




**NVIDIA ConnectX-6 Lx Adapter Cards
Firmware Release Notes v26.35.3502
LTS**

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 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
26.35.3502	December 31, 2023	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.

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 Lx adapters firmware. This firmware supports the following protocols:

- Ethernet - 1GbE, 10GbE, 25GbE, 50GbE
- 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.

3.1 Supported Devices

This firmware supports the devices and protocols listed below:

NVIDIA SKU	Legacy OPN	PSID	Device Name	Flex Boot	UEFI x86	UEFI ARM	Enable / disable exprom Feature
900-9X66 2-0053- ST1	MCX6311 02AN- ADA	MT_0000 000531	ConnectX-6 Lx EN adapter card; 25GbE ; Dual-port SFP28; PCIe 4.0 x8; No Crypto	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X66 2-0083- ST0	MCX6311 02AC- ADA	MT_0000 000532	ConnectX-6 Lx EN adapter card; 25GbE ; Dual-port SFP28; PCIe 4.0 x8; Crypto and Secure Boot	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X62 5-0053- SB0	MCX6314 32AN- ADA	MT_0000 000546	ConnectX-6 Lx EN adapter card; 25GbE OCP3.0; With Host management ; Dual-port SFP28; PCIe 4.0 x8; No Crypto; Thumbscrew (Pull Tab) Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X62 5-0083- SB0	MCX6314 32AC- ADA	MT_0000 000547	ConnectX-6 Lx EN adapter card; 25GbE OCP3.0; With Host management ; Dual-port SFP28; PCIe 4.0 x8; Crypto and Secure Boot; Thumbscrew (Pull Tab) Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X62 5-0073- SB1	MCX6314 32AS- ADA	MT_0000 000551	ConnectX-6 Lx EN adapter card; 25GbE OCP3.0; With Host management ; Dual-port SFP28; PCIe 4.0 x8; Secure Boot; No Crypto; Internal Lock Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X66 2-0073- ST0	MCX6311 02AS- ADA	MT_0000 000575	ConnectX-6 Lx EN adapter card; 25GbE; Dual-port SFP28; PCIe 4.0 x8; Secure Boot; No Crypto;	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X65 9-0015- SB1	MCX6314 35AN- GDAB	MT_0000 000548	ConnectX-6 Lx EN adapter card; 50GbE; OCP3.0; With Host management ; Single-port QSFP28; PCIe 4.0 x8; No Crypto; Thumbscrew (Pull Tab) Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists

NVIDIA SKU	Legacy OPN	PSID	Device Name	Flex Boot	UEFI x86	UEFI ARM	Enable / disable exprom Feature
900-9X60 1-0015- SQ0	MCX6311 05AN- GDAT	MT_0000 000589	ConnectX-6 Lx EN adapter card; 50GbE ; Single-port QSFP28; PCIe 4.0 x8; No Crypto; Tall Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X65 9-0045- SB0	MCX6314 35AC- GDAB	MT_0000 000549	ConnectX-6 Lx EN adapter card; 50GbE; OCP3.0; With Host management ; Single-port QSFP28; PCIe 4.0 x8; Crypto and Secure Boot; Thumbscrew (Pull Tab) Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X60 1-0045- ST0	MCX6311 05AC- GDAT	MT_0000 000590	ConnectX-6 Lx EN adapter card; 50GbE ; Single-port QSFP28; PCIe 4.0 x8; Crypto and Secure Boot; Tall Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X66 2-0063- ST0	MCX6311 02AE- ADAT	MT_0000 000545	ConnectX-6 Lx EN adapter card; 25GbE; Dual-port SFP28; PCIe 4.0 x8; Crypto; No Secure Boot	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X60 1-0025- ST0	MCX6311 05AE- GDAT	MT_0000 000587	ConnectX-6 Lx EN adapter card; 50GbE ; Single-port QSFP28; PCIe 4.0 x8; Crypto; No Secure Boot; Tall Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X65 9-0025- SB0	MCX6314 35AE- GDAB	MT_0000 000550	ConnectX-6 Lx EN adapter card; 50GbE; OCP3.0; With Host management ; Single-port QSFP28; PCIe 4.0 x8; Crypto; No Secure Boot; Thumbscrew (Pull Tab) Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists
900-9X62 5-0063- SB0	MCX6314 32AE- ADAB	MT_0000 000552	ConnectX-6 Lx EN adapter card; 25GbE OCP3.0; With Host management ; Dual-port SFP28; PCIe 4.0 x8; Crypto; No Secure Boot; Thumbscrew (Pull Tab) Bracket	Present (Enabled)	Present (Enabled)	Present (Enabled)	Exists

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 Lx Firmware	26.35.3502 / 26.35.3006 / 26.35.2000
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.

	Supported Version
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.
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.
Cumulus	5.4 onwards

3.3 Supported Cables and Modules

3.3.1 Validated and Supported 100GbE Cables

Speed	Cable OPN	Description
100GE	MCP7F00-A001R	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pulltabs, 1m, 30AWG
100GE	MCP7F00-A001R30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 1m, Colored, 30AWG, CA-N
100GE	MCP7F00-A002R	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pulltabs, 2m, 30AWG
100GE	MCP7F00-A002R30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2m, Colored, 30AWG, CA-N
100GE	MCP7F00-A003R26N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m, Colored, 26AWG, CA-N
100GE	MCP7F00-A003R30L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m, Colored, 30AWG, CA-L
100GE	MCP7F00-A005R26L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 5m, Colored, 26AWG, CA-L
100GE	MCP7F00-A01AR	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, colored pulltabs, 1.5m, 30AWG
100GE	MCP7F00-A01AR30N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 1.5m, Colored, 30AWG, CA-N

Speed	Cable OPN	Description
100GE	MCP7F00-A02AR26N	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, Colored, 26AWG, CA-N
100GE	MCP7F00-A02AR30L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, Colored, 30AWG, CA-L
100GE	MCP7F00-A02ARLZ	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 2.5m, LSZH, Colored, 28AWG
100GE	MCP7F00-A03AR26L	NVIDIA passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3.5m, Colored, 26AWG, CA-L
100GE	MCP7H00-G001	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1m, 30AWG
100GE	MCP7H00-G001R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 1m, 30AWG
100GE	MCP7H00-G001R30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1m, Colored, 30AWG, CA-N
100GE	MCP7H00-G002R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 2m, 30AWG
100GE	MCP7H00-G002R30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2m, Colored, 30AWG, CA-N
100GE	MCP7H00-G003R	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 3m, 28AWG
100GE	MCP7H00-G003R26N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 3m, Colored, 26AWG, CA-N
100GE	MCP7H00-G003R30L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 3m, Colored, 30AWG, CA-L
100GE	MCP7H00-G004R26L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 4m, Colored, 26AWG, CA-L
100GE	MCP7H00-G01AR	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 1.5m, 30AWG
100GE	MCP7H00-G01AR30N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1.5m, Colored, 30AWG, CA-N
100GE	MCP7H00-G02AR	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, colored pulltabs, 2.5m, 30AWG

Speed	Cable OPN	Description
100GE	MCP7H00-G02AR26N	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2.5m, Colored, 26AWG, CA-N
100GE	MCP7H00-G02AR30L	NVIDIA passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2.5m, Colored, 30AWG, CA-L
100GE	MFA7A20-C003	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 3m
100GE	MFA7A20-C005	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 5m
100GE	MFA7A20-C010	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 10m
100GE	MFA7A20-C020	NVIDIA active fiber hybrid solution, ETH 100GbE to 2x50GbE, QSFP28 to 2xQSFP28, 20m
100GE	MFA7A50-C003	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m
100GE	MFA7A50-C005	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 5m
100GE	MFA7A50-C010	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 10m
100GE	MFA7A50-C015	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 15m
100GE	MFA7A50-C020	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 20m
100GE	MFA7A50-C030	NVIDIA active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 30m



Please note, the cables above are split cables where ConnectX-6 Lx adapter card in on the split side.

3.3.2 Validated and Supported 25GbE Cables

Speed	Cable OPN	Description
25GE	MAM1Q00A-QSA28	NVIDIA cable module, ETH 25GbE, 100Gb/s to 25Gb/s, QSFP28 to SFP28
25GE	MCP2M00-A001	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 1m, 30AWG
25GE	MCP2M00-A001E30N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 1m, Black, 30AWG, CA-N
25GE	MCP2M00-A002	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2m, 30AWG
25GE	MCP2M00-A002E30N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2m, Black, 30AWG, CA-N
25GE	MCP2M00-A003E26N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 3m, Black, 26AWG, CA-N

Speed	Cable OPN	Description
25GE	MCP2M00-A003E30L	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 3m, Black, 30AWG, CA-L
25GE	MCP2M00-A004E26L	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 4m, Black, 26AWG, CA-L
25GE	MCP2M00-A005E26L	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 5m, Black, 26AWG, CA-L
25GE	MCP2M00-A00A	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 0.5m, 30AWG
25GE	MCP2M00-A00AE30N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 0.5m, Black, 30AWG, CA-N
25GE	MCP2M00-A01AE30N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 1.5m, Black, 30AWG, CA-N
25GE	MCP2M00-A02AE26N	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2.5m, Black, 26AWG, CA-N
25GE	MCP2M00-A02AE30L	NVIDIA Passive Copper cable, ETH, up to 25Gb/s, SFP28, 2.5m, Black, 30AWG, CA-L
25GE	MFA2P10-A003	NVIDIA active optical cable 25GbE, SFP28, 3m
25GE	MFA2P10-A005	NVIDIA active optical cable 25GbE, SFP28, 5m
25GE	MFA2P10-A007	NVIDIA active optical cable 25GbE, SFP28, 7m
25GE	MFA2P10-A010	NVIDIA active optical cable 25GbE, SFP28, 10m
25GE	MFA2P10-A015	NVIDIA active optical cable 25GbE, SFP28, 15m
25GE	MFA2P10-A020	NVIDIA active optical cable 25GbE, SFP28, 20m
25GE	MFA2P10-A030	NVIDIA active optical cable 25GbE, SFP28, 30m
25GE	MFA2P10-A050	NVIDIA active optical cable 25GbE, SFP28, 50m
25GE	MMA2P00-AS	NVIDIA transceiver, 25GbE, SFP28, LC-LC, 850nm, SR, up to 100m
25GE	MMA2P00-AS-SP	NVIDIA transceiver, 25GbE, SFP28, LC-LC, 850nm, SR, up to 100m, single package
25GE	MMA2P00-AS_FF	NVIDIA transceiver, 25GbE, SFP28, LC-LC, 850nm, SR, up to 100m
25GE	SFP25G-AOC03M-TG	NVIDIA customized active optical cable 25GbE, SFP28, 3m, Aqua
25GE	SFP25G-AOC05M-TG	NVIDIA customized active optical cable 25GbE, SFP28, 5m, Aqua
25GE	SFP25G-AOC07M-TG	NVIDIA customized active optical cable 25GbE, SFP28, 7m, Aqua
25GE	SFP25G-AOC10M-TG	NVIDIA customized active optical cable 25GbE, SFP28, 10m, Aqua
25GE	SFP25G-AOC20M-TG	NVIDIA customized active optical cable 25GbE, SFP28, 20m, Aqua
25GE	SFP25G-AOC30M-TG	NVIDIA customized active optical cable 25GbE, SFP28, 30m, Aqua
25GE	MMA2L20-AR	NVIDIA optical transceiver, 25GbE, 25Gb/s, SFP28, LC-LC, 1310nm, LR up to 10km

3.3.3 Validated and Supported 10GbE Cables

Speed	Cable OPN	Description
10GE	MAM1Q00A-QSA	NVIDIA cable module, ETH 10GbE, 40Gb/s to 10Gb/s, QSFP to SFP+
10GE	MC2309124-005	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 5m
10GE	MC2309124-007	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 7m
10GE	MC2309130-001	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 1m
10GE	MC2309130-002	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 2m
10GE	MC2309130-003	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 3m
10GE	MC2309130-00A	NVIDIA passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+, 0.5m
10GE	MC3309124-004	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 4m
10GE	MC3309124-005	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 5m
10GE	MC3309124-006	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 6m
10GE	MC3309124-007	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 7m
10GE	MC3309130-001	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m
10GE	MC3309130-002	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m
10GE	MC3309130-003	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m
10GE	MC3309130-00A	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 0.5m
10GE	MC3309130-0A1	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m
10GE	MC3309130-0A2	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m
10GE	MCP2100-X001B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m, Blue Pulltab, Connector Label
10GE	MCP2100-X002B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m, Blue Pulltab, Connector Label
10GE	MCP2100-X003B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m, Blue Pulltab, Connector Label
10GE	MCP2101-X001B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m, Green Pulltab, Connector Label

Speed	Cable OPN	Description
10GE	MCP2104-X001B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m, Black Pulltab, Connector Label
10GE	MCP2104-X002B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m, Black Pulltab, Connector Label
10GE	MCP2104-X003B	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m, Black Pulltab, Connector Label
10GE	MCP2104-X01AB	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m, Black Pulltab, Connector Label
10GE	MCP2104-X02AB	NVIDIA passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m, Black Pulltab, Connector Label
10G	FTLX8571D3BCL-ME	Mellanox FTLX8571D3BCL-ME 10GB SFP+ Transceiver Module.
10G	MFM1T02A-SR	NVIDIA SFP+ optical module for 10GBASE-SR
10GE	MFM1T02A-LR	NVIDIA SFP+ optical module for 10GBASE-LR

3.3.4 Validated and Supported 1GbE Cables

Speed	Cable OPN	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

3.4 Supported 3rd Party Cables and Modules

Speed	Cable OPN	Description
10GbE	74752-9096	Dell Active DAC SFP+, Cisco PN SFP-H10GB-CU5M, Molex PN 74752-9096
10GbE	74752-9096 (SFP-H10GB-SU5M)	Cisco-Molex INC Active DAC SFP+ 5m
10GbE	74752-9521	CISCO-MOLEX SFP28/SFP+ 10G Passive copper cable
10GbE	74752-9521 (SFP-H10GB-CU5M)	Cisco 10GBASE SFP+ modules
10GbE	BN-QS-SP-CBL-5M	40G QSFP+ to 4xSFP+ DAC Breakout Direct Attach Cable 5m
10GbE	BN-QS-SP-CBL-5M	40G QSFP+ to 4xSFP+ DAC Breakout Direct Attach Cable 5m
10GbE	CAB-SFP-SFP-1M	Arista 10GBASE-CR SFP+ Cable 1 Meter
10GbE	CAB-SFP-SFP-1M	Arista Compatible 10G SFP+ Passive Cable 1m
10GbE	CAB-SFP-SFP-3M	Arista 10GBASE-CR SFP+ Cable 3 Meter
10GbE	CAB-SFP-SFP-5M	Arista 10GBASE-CR SFP+ Cable 5 Meter
10GbE	CAB-SFP-SFP-5M	Arista Compatible 10G SFP+ Passive Cable 5m

Speed	Cable OPN	Description
10GbE	FTLX1471D3BCL-ME	10GBASE-LR SFP+ 1310nm 10km DOM Transceiver Module
10GbE	FTLX8570D3BCL-C2	Cisco FET-10G 10-2566-02 FTLX8570D3BCL-C2 10Gbps Fabric Extender SFP+ Module
10GbE	FTLX8571D3BCL-ME	10gb SFP 850nm Optic Transceiver
10GbE	L45593-D178-B50	QSFP-4SFP10G-CU5M
10GbE	SFP-10G-SR	Cisco 10GBASE-SR SFP+ transceiver module for MMF, 850-nm wavelength, LC duplex connector
10GbE	SFP-10GB-SR	Cisco SFP+ 10GB SR optic module
10GbE	SFP-H10GB-CU1M	Cisco 1-m 10G SFP+ Twinax cable assembly, passive
10GbE	SFP-H10GB-CU3M	Cisco 3-m 10G SFP+ Twinax cable assembly, passive
10GbE	SFP-H10GB-CU5M	Cisco 5-m 10G SFP+ Twinax cable assembly, passive
25GbE	FTLF8536P4BCL	TRANSCEIVER 25GBE SFP SR
25GbE	LTF8507-PC07	HISENSE ACTIVE FIBER CABLE, 25GBE
25GbE	SFP-H25G-CU3M	CISCO 25GBASE-CR1 COPPER CABLE 3-METER NDCCGJ-C403

3.5 Tested Switches

3.5.1 Tested 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
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

Speed	Switch Silicon	OPN # / Name	Description	Vendor
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	Quanta

3.5.2 Tested 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

3.6 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.


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 large amount of PCIe resources.

Such features are: SR-IOV with numerous VFs, PCIe Emulated Switch, and Large BAR Requests.

 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.

4.2 Changes and New Feature in this Firmware Version

Feature/Change	Description
26.35.3502	
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.

4.3 Unsupported Features and Commands

4.3.1 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

4.3.2 Unsupported Commands

- QUERY_MAD_DEMUX
- SET_MAD_DEMUX
- CREATE_RQ - MEMORY_RQ_RMP
- MODIFY_LAG_ASYNC_EVENT

5 Bug Fixes in this Firmware Version

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

Internal Ref.	Issue
3673362	Description: Updated the number of channels (ports) that are displayed in the iLO from 1 to 2 (num_channels_per_pkg=2) for dual port adapter cards.
	Keywords: Number of channels (ports)
	Discovered in Version: 26.35.2000
	Fixed in Release: 26.35.3502
3673153	Description: Modified the TCP IPv4 flows so that the steering TIR rx_hash_symmetric field is now valid only when both the SRC and DST fields are not set to zero.
	Keywords: TCP IPv4 flows
	Discovered in Version: 26.35.2000
	Fixed in Release: 26.35.3502

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)

Known Issues

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: 26.35.3006
3463527	Description: PhyLess Reset is currently not supported.
	Workaround: N/A
	Keywords: PhyLess Reset
	Discovered in Version: 26.35.3006
3267506	Description: CRC is included in the traffic byte counters as a port byte counter.
	Workaround: N/A
	Keywords: Counters, CRC
	Discovered in Version: 26.35.2000
3200779	Description: Changing dynamic PCIe link width is not supported.
	Workaround: N/A
	Keywords: PCIe
	Discovered in Version: 26.34.1002
2169950	Description: When decapsulation on a packet occurs, the FCS indication is not calculated correctly.
	Workaround: N/A
	Keywords: FCS
	Discovered in Version: 26.34.1002

Internal Ref.	Issue
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: 26.34.1002</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: 26.34.1002</p>
2866931	<p>Description: When the host powers up directly into the standby mode, the adapter may not handle WOL packets.</p> <p>Workaround: N/A</p> <p>Keywords: WOL packets</p> <p>Discovered in Version: 26.32.1010</p>
2864238	<p>Description: VPD cannot be accessed after firmware upgrade or reset when the following sequence is performed:</p> <ol style="list-style-type: none"> 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 <p>Workaround: Run the upgrade or reset sequence as follow:</p> <ol style="list-style-type: none"> 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> <p>Keywords: VDP</p> <p>Discovered in Version: 26.32.1010</p>
2780349	<p>Description: As a result of having a single LED per port, features such as the Blinking Detection can work only when in low speed mode.</p> <p>Workaround: N/A</p> <p>Keywords: LED, port, Blinking Detection</p> <p>Discovered in Version: 26.32.1010</p>
2834990	<p>Description: On rare occasions, when toggling both sides of the link, the link may not rise.</p> <p>Workaround: Toggle the port to free it.</p> <p>Keywords: Port toggling, link</p> <p>Discovered in Version: 26.31.1014</p>
2667681	<p>Description: As the Connection Tracking (CT) is not moved to SW state after receiving a TCP RST packet, any packet that matches the windows even after the RST is marked as a valid packets.</p>

Internal Ref.	Issue
	<p>Workaround: N/A</p> <p>Keywords: Connection Tracking</p> <p>Discovered in Version: 26.31.1014</p>
2378593	<p>Description: Sub 1sec firmware update (fast reset flow) is not supported when updating from previous releases to the current one. Doing so may cause network disconnection events.</p> <p>Workaround: Use full reset flow for firmware upgrade/downgrade.</p> <p>Keywords: Sub 1sec firmware update</p> <p>Discovered in Version: 26.29.1016</p>
2213356	<p>Description: The following are the Steering Dump limitations:</p> <ul style="list-style-type: none"> • Supported only on ConnectX-5 adapter cards • Requires passing the version (FW/Stelib/MFT) and device type to stelib • Re-format is not supported • Advanced multi-port feature is not supported - LAG/ROCE_AFFILIATION/MPFS_LB/ESW_LB (only traffic vhca <-> wire) • Packet types supported: <ul style="list-style-type: none"> • Layer 2 Eth • Layer 3 IPv4/Ipv6/Grh • Layer 4 TCP/UDP/Bth/GreV0/GreV1 • Tunneling VXLAN/Geneve/GREv0/Mpls • FlexParser protocols are not supported (e.g AliVxlan/VxlanGpe etc..). • Compiles only on x86 <p>Workaround: N/A</p> <p>Keywords: Steering Bump</p> <p>Discovered in Version: 26.29.1016</p>
2365322	<p>Description: When configuring adapter card's Level Scheduling, a QoS tree leaf (QUEUE_GROUP) configured with default rate_limit and default bw_share, may not obey the QoS restrictions imposed by any of the leaf's ancestors.</p> <p>Workaround: To prevent such a case, configure at least one of the following QoS attributes of a leaf: <code>max_average_bw</code> or <code>bw_share</code></p> <p>Keywords: QoS</p> <p>Discovered in Version: 26.29.1016</p>
2201468	<p>Description: Running multiple resets ("mlxfwreset --sync=1") simultaneously is not functioning properly,</p> <p>Workaround: Wait a few seconds until you run "mlxfwreset --sync=0".</p> <p>Keywords: mlxfwreset, reset-sync, reset, sync</p> <p>Discovered in Version: 26.28.1002</p>

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 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	

Configuration	mlxconfig Parameter Name	Class	TLV ID
	DCR_LIFO_SIZE		
NV_VPI_LINK_TYPE	LINK_TYPE	PHYSICAL_PORT (2)	0x12
NV_ROCE_CC	ROCE_CC_PRIO_MASK		0x107
	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	

Configuration	mlxconfig Parameter Name	Class	TLV ID
	NUM_OF_TC		
	NUM_OF_PFC		
NV_MPFS_CONF	DUP_MAC_ACTION		0x196
	SRIOV_IB_ROUTING_MODE		
	IB_ROUTING_MODE		
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		

9 Release Notes History

9.1 Changes and New Feature History

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

Feature/Change	Description
26.35.3006	
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
26.35.2000	
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
26.35.1012	
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.

QoS Priority Trust Default State	<p>QoS priority trust default state can now be changed using the new nvconfig below:</p> <ul style="list-style-type: none"> • QOS_TRUST_STATE_P1 • QOS_TRUST_STATE_P2 <p>The values that can be used to set the default state are:</p> <ul style="list-style-type: none"> • TRUST_PORT • TRUST_PCP • TRUST_DSCP • TRUST_DSCP_PCP
Bug Fixes	See Bug Fixes .
26.34.1002	
LLDP Properties Implementation on RDE	Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
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.
Congestion Control, PCC	Added Programmable Congestion Control (PCC) support. Note: User programmability is currently not supported.
Bug Fixes	See Bug Fixes .
26.33.1048	
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.
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).
VF Migration	Added support for VF migration.
ICM Pages	Added a new register (<code>vhca_icm_ctrl_access_reg</code>) to enable querying and limiting the ICM pages in use.
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, <code>QUERY_QP</code> will provide information on the syndrome type and which side caused the error.
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.
NetworkPort Schema Replacement	Replaced the deprecated NetworkPort schema with Port schema in NIC RDE implementation.

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 using <code>sync_steering</code> command.
Firmware Steering	Enabled the option to modify the <code>ip_ecn</code> field in the packet header in firmware steering.
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.
Bug Fixes	See Bug Fixes .
26.33.1048	
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Bug Fixes	See Bug Fixes .

9.2 Bug Fixes History

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

Internal Ref.	Issue
3333959	Description: Enabled ACS for single port cards.
	Keywords: ACS
	Discovered in Version: 26.35.2000
	Fixed in Release: 26.35.3006
3491989	Description: Fixed an issue that caused the virtio-blk traffic to get stuck when working on vDPA over VFE mode.
	Keywords: virtio-blk, virtio full emulation, vDPA
	Discovered in Version: 26.35.2000
	Fixed in Release: 26.35.3006
3467215	Description: Enabled VF LAG hash mode. The LAG_RESOURCE_ALLOCATION mlxconfig field is now modifiable.
	Keywords: VF LAG
	Discovered in Version: 26.35.2000
	Fixed in Release: 26.35.3006
3467212	Description: Modified the RDE behavior to return an error if the chassis ID subtype is AgentId, or Port ID subtype is ChassisComp.
	Keywords: RDE
	Discovered in Version: 26.35.2000
	Fixed in Release: 26.35.3006

Internal Ref.	Issue
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: 26.35.1012
	Fixed in Release: 26.35.2000
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: 26.35.1012
	Fixed in Release: 26.35.2000

Internal Ref.	Issue
3219546	Description: Fixed an issue that caused the patch to the RDE LLDPEnable property in Port schema not to be updated after the host reboot.
	Keywords: RDE LLDPEnable property
	Discovered in Version: 26.34.1002
	Fixed in Release: 26.35.1012
3227873	Description: Fixed an issue that caused RDE (Redfish) PATCH operation to LLDPTransmit properties "ManagementAddressIPv4", "ManagementAddressIPv6" and "ManagementAddressMAC" to be applied only in the first attempt but failed in the next.
	Keywords: RDE (Redfish) PATCH operation
	Discovered in Version: 26.34.1002
	Fixed in Release: 26.35.1012
3184625	Description: Fixed an issue that caused PLDM AEN event receiver media to be changed unexpectedly and destination BDF to be overridden with garbage when some PLDM packet were received from the SMBus layer.
	Keywords: PLDM AEN event receiver media
	Discovered in Version: 26.34.1002
	Fixed in Release: 26.35.1012
3194359	Description: Fixed PCIe SKP OS generation interval for Gen1 and Gen2.
	Keywords: PCIe SKP
	Discovered in Version: 26.34.1002
	Fixed in Release: 26.35.1012

Internal Ref.	Issue
2665773	Description: Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.
	Keywords: PCIe. PML1
	Discovered in Version: 26.33.1048
	Fixed in Release: 26.34.1002
3134894	Description: Fixed an issue where set_flow_table_entry failed when aso_flow_meter action was used.
	Keywords: ASO Flow Meter, FW Steering
	Discovered in Version: 26.33.1048
	Fixed in Release: 26.34.1002
3039007	Description: Enabled Multi-Host RX Rate-limiter configuration via the QECC mlxreg and the max_shaper_rate field.
	Keywords: RX Rate-Limiter, Multi-host
	Discovered in Version: 26.30.1004
	Fixed in Release: 26.34.1002

Internal Ref.	Issue
3059379	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.
	Keywords: MCTP control command
	Discovered in Version: 26.30.1004
	Fixed in Release: 26.34.1002
2994292	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.
	Keywords: Race condition
	Discovered in Version: 26.30.1004
	Fixed in Release: 26.34.1002
3110286	Description: Fixed an issue where vPort counters had wrong values.
	Keywords: vPort counters
	Discovered in Version: 26.33.1048
	Fixed in Release: 26.34.1002

Internal Ref.	Issue
2513453	Description: Fixed rare lanes skew issue that caused CPU to timeout in Rec.idle.
	Keywords: PCIe
	Discovered in Version: 26.32.1010
	Fixed in Release: 26.33.1048
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: 26.32.1010
	Fixed in Release: 26.33.1048
2801850	Description: Fixed a rare case where asserts and ext_synd appeared in dmesg after performing driver restart.
	Keywords: Driver restart
	Discovered in Version: 26.32.1010
	Fixed in Release: 26.33.1048
2860409	Description: Enabled delay drop for hairpin packets. If a hairpin QP is created with delay_drop_en enabled, the feature will be enabled across all GVMI, based on the delay drop status.
	Keywords: Hairpin delay drop
	Discovered in Version: 26.32.1010
	Fixed in Release: 26.33.1048

Internal Ref.	Issue
2875624	Description: Fixed an issue that prevented the np_cnp_sent counter from increasing after it reached its maximum although there were CNPs sent upon receiving ECN-marked packets.
	Keywords: Counters
	Discovered in Version: 26.32.1010
	Fixed in Release: 26.33.1048

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