Added <code>pci_rescan_needed</code> field to the MFRL access register to indicate whether a PCI rescan is needed based on the NV configurations issued by the software. Note: If the Keep Link Up NV configuration is changed, phyless reset will be blocked.
Increasing Firmware's Queue Depth Limit	Changing the <code>mlxconfig</code> parameter allows the user to expose different value of max queue depth in NVMe CAP on static emulated functions which results in NVMe module creating longer NVMe queues.
RSHIM PF Interrupts Implementation	Added support for interrupts on the RSHIM PFs to enable gracefully stop of the RSHIM host driver.
ICM Pages	Added a new register (<code>vhca_icm_ctrl_access_reg</code>) to enable querying and limiting the ICM pages in use.
VF Migration	Added support for VF migration.
NetworkPort Schema Replacement	Replaced the deprecated NetworkPort schema with Port schema in NIC RDE implementation.
RShim PF	Added support for " <code>mlxfwreset --sync 1</code> " for the RShim PF.
Steering Definer	Added support for creating a steering definer with a dword selector using <code>create_match_definer_object</code> and the "SELECT" format.
XRQ QP Errors Enhancements	Enhanced the XRQ QP error information provided to the user in case QP goes into an error state. In such case, QUERY_QP will provide information on the syndrome type and which side caused the error.
HW Steering: WQE Insertion Rules	[Beta] Added HW Steering support for the following: <ul style="list-style-type: none"> • set, add and copy inline STC action • set and copy actions for several fields using <code>modify_pattern</code> object and <code>inline stc modify</code> action • FDB mode in HW steering using FDB_RX and FDB_TX flow table types • ASO flow meter action via STC • flow counter query using ASO WQE • allocation of large bulks for the objects: STE, ASO flow meter and modify argument • jumbo match RTC • count action in STC
Holdover Mode	Added support for holdover mode to comply to SyncE specifications (EEC compliance) to limit the maximum phase transient response upon link loss.
SyncE Enhancements	Added support for noise filtering to comply to the SyncE specifications requirements.

Feature/Change	Description
24.33.1048	
ibstat	Updated the ibstat status reported when the phy link is down. Now <code>QUERY_VPORT_STATE.max_tx_speed</code> of UPLINK will not be reported as 0 anymore.
ZTRCC	Added support for advanced ZTR_RTCC algorithm based on the Programmable CC platform to achieve better congestion control without dependency on the switch ECN marking.
SMPs	Disabled the option to send SMPs from unauthorized hosts.
Dynamic Completion Event Moderation for vDPA	DIM is used to tune moderation parameter dynamically using an <code>mlxreg</code> command. To disable this capability, run: <pre>mlxreg -d /dev/mst/mt41686_pciconf0 --reg_id 0xc00d --reg_len 0x8 -s "0x4.1:1=0x0"</pre>
UPT Performance Improvement	Improved UPT PPS performance.
SW Steering Cache	Modified the TX or RX cache invalidation behavior. TX or RX cache invalidation now does not occur automatically but only when the software performs the sync operation using the <code>sync_steering</code> command.
Mega Allocations in Bulk Allocator Mechanism	Modified the maximum bulk size per single allocation from <code>"log_table_size - log_num_unisizes"</code> , to allocate any range size, to remove limitations that HWS objects such as counters and modify arguments might encounter.
Dynamic Flex Parser over a VF	Added support for creating a dynamic flex parser on untrusted function, and changed the flex parser cap for untrusted function to the following: <ul style="list-style-type: none"> • maximum flex parser node = 2 • maximum dw sample = 4
Changing all the Crypto Features to Wrapped or Cleartext	Crypto features can be in either wrapped or unwrapped mode. Meaning, the key can be wrapped or in plaintext when running the <code>CREATE_DEK PRM</code> command. To comply with the requirements specified in FIPS publication, all the created DEKs must be wrapped. This feature adds new <code>NV_CONFIG</code> per device to control this mode, and enables the user to change all the crypto features to wrapped or cleartext.
ICM Direct Access by the Software to write/modify the DEK Objects	[Beta] This new capability enables the software to directly access ICM and write/modify the DEK objects. Such change improves the DEK object update rate by re-using DEK object instead of creating a new one. In addition, added the following: <ul style="list-style-type: none"> • New for DEK object: <code>bulk allocation</code>, <code>modify_dek cmd</code>, and new mode <code>- sw_wrapped</code>. • New general object <code>INT_KEK</code>
Bug Fixes	See <i>Bug Fixes</i> section.

8.2 Bug Fixes History

Internal Ref.	Issue
3217896	Description: Fixed RDE PATCH operation status code reported in case the property is "read-only".
	Keywords: RDE
	Discovered in Version: 24.35.1012
	Fixed in Release: 24.35.2000
3241357	Description: Fixed an issue in MCTP-over-PCIe, where the VDM message with the type Route-to-Root Complex, the target ID was not set as 0x0.
	Keywords: MCTP-over-PCIe, VDM message
	Discovered in Version: 24.35.1012
	Fixed in Release: 24.35.2000
3250924	Description: Fixed an issue that resulted in NVMe driver not loading on a hotplug-able device when VIRTIO_EMULATION_HOTPLUG_TRANS was enabled by mlxconfig.
	Keywords: VIRTIO_EMULATION_HOTPLUG_TRANS, NVMe
	Discovered in Version: 24.35.1012
	Fixed in Release: 24.35.2000
3215393	Description: Fixed an issue that caused the virtual QoS mechanism to stop traffic from reaching the full line rate of 200GbE on each direction when LAG was enabled.
	Keywords: Virtual QoS mechanism, 200GbE, LAG
	Discovered in Version: 24.35.1012
	Fixed in Release: 24.35.2000

Internal Ref.	Issue
3023205	Description: Fixed an issue that resulted in: <ul style="list-style-type: none"> • data corruption • NVMF queue getting stuck, following backend controller timeout and RNR NAK exceeded syndrome on initiator due to mistakes in access to the internal database NVMF Backend Controller as a result of wrong data in the database.
	Keywords: data_corruption
	Discovered in Version: 24.33.1048
	Fixed in Release: 24.34.1002
3101645	Description: Fixed an issue that caused some requests to get stuck in the pacer, thus not allowing detach NVMF namespace command to progress when the pacer was configured to use byte in flight limitation mechanism and NVMF backend controller timeout happened under traffic.
	Keywords: CMD queue
	Discovered in Version: 24.33.1048
	Fixed in Release: 24.34.1002

Internal Ref.	Issue
3021669	<p>Description: Added a new NVconfig parameter “MULTI_PCI_RESOURCE_SHARE” to support modes that allow choosing the utilization of the card's resources on each host in Socket-Direct / Multi host setup.</p> <p>Keywords: Performance</p> <p>Discovered in Version: 24.33.1048</p> <p>Fixed in Release: 24.34.1002</p>
2665773	<p>Description: Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.</p> <p>Keywords: PCIe. PML1</p> <p>Discovered in Version: 24.33.1048</p> <p>Fixed in Release: 24.34.1002</p>
3134894	<p>Description: Fixed an issue where <code>set_flow_table_entry</code> failed when <code>aso_flow_meter</code> action was used.</p> <p>Keywords: ASO Flow Meter, FW Steering</p> <p>Discovered in Version: 24.33.1048</p> <p>Fixed in Release: 24.34.1002</p>
3039007	<p>Description: Enabled Multi-Host RX Rate-limiter configuration via the QEEC <code>mlxreg</code> and the <code>max_shaper_rate</code> field.</p> <p>Keywords: RX Rate-Limiter, Multi-host</p> <p>Discovered in Version: 24.33.1048</p> <p>Fixed in Release: 24.34.1002</p>
3059379	<p>Description: Added "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.</p> <p>Keywords: MCTP control command</p> <p>Discovered in Version: 24.33.1048</p> <p>Fixed in Release: 24.34.1002</p>
2994292	<p>Description: Fixed a race condition occurred between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to hang.</p> <p>Keywords: Race condition</p> <p>Discovered in Version: 24.33.1048</p> <p>Fixed in Release: 24.34.1002</p>
3068927	<p>Description: Added support for dynamic MSI-X when in SmartNIC mode.</p> <p>Keywords: Dynamic MSI-X</p> <p>Discovered in Version: 24.33.1048</p> <p>Fixed in Version: 24.34.1002</p>
3110286	<p>Description: Fixed an issue where vPort counters had wrong values.</p> <p>Keywords: vPort counters</p> <p>Discovered in Version: 24.33.1048</p> <p>Fixed in Version: 24.34.1002</p>

Internal Ref.	Issue
2887966	Description: A hardware issue in the illegal_flowq that raises even when there is drop, results in the adapter card getting stuck during high scale traffic.
	Keywords: Performance
	Discovered in Version: 24.33.1048
	Fixed in Version: 24.34.1002
3056461	Description: Creating a Channel Service Object with bad parameters that lead to command rollback, results in the command getting stuck.
	Keywords: Open SNAPI
	Discovered in Version: 24.33.1048
	Fixed in Version: 24.34.1002

Internal Ref.	Issue
2702118	Description: Changed the policy of VDPA queue number capability. <ul style="list-style-type: none"> When the devices count <= 8, the VDPA queue number in cap is 256 When the device count >=32, the VDPA queue number in cap is 64 When the devices count is in 9-31, the VDPA queue number in cap is 128. Here the devices counts all port functions configured in mlxconfig, including pf, vf and sf.
	Keywords: VDPA
	Discovered in Version: 24.32.1010
	Fixed in Version: 24.33.1048
2991255	Description: Fixed an issue that caused the host driver to hang when the received packet was bigger than the received buffer (according to the device's MTU) as the device reported a packet length bigger than the received buffer length.
	Keywords: virtio net RX packet, RX buffer
	Discovered in Version: 24.32.1010
	Fixed in Version: 24.33.1048
3021734	Description: Fixed an issue that caused BMC to fail to detect the PCIe device when using the MCTP-over-PCIe protocol.
	Keywords: BMC, MCTP-over-PCIe protocol, PCIe
	Discovered in Version: 24.32.1010
	Fixed in Version: 24.33.1048
2802943	Description: Implemented SLD detection code. Surprise Down Error Reporting Capable value was changed from 1 to 0 in boards where the downstream perst was not controlled thus causing SLD detection not to function properly.
	Keywords: SLD detection, Surprise Down Error Reporting Capable
	Discovered in Version: 24.32.1010
	Fixed in Version: 24.33.1048

Internal Ref.	Issue
2513453	Description: Fixed rare lanes skew issue that caused CPU to timeout in Rec.idle.
	Keywords: PCIe
	Discovered in Version: 24.32.1010
	Fixed in Version: 24.33.1048
2932436	Description: Optimized the virtio data path to reach line speed for Tx bandwidth.
	Keywords: VDPA, virtio full emulation
	Discovered in Version: 24.32.1010
	Fixed in Version: 24.33.1048
2907707	Description: Fixed a configuration issue which flipped the MSB of Partition Key field in CNP packets and led to P_KEY mismatch between CNP packets and regular packets.
	Keywords: Partition Key, PKEY, CNP, ECN
	Discovered in Version: 24.32.1010
	Fixed in Version: 24.33.1048

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Product	Version	Legal Notices and 3rd Party Licenses
Firmware	xx.35.3006	<ul style="list-style-type: none">• HCA Firmware EULA• License• 3rd Party Notice
MLNX_OFED	5.8-3.0.5.1	<ul style="list-style-type: none">• License• 3rd Part Notice
MFT FreeBSD	4.22.1-307	<ul style="list-style-type: none">• License• 3rd Party Notice
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MFT VMware		<ul style="list-style-type: none">• License• 3rd Party Notice
MFT Windows		<ul style="list-style-type: none">• License• 3rd Party Notice
msfflint	4.22.1-307	<ul style="list-style-type: none">• License• 3rd Party Notice

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