



NVIDIA BlueField-3 DPU NIC Firmware Release Notes v32.43.2408

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Release Notes Update History

Revision	Date	D e s c r i p t i o n
32.43.24 08	February 2024	I n i t i a l r e l e a s e o f t h i s R e l e a s e N o t e s v

Revision	Date	D e s c r i p t i o n
		e r s i o n ,

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-3 DPU provides innovative acceleration, security, and efficiency in every host. BlueField-3 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-3 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.

Firmware Download

Please visit [Firmware Downloads](#).

Changes and New Features

Note

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.

Info

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

Feature/ Change	Description
	32.43.2408
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Backward Compatibility

This section will include all the features that their backward compatibility is broken at a certain release.

Category /Feature	Description
DPA Outbox Blocking -Mode	As of firmware v32.43.2026, when the switch DPA Outbox configuration is in non-blocking mode, where DPA Outbox requests complete immediately (do not wait for completion), DPA Kernel, FlexIO SDK and DPA applications should use the "busy" bit check before performing DPA Outbox operations. To avoid any issues, it is recommended to update the firmware version together with the FlexIO SDK and DPA Applications.
DPA Thread Context	Due to performance optimization, as of firmware v32.43.2026, DPA Thread context is changed in the DPA Kernel and such change will affect DPA applications. To avoid any issues, it is recommended to update the firmware version together with the FlexIO SDK and DPA Applications.

Customer Affecting Changes

Changes in This Release

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

Introduced in Version	Description
N/A	N/A

Changes Planned for Future Releases

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

Planned for Version	Description
N/A	N/A

Changes in Earlier Releases

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

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

Introduced in Version	Description	Customer Impact and Recommendation
32.43.2026	<p>DPA Outbox Blocking-Mode</p> <p>Due to a silicon issue, as of firmware version 32.43.2026, the DPA outbox is configured to operate in non-blocking mode, causing DPA outbox requests to complete immediately without waiting for actual completion. As a result, the DPA stack must poll a "busy" bit before initiating another DPA outbox operation.</p>	<p>Update the firmware version to 32.43.2026 or higher or update the BF-Bundle (containing this firmware) and DOCA-Host to 2.9.x or higher. This is mandatory for customers programming the DPA (e.g., DPA with DOCA PCC, or using NVIDIA turn-key apps which utilize the DPA (virtio-net/blk/fs, NVMe).</p>
	<p>DPA Thread Context</p> <p>Due to internal-stack API changes, as of firmware v32.43.2026, DPA thread context is changed in the DPA. This affects the overlying DPA stack.</p> <p>As of firmware version 32.43.2026, internal-stack API changes have altered the DPA thread context, impacting the overlying DPA stack.</p>	

Introduced in Version	Description	Customer Impact and Recommendation
32.38.1002	<p>DPU NIC mode working flow has been updated.</p> <p>Note Firmware v32.38.1002 is not backward compatible with older BlueField software releases.</p>	<p>To upgrade to firmware v32.38.1002:</p> <ol style="list-style-type: none"> Set mlxcnfig to move to DPU mode (if not already there). <p style="text-align: center;">s u d o m s t s t a r t s u d o m</p>

Introduced in Version	Description	Customer Impact and Recommendation
		<p style="text-align: center;">I X C O N F I G - D / D E V / M S T / < D E V I C E > S I N T</p>

Introduced in Version	Description	Customer Impact and Recommendation
		E R N A L - C P U - M O D E L = 1 I N T E R N A L - C P U - O

Introduced in Version	Description	Customer Impact and Recommendation
		<p data-bbox="1421 384 1446 1104">F F L O A D - E N G I N E = 0</p> <ol data-bbox="1328 1167 1463 1717" style="list-style-type: none"> 2. Power-cycle the host. 3. Flash the latest BFB file (v2.2.0). 4. Set mlxconfig. <p data-bbox="1421 1787 1446 1913">s u d</p>

Introduced in Version	Description	Customer Impact and Recommendation
		<p>o m s t s t a r t s u d o m l x c o n f i g - d / d e v / m s</p>

Introduced in Version	Description	Customer Impact and Recommendation
		t / < d e v i c e > S I N T E R N A L - C P U - M O D E L = 1

Introduced in Version	Description	Customer Impact and Recommendation
		<p style="text-align: center;">INTERNAL - CPU - OFFLOAD - ENGINE = 1</p> <p>5. Set EXP_R</p>

Introduced in Version	Description	Customer Impact and Recommendation
		<p>OM_U EFI_A RM_E NABL E = True (1). If EXP_R OM_U EFI_A RM_E NABL E = False (0), perform the following on the Arm/Soc side:</p> <div style="border: 1px solid black; padding: 5px; margin-left: 20px;"> <p style="text-align: center;">s u d o m s t s t a</p> </div>

Introduced in Version	Description	Customer Impact and Recommendation
		r t s u d o m l x c o n f i g - d / d e v / m s t / < d e v i

Introduced in Version	Description	Customer Impact and Recommendation
		<div data-bbox="1360 369 1463 1860" style="border: 1px solid black; padding: 5px; text-align: center;"> C E > S E X P - R O M - U E F I - A R M - E N A B L E = 1 </div> <p data-bbox="1328 1864 1458 1946">6. Power-cycle</p>

Introduced in Version	Description	Customer Impact and Recommendation
		the host.

Discontinued Features

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

N/A

Declared Unsupported Features

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

N/A

Bug Fixes in This Version

Internal Ref.	Issue
4174096	Description: Fixed an issue that occasionally resulted in <code>ext_synd = 0x8309</code> in dmesg when enabled the internal NP/DOCA NP.
	Keywords: PCC NP
	Discovered in Version: 32.42.1000
	Fixed in Release: 32.43.2408
4030180	Description: Fixed an issue that prevented virtio 2K device from working with LFWP at the same time due to limited hardware resource. Therefore, resulting in LFWP command failure.
	Keywords: virtio 2K, LFWP
	Discovered in Version: 32.42.1000
	Fixed in Release: 32.43.2408

Known Issues

Internal Ref.	Issue
4007228	Description: NC-SI pass-through requires the user to allocate a MAC address to the platform BMC.
	Workaround: N/A
	Keywords: NC-SI pass-through
	Discovered in Version: 32.41.1000
3787618	Description: NVIA register is not allowed for external host if any field of EXTERNAL_HOST_PRIV or EXTERNAL_HOST_PRIV_FAST TLVs is not set as the default.
	Workaround: N/A
	Keywords: Host privilege
	Discovered in Version: 32.41.1000
3636631	Description: When configuring BlueField-3 Arm cores as PCIe root-complex, all non-mlx5 devices must always set the BlueField-3's IOMMU to disabled or passthrough mode. Turning IOMMU "ON" requires special handling of interrupts in the driver or the use of polling. For further assistance, contact NVIDIA support .
	Workaround: N/A
	Keywords: IOMMU
	Discovered in Version: 32.39.2048
3614529	Description: The supported DDR5 link speed in SKU B3220, is 5200 MT/s.
	Workaround: N/A
	Keywords: DDR5 link speed
	Discovered in Version: 32.39.2048
3728450	Description: SW_RESET with a pending image is currently not supported.
	Workaround: N/A
	Keywords: SW_RESET

Internal Ref.	Issue
	Discovered in Version: 32.39.2048
3614288	Description: Occasionally, the device may hang when there a hot plug is performed from a unknown direction.
	Workaround: N/A
	Keywords: Hot-plug operation
	Discovered in Version: 32.39.2048
-	Description: The I ² C clock fall time is lower than the 12ns minimum defined in the I2C-bus specification. For further information, refer to the I ² C-bus Specification, Version 7.0, October 2021, https://www.i2c-bus.org/ .
	Workaround: N/A
	Keywords: I ² C clock
	Discovered in Version: 32.39.2048
3439438	Description: When connecting to a High Speed Traffic Generator in 400G speed, the linkup time may takes up to 3 minutes.
	Workaround: N/A
	Keywords: 400G linkup time
	Discovered in Version: 32.38.1002
3534128	Description: External flash access such as flash read using the MFT tools will fail if there is a pending image on the flash.
	Workaround: N/A
	Keywords: Flash access
	Discovered in Version: 32.38.1002
3534219	Description: On BlueField-3 devices, from DOCA 2.2.0 to 32.37.1306 (or lower), the host crashes when executing partial Arm reset (e.g., Arm reboot; BFB push; mlxfwreset).
	Workaround: Before downgrading the firmware, perform: <ul style="list-style-type: none"> • echo 0 > /sys/bus/platform/drivers/mlxbf-bootctl/large_icm • Arm reboot

Internal Ref.	Issue
	Keywords: BlueField-3; downgrade
	Discovered in Version: 32.38.1002
3547022	Description: When unloading the network drivers on an external host, sync 1 reset may be still reported as 'supported' although it is not. Thus, initiating the reset flow may result in reset failure after a few minutes.
	Workaround: N/A
	Keywords: Sync 1 reset
	Discovered in Version: 32.38.1002
3439438	Description: When connecting to a Spirent switch in 400G speed, the linkup time may takes up to 3 minutes.
	Workaround: N/A
	Keywords: Spirent, 400G, linkup time
	Discovered in Version: 32.38.1002
3178339	Description: PCIe PML1 is disabled.
	Workaround: N/A
	Keywords: PCIe PML1
	Discovered in Version: 32.38.1002
3525865	Description: Unexpected system behavior might be observed if the driver is loaded while reset is in progress.
	Workaround: N/A
	Keywords: Sync 1 reset, firmware reset
	Discovered in Version: 32.38.1002
3275394	Description: When performing PCIe link secondary-bus-reset, disable/enable or mlxfwreset on AMD based Genoa systems, the device takes longer then expected to link up, due to a PCIe receiver termination misconfiguration.
	Workaround: N/A
	Keywords: PCIe
	Discovered in Version: 32.37.1306
2878841	Description: The firmware rollback fails for the signature retransmit flow if the QPN field is configured in the mkey (as it only allows the given QP to use

Internal Ref.	Issue
	<p>this Mkey) as the firmware rollback flow relies on an internal QP that uses the mkey.</p> <p>Workaround: N/A</p> <p>Keywords: Signature retransmit flow</p> <p>Discovered in Version: 32.37.1306</p>
3412847	<p>Description: Socket-Direct is currently not supported.</p> <p>Workaround: N/A</p> <p>Keywords: Socket-Direct</p> <p>Discovered in Version: 32.37.1306</p>

PreBoot Drivers (FlexBoot/UEFI)

FlexBoot Changes and New Features

For further information, please refer to the [FlexBoot Release Notes](#).

UEFI Changes and Major New Features

For further information, please refer to the [UEFI Release Notes](#).

Validated and Supported Cables and Modules

Cables Lifecycle Legend

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

NDR / 400GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy P/N	Description	Lifecycle Phase

N/A	400GE	9809108L00W003	-C DQ8FN003-NM L	NVIDIA Select 400GbE SF-DDAOCC3m	Preliminary
N/A	400GE	9809108N-00W005	C-DQ8FN005-NM L	NVIDIA Select 400GbE	Preliminary

				Q S F P - D D A O C 5 m
N/A	400GE	9 8 0- 9 0 8 P- 0 0 W 0 1 0	C - D Q 8 F N M O 1 O - N M L	N V I D I A S e l e c t 4 0 0 G b E Q S F P - D D A O C 1 0 m P r e l i m i n a r y
N/A	400GE	9 8 0-	C - D	N V I D P r e l i

		9 0 8 R- 0 0 W 0 2 0	Q 8 F N M O 2 0 - N M L	I A S e l c t 4 0 0 G b E Q S F P - D D A O C 2 0 m	m i n a r y
N/A	400GE	9 8 0- 9 0 8 T- 0 0 W 0 5 0	C - D Q 8 F N M O 5 0 - N M L	N V I D I A S e l c t 4 0 0 G b E Q S	P r e l i m i n a r y

				F P - D D A O C 5 0 m
NDR	N/A	9 8 0- 9 8 1 B- 0 0 N 0 0 4	M C A 7 J 6 5 - N 0 0 4	N V I D I A A c t i v e c o p p e r s p l i t t e r c a b l e, I B t w i n p o

				rt N D R 8 0 0 G b /s t o 2 x 4 0 0 G b /s , O S F P t o 2 x Q S F P 1 1 2, 4 m	
NDR	N/A	9 8 0- 91 8 1	M C A 7 J 6	N V I D I A	P r o t o t

C	5	c	y
-	-	t	p
0	N	v	e
0	0	e	c
N	0	c	o
0	5	o	p
0		p	e
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5		p	l
		i	t
		t	e
		r	c
		a	b
		l	e,
		I	B
		t	w
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		p	o
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		N	D
		R	8
		0	0
		0	0
		G	b
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		o	2
		x	4
		0	0
		0	0
		G	

				b /s , O S F P t o 2 x Q S F P 1 1 2, 5 m
NDR	N/A	9 8 0- 9 7 6 G - 0 0 N 0 0 4	M C A 7 J 7 5 - N 0 0 4	N V I A A c t i v e c o p p e r s p l i t t e r c a P r o t o t y p e

ble, I B t w in p o r t N D R 8 0 0 G b /s t o 4 x 2 0 0 G b /s , O S F P t o 4 x Q S F P 1 1 2,

				4 m
NDR	N/A	9 8 0- 9 7 6 H - 0 0 N 0 0 5	M C A 7 J 7 A 5 - N 0 0 5	P r o t o t y p e N V I D I A A D A P T I V E C O P P E R S P L I T T E R C A B L E I B T W I N P O R T N D R 8 0 0 G b

				/s t o 4 x 2 0 0 G b /s , O S F P t o 4 x Q S F P 1 1 2, 5 m
NDR	N/A	9 8 0- 9 9 2 8- 0 0 0 0 0 1	M C P 7 Y 1 0 - N O O 1	P - R el A p a s s i v e c o p p

er splitter cable, 1 Btwin port NDR 8000 Gb/s to 2x4000 Gb/s, OSFP

				o 2 x Q S F P 1 1 2, 1 m
NDR	N/A	9 8 0- 9 9 2 9- 0 0 N 0 0 2	M C P 7 Y 1 0 - N 0 0 2	N V I D I A p a s s i v e c o p p e r s p l i t t e r c a b l e, I B t w i n P - R e l

				port NDR 800 Gb/s to 2x400 Gb/s, OSFP to 2xQSFP112, 2m
NDR	N/A	980-91	MCPI7	NVI-Rel

80000003	Y10-N003	Appassive copper splitters cable, 1B twin port NDR 800Gb/s to 2x4
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				0 0 G b /s , O S F P t o 2 x Q S F P 1 1 2, 3 m
NDR	N/A	9 8 0- 9 8 0 A- 0 0 N 0 1 A	M C P 7 Y 1 0 - N O 1 A	N V I D I A p a s s i v e c o p p e r s p l i t

er cable, I B t w in p o r t N D R 8 0 0 G b /s t o 2 x 4 0 0 G b /s , O S F P t o 2 x Q S F

				P 1 1 2, 1. 5 m
NDR	N/A	9 8 0- 9 8 0 Q - 0 0 N 0 2 A	M C P 7 Y 1 0 - N 0 2 A	N V I D I A p a s s i v e c o p p e r s p l i t t e r c a b l e, I B t w i n p o r t N D
				P - R e l

				R 8 0 0 G b /s t o 2 x 4 0 0 G b /s , O S F P t o 2 x Q S F P 1 1 2, 2. 5 m
NDR	N/A	9 8 0- 9I 8 0 B- 0	M C P 7 Y 4 0 -	N V I D I A p a s s w o r d

0	N	si
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		2
		0
		0
		G
		b

				/s , O S F P t o 4 x Q S F P 1 1 2, 1 m
NDR	N/A	9 8 0- 9 8 0 C - 0 0 N 0 0 2	M C P 7 Y 4 0 - N 0 2	N V I D I A p a s s i v e c o p p e r s p l i t t e r c a P - R e l

ble, I B t w in p o r t N D R 8 0 0 G b /s t o 4 x 2 0 0 G b /s , O S F P t o 4 x Q S F P 1 1 2,

				2 m
NDR	N/A	9 8 0- 9 7 5 R- 0 0 N 0 0 3	M C P 7 Y 4 0 - N 0 0 3	P - R el N V I D I A p a s s i v e c o p p e r s p l i t t e r c a b l e, I B t w i n p o r t N D R 8 0 0 G

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				t o 4 x Q S F P 1 1 2, 1. 5 m
NDR	N/A	9 8 0- 91 7 5 S- 0 0 N 0 2 A	M C P 7 Y 4 0 - N 0 2 A	N V I D I A p a s s i v e c o p p e r s p l i t t e r c a b l e, I B t
				P - R e l

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NDR	N/A	980-9173U-0000003	MFP7E10-N003	NVIDIA PaaSive fiber capable, MMF, MPO12 APC, 3m	MP
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NDR	N/A	980-9173V-0000005	MFP7E10-N0005	NVIDIA passive fiber capable, MMF, MPO12 APC, 5m	MP
NDR	N/A	98	MF	NVI	MP

		0-9157W-000007	P7E10-N007	D I A p a s s i v e f i b e r c a b l e, M M F, M P O 1 2 A P C t o M P O 1 2 A P C, 7 m	
NDR	N/A	980-91	MFP7	NVIDI	MP

		57X-00N010	E10-N010	Appassivethebercable, MMF, MPO12APCtoMPO12APC, 10m	
NDR	N/A	980-915	MFP7E	NVIDIA	MP

		7 Y- 0 0 0 0 1 5	1 0 - N 0 0 1 5	p a s s i v e f i b e r c a b l e, M M F , M P O 1 2 A P C t o M P O 1 2 A P C, 1 5 m	
NDR	N/A	9 8 0- 9 5	M F P 7 E	N V I D I A	M P

			7 Z- 0 0 0 0 2 0	1 0 - N 0 0 2 0	p a s s i v e f i b e r c a b l e, M M F, M P O 1 2 A P C t o M P O 1 2 A P C, 2 0 m	
NDR	N/A		9 8 0- 9 5 7	M F P 7 E 1	N V I D I A p	M P

				3-00N025	0-N025	assive fiber cable, MMF, MPO12 APC to MPO12 APC, 25m	
NDR	N/A			98091570	MFPIE10	NVIDIA	MP

			00N030	-N030	ssive fiber cable, MMF, MPO12 APC, MPO12 APC, 30m	
NDR	N/A		980-91570-0	MFPE10-	NVIDIApass	MP

		0 N 0 3 5	N O 3 5	si v e f i b e r c a b l e, M M F, M P O 1 2 A P C t o M P O 1 2 A P C, 3 5 m	
NDR	N/A	9 8 0- 9 5 7 0- 0 0	M F P 7 E 1 0 - N	N V I D I A p a s s i	M P

			050	50	efiber cable, MMF, MPO12 APC to MPO12 APC, 50m	
NDR	N/A		980-91571-00N0	MFPIE0-N0	NVIDIA passive	MP

				03	03	fiber cable, MMF, MPO12 APC, 3m	
NDR	N/A			980-91572-00NO	MFP7E20-NO	NVIDIA passive	MP

				05	05	fiber cable, MMF, MPO12 APC to 2x MPO12 APC, 5m	
NDR	N/A			9809157300N0	MFPIE20-N0	NVIDIA passive	MP

				07	07	fiber cable, MMF, MPO12 APC to 2x MPO12 APC, 7m	
NDR	N/A			980-91554-00NO	MFPIE20-NO	NVIDIA passive	MP

				10	10	fiber cable, MMF, MPO12 APC connector 2x MPO12 APC, 10m	
NDR	N/A			980-9155-00N	MFPIE20-NO	NVIDIA Appassiv	MP

			015	15	efiber cable, MMFP O12APC to 2xMFP O12APC, 15m	
NDR	N/A		980-91556-00	MFPIE20-N	NVIDIA passiv	MP

				0 N 0 3 0	N 0 3 0	si v e f i b e r c a b l e, M M F, M P O 1 2 A P C t o 2 x M P O 1 2 A P C, 3 0 m	
NDR	N/A			9 8 0- 9I 5 5 Z-	M F P 7 E 2 0	N V I D I A p a	M P

			00N050	-N050	ssive fiber cable, MMF, MPO12 APC to 2x MPO12 APC, 50m	
NDR	N/A		980-9155	MFPE3	NVIDIA App	MP

				8-000N0001	0-N001	assive fiber cable, SMMPO12APC to MPO12APC, 1m	
NDR	N/A			980915590	MFP7E30-	NVIDIA pas	MP

				0 N 0 0 0 2	N 0 0 2	si v e f i b e r c a b l e, S M F, M P O 1 2 A P C t o M P O 1 2 A P C, 2 m	
NDR	N/A			9 8 0- 91 5 5 A- 0 0 N	M F P 7 E 3 0 - N O	N V I D I A p a s s i v	M P

				003	03	efiber cable, SFP, MPO12 APC to MPO12 APC, 3m	
NDR	N/A			9809155B00N00	MFP7E30-N005	NVIDIA Appassivifi	MP

			05	bercabl e, S M F, M P O 1 2 A P C t o M P O 1 2 A P C, 5 m	
NDR	N/A		980-9158C-00N007	MFP7E30-N007	MPI Appasivibe

				r c a b l e, S M F, M P O 1 2 A P C t o M P O 1 2 A P C, 7 m
NDR	N/A	9 8 0- 9 5 8 D - 0 0 N 0 1 0	M F P 7 E 3 0 - N 0 1 0	N V I D I A p a s s i v e f i b e r c M P

				a b l e, S M F, M P O 1 2 A P C t o M P O 1 2 A P C, 1 0 m
NDR	N/A	9 8 0- 9 5 8 E- 0 0 N 0 1 5	M F P 7 E 3 0 - N 0 1 5	N V I D I A p a s s i v e f i b e r c a M P

				bl e, S M F, M P O 1 2 A P C t o M P O 1 2 A P C, 1 5 m
NDR	N/A	9 8 0- 91 5 8 F- 0 0 N 0 2 0	M F P 7 E 3 0 - N 0 2 0	N V I A p a s s i v e f i b e r c a bl M P

				e, S M F, M P O 1 2 A P C t o M P O 1 2 A P C, 2 0 m
NDR	N/A	9 8 0- 9 5 8 G - 0 0 N 0 3 0	M F P 7 E 3 0 - N 0 3 0	N V I D I A p a s s i v e f i b e r c a b l e, M P

				S M F, M P O 1 2 A P C t o M P O 1 2 A P C, 3 0 m
NDR	N/A	9 8 0- 91 5 8 0- 0 0 N 0 3 0	M F P 7 E 3 0 - N 0 4 0	N V I D I A p a s s i v e f i b e r c a b l e, S M P

				M F, M P O 1 2 A P C t o M P O 1 2 A P C, 4 0 m
NDR	N/A	9 8 0- 9 5 8 H - 0 0 N 0 5 0	M F P 7 E 3 0 - N 0 5 0	N V I D I A p a s s i v e f i b e r c a b l e, S M P

				F, M P O 1 2 A P C t o M P O 1 2 A P C, 5 0 m
NDR	N/A	9 8 0- 9 5 8 1- 0 0 N 0 5 0	M F P 7 E 3 0 - N 0 6 0	N V I D I A p a s s i v e f i b e r c a b l e, S M F, M P

				M P O 1 2 A P C t o M P O 1 2 A P C, 6 0 m
NDR	N/A	9 8 0- 91 5 8 2- 0 0 N 0 5 0	M F P 7 E 3 0 - N 0 7 0	N V I D I A p a s s i v e f i b e r c a b l e, S M F, M P

				O 1 2 A P C t o M P O 1 2 A P C, 1 0 0 m
NDR	N/A	9 8 0- 9 5 8 J- 0 0 N 1 5 0	M F P 7 E 3 0 - N 1 5 0	N V I D I A p a s s i v e f i b e r c a b l e, S M F, M P

				O 1 2 A P C t o 2 x M P O 1 2 A P C, 1 0 m
NDR	N/A	9 8 0- 91 5 6 0 0 - 0 0 N 0 1 5	M F P 7 E 4 0 - N 0 1 5	N V I D I A p a s s i v e f i b e r c a b l e, S M F, M P

				P O 1 2 A P C t o 2 x M P O 1 2 A P C, 1 5 m
NDR	N/A	9 8 0- 91 5 6 P- 0 0 N 0 2 0	M F P 7 E 4 0 - N 0 2 0	N V I D I A p a s s i v e f i b e r c a b l e, S M F, M P

				M P O 1 2 A P C t o 2 x M P O 1 2 A P C, 2 0 m
NDR	N/A	9 8 0- 9 5 6 Q - 0 0 N 0 3 0	M F P 7 E 4 0 - N 0 3 0	N V I D I A p a s s i v e f i b e r c a b l e, S M P

				F, M P O 1 2 A P C t o 2 x M P O 1 2 A P C, 3 0 m
NDR	N/A	9 8 0- 9 5 6 R- 0 0 0 0 5 0	M F P 7 E 4 0 - N 0 5 0	N V I D I A p a s s i v e f i b e r c a b l e, S M P

				M F, M P O 1 2 A P C t o 2 x M P O 1 2 A P C, 5 0 m
NDR	N/A	9 8 0- 91 6 9 3- 0 0 N S 0 0	M M A I Z O - N S 4 0 0	N V I D I A S i n g l e s p o r t r a n s c e i v e

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G
b
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D
R,
Q
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O
1
2
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C,
8
5
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n
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F,
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5
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a

HDR / 200GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy P/N	Description	Lifecycle Phase
HDR	NA	980-9145-L-00H150	MFS1S00-H150E	NVIDIA Active fiber cable, IB HDR, up to 2	EOL [HV M]

				O O G b/s, Q S F P 5 6, L S Z H, bl a c k p ul t a b, 1 5 0 m
HDR	NA	9 8 0- 91 4 5 0 0 - 0 0 H 2 0 0	M F S 1 S 0 0 - H 2 0 0 E	N V I D I A a c t i v e fi b er c a bl e, IB E O L [E V T]

				H D R, u p t o 2 0 0 G b/ s, Q S F P 5 6, L S Z H, bl a c k p ul lt a b, 2 0 0 m
NDR	NA	9 8 0- 9l 0 6 8- 0	M M S 1 X 0 0 -	N V I A s i n g l e
				E a r l y B O M

0	N	p
N	S	or
M	4	t
0	0	tr
0	0	a
		n
		s
		c
		e
		i
		v
		e
		,
		4
		0
		0
		G
		b
		p
		s,
		N
		D
		R,
		Q
		S
		F
		P
		1
		1
		2,
		M
		P
		O,
		1
		3
		1
		0
		n
		m
		S
		M
		F,
		u
		p
		t
		o

				500m, flat top
HDR	200GE	980-91548-000H0001	MCPI650-H001E30	Nvidia Parallel Processing Capable, up to 200Gbps, QSP

				5 6 t o Q S F P 5 6, 1 m
HDR	200GE	9 8 0- 9 5 4 9- 0 0 H 0 0 2	M C P 1 6 5 0 - H 0 0 2 E 2 6	N v i d i a P a s s i v e C o p p e r c a b l e, u p t o 2 0 0 G b p s, Q S
				H V M

				F P 5 6 t o Q S F P 5 6, 2 m
HDR	200GE	9 8 0- 9l 5 4 A - 0 0 H 0 0 A	M C P 1 6 5 0 - H 0 0 A E 3 0	N v i d i a P a s s i v e C o p p e r c a b l e, u p t o 2 0 0 G b p s, H V M

				Q S F P 5 6 t o Q S F P 5 6, 0. 5 m
HDR	200GE	9 8 0- 9 5 4 B - 0 0 H 0 1 A	M C P 1 6 5 0 - H 0 1 A E 3 0	N v i d i a P a s s i v e C o p p e r c a b l e, u p t o 2 0 0 G
				H V M

				E, 2 0 0 G b/ s, Q S F P 5 6, L S Z H, 1 m , bl a c k p ul lt a b, 3 0 A W G
N/A	200GE	9 8 0- 9l 5 4 D - 0 0	M C P 1 6 5 0 - V 0	N V I D I A P a s s i v e L T B [H V M]

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E,
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s,
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S
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P
5
6,
L
S
Z
H,
2
m
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b
l
a
c
k
p
u
l
t
a
b,
2
6

				A W G
N/A	200GE	9 8 0- 9 5 4 G - 0 0 V 0 0 3	M C P 1 6 5 0 - V 0 0 3 E 2 6	N V I D I A P a s s i v e C o p p e r c a b l e, 2 0 0 G b E, 2 0 0 G b/ s, Q S F P 5 6, L S Z H,

				3 m , bl a c k p ul t a b, 2 6 A W G
N/A	200GE	9 8 0- 9l 5 4 H - 0 0 V 0 0 A	M C P 1 6 5 0 - V 0 A E 3 0	N V I D I A P a s s i v e C o p p er c a bl e, 2 0 0 G b E, 2 0

1
A

E
3
0

p
p
e
r
c
a
b
l
e,
2
0
0
G
b
E,
2
0
0
G
b/
s,
Q
S
F
P
5
6,
L
S
Z
H,
1.
5
m
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b
l
a
c
k
p
u
l
t
a
b,
3
0
A

N/A	200GE	980-9154L-00V02A	MCPI1650-V02AE26	WG NVIDIA [HVMS] NICs, 200GbE, 200Gb/s, QSFP56, LSZH, 2.	LTB [HVMS]
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				5 m , bl a c k p u l t a b, 2 6 A W G
HDR	200GE	9 8 0- 9 3 9 E- 0 0 H 0 0 1	M C P 7 H 5 0 - H 0 0 1 R 3 0	N v i d i a P a s s i v e c o p p e r s p l i t t e r c a b l e, 2 0 0 0

				G b p s t o 2 x 1 0 0 G b p s, Q S F P 5 6 t o 2 x Q S F P 5 6, 1 m
HDR	200GE	9 8 0- 9 9 9 F- 0 0 H 0	M C P 7 H 5 0 - H 0 0	N v i d i a P a s s i v e c
				H V M

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s
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e,
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o
2
x
1
0
0
G
b
p
s,
Q
S
F
P
5
6
t
o
2
x
Q
S
F
P

				5 6, 2 m
HDR	200GE	9 8 0- 9 9 8 G - 0 0 H 0 1 A	M C P 7 H 5 0 - H 0 1 A R 3 0	N v i d i a P a s s i v e c o p p e r s p l i t t e r c a b l e, 2 0 0 G b p s t o 2 x 1 0 0 G b
				H V M

				p s, Q S S F P 5 6 t o 2 x Q S F P 5 6, 1. 5 m
N/A	200GE	9 8 0- 9I 9 8 H - 0 0 V 0 0 1	M C P 7 H 5 0 - V 0 0 1 R 3 0	N V I D I A p a s s i v e c o p p e r h y b r i d c a b l e

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s,
Q
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F
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6
t
o
2
x
Q
S
F
P
5
6,
c
o
l
o
r
e
d,
1

				m , 3 0 A W G
N/A	200GE	9 8 0- 9 9 8 - 0 0 V 0 0 2	M C P 7 H 5 0 - V 0 0 2 R 2 6	N V I D I A p a s s i v e c o p p e r h y b r i d c a b l e, 2 0 0 G b E 2 0 0 G b/ s t
				L T B [H V M]

				o 2 x 1 0 0 G b/ s, Q S F P 5 6 t o 2 x Q S F P 5 6, c o l o r e d, 2 m , 2 6 A W G
N/A	200GE	9 8 0- 91 9 8	M C P 7 H 5	N V I D I A p a E O L [H V

J-000V0003	0-0003R26	ssi vec o p p e r h y b r i d c a b l e, 2000G b/ s t o 2 x 100G b/ s, Q S F P 5	M]
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				6 t o 2 x Q S F P 5 6, c o l o r e d, 3 m , 2 6 A W G
N/A	200GE	9 8 0- 9 9 8 K- 0 0 V 0 1 A	M C P 7 H 5 0 - V 0 1 A R 3 0	N V I D I A p a s s i v e c o p p e r h y b r i d
				E O L [H V M]

c
a
b
l
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G
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x
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s,
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F
P
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6,
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N/A	200GE	98091A3X00V001	MCP7H70-V001R30	NVIDIA Pascal silicon vcooper hybrid cable, 200GbE 200Gb/s to 4x50Gb/s,	EOL [P-Rel]
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				Q S F P 5 6 t o 4 x S F P 5 6, c o l o r e d, 1 m , 3 0 A W G
N/A	200GE	9 8 0- 9 A 3 Y- 0 0 V 0 0 2	M C P 7 H 7 0 - V 0 0 2 R 2 6	N V I D I A p a s i v e c o p p e r h E O L [P - R e l]

y
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0
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s,
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F
P
5
6
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F
P
5
6,
c

				ol or e d, 2 m , 2 6 A W G
N/A	200GE	9 8 0- 9l 4 3 Z- 0 0 V 0 0 3	M C P 7 H 7 0 - V 0 0 3 R 2 6	N V I D I A p a s i v e c o p p e r h y b r i d c a b l e, 2 0 0 G b E 2 0
				E O L [P - R el]

				0 G b/ s t o 4 x 5 0 G b/ s, Q S F P 5 6 t o 4 x 4 S F P 5 6, c o l o r e d, 3 m , 2 6 A W G	
N/A	200GE	9 8	M C	N VI	E O

0-9	P	D	L
4	7	IA	[
3	H	p	P
0-0	7	a	-
0	0	s	R
V	-	si	el
0	V	v]
0	0	e	
1	1	c	
A	A	o	
	R	p	
	3	p	
	0	er	
		h	
		y	
		b	
		ri	
		d	
		c	
		a	
		bl	
		e,	
		2	
		0	
		0	
		G	
		b	
		E	
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		G	
		b/	
		s	
		t	
		o	
		4	
		x	
		5	
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		G	
		b/	
		s,	
		Q	
		S	

				FP56to4xSFP56,color ed,1.5m,30AWG
N/A	200GE	980-91431-00V02A	MCPL7H70-V02AR26	ENVIADIA [P-R el] ve co pp er hy

b
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G
b/
s,
Q
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F
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x
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				ored, 2.5m, 26AWG
HDR	200GE	980-9146K-00H001	MCP7Y660-H001	NPDIAs passivesive copper splitters cable, 400(2x200)

				G b p s t o 2 x 2 0 0 G b p s, O S F P t o 2 x Q S F P 5 6, 1 m , fi n t o fl at
HDR	200GE	9 8 0- 91 4 6	M C P 7 Y 6	N V I D I A p a M P

L-00H002	0-H002	s-si v e c o p p e r s p l i t t e r c a b l e, 4 0 0 (2 x 2 0 0) G b p s t o 2 x 2 0 0 G b p s, O S F P
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				t o 2 x Q S F P 5 6, 2 m , fi n t o fl at
HDR	200GE	9 8 0- 9I 9 3 M - 0 0 H 0 1 A	M C P 7 Y 6 0 - H 0 1 A	N V I D I A p a s s i v e c o p p e r s p l i t e r c a b l e, 4 M P

00(2x200)Gbpssto2x200Gbps,OSFPto2xQSFP56,1.5m',fnto

				fl at
HDR	200GE	9 8 0- 9 9 3 N - 0 0 H 0 0 1	M C P 7 Y 7 0 - H 0 0 1	N V I D I A p a s s i v e c o p p e r s p l i t t e r c a b l e, 4 0 0 (2 x 2 0 0) G b p s t o 4 x 1 0
				M P

				O G b p s, O S F P t o 4 x Q S F P 5 6, I m , fi nt o fl at
HDR	200GE	9 8 0- 9I 9 3 0 - 0 0 H 0 0 2	M C P 7 Y 7 0 - H 0 0 2	N V I D I A p a s s i v e c o p p e r s M P

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s,
O
S
F
P
t
o
4
x
Q
S
F
P
5
6,

				2 m , fi n t o fl at
HDR	200GE	9 8 0- 9l 4 7 P- 0 0 H 0 1 A	M C P 7 Y 7 0 - H 0 1 A	N V I D I A p a s s i v e c o p p e r s p l i t t e r c a b l e, 4 0 0 (2 x 2 0 0) G b p
				M P

0-9	S	di
4	I	a
5	S	a
7-	0	ct
0	0	iv
0	-	e
H	0	H
0	0	o
0	3	p
3	V	ti
		c
		al
		c
		a
		bl
		e,
		u
		p
		r
		t
		o
		2
		0
		0
		G
		b
		p
		r
		s
		,
		Q
		S
		F
		P
		5
		6
		t
		o
		Q
		S
		F
		P
		5
		6,
		3
		m

HDR	N/A	980-9145A-00H005	MFS1S00-H005E	NVIDIA Software Release 200Gb/s, QSP56, LSH, blakupul	EOL [HVM]
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				It a b, 5 m	
HDR	200GE	9 8 0- 9 4 5 D - 0 0 H 0 0 5	M F S I S O O - H O O 5 V	N v i d i a a c t i v e o p t i c a l c a b l e, u p t o 2 0 0 G b p s , Q S F P 5 6 t o Q S	M P

				F P 5 6, 5 m
HDR	N/A	9 8 0- 9 4 5 G - 0 0 H 0 1 0	M F S I S O - H O I E	N V I D I A S a c t i v e f i b e r c a b l e, I B H D R, u p t o 2 0 0 G b/ s, Q S F P 5 6, L S Z
				E O L [H V M]

				F P 5 6 t o Q S F P 5 6, 1 0 m
HDR	N/A	9 8 0- 9 4 5 M - 0 0 H 0 1 5	M F S I S O O - H O 1 5 E	N V I D I A a c t i v e f i b e r c a b l e, I B H D R, u p t o 2 0 0 G b/ s, E O L [H V M]

				Q S F P 5 6, L S Z H, b l a c k p u l t a b, 1 5 m
HDR	200GE	9 8 0- 91 4 5 0 0 - 0 0 H 0 1 5	M F S 1 S 0 0 - H 0 1 5 V	N v i d i a a c t i v e o p t i c a l c a b l e, u p t o 2
				M P

				<p> p t o 2 0 0 G b/ s, Q S F P 5 6, L S Z H, bl a c k p ul t a b, 2 0 m </p>
HDR	200GE	980-9145-T-00H020	MFSS0-O-HO20V	<p> N v i d i a s a c t i v e o p t i c al M P </p>

				c a b l e, u p t o 2 0 0 0 G b p s , Q S F P 5 6 t o Q S F P 5 6, 2 0 m
HDR	N/A	9 8 0- 9 4 5 Y- 0 0 H 0	M F S I S O O - H O 3	N V I D I A a c t i v e f i b e r
				E O L [H V M]

			30	OE	cable, HDR, upto 200Gb/s, QSFP56, LSZH, backpultab, 30m	
HDR	200GE		980-91	MFS1	Nvidia	MP

				4 4 0- 0 0 H 0 3 0	S 0 - H 0 3 0 V	a c t i v e - H o p t i c a l c a b l e, s u p p o r t i n g G b p s , Q S F P 5 6 t o Q S F P 5 6, 3 0 m			
HDR	N/A			9 8	M F	N V	E O		

0-9	S	D	L
4	I	I	[
5	S	a	H
5-	0	ct	V
0	0	iv	M
0	-	e]
H	H	fi	
0	0	b	
5	5	er	
0	0	c	
	E	a	
		bl	
		e,	
		IB	
		H	
		D	
		R,	
		u	
		p	
		t	
		o	
		2	
		0	
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		G	
		b/	
		s,	
		Q	
		S	
		F	
		P	
		5	
		6,	
		L	
		S	
		Z	
		H,	
		bl	
		a	
		c	
		k	
		p	
		ul	
		It	
		a	

				b, 5 0 m
HDR	200GE	9 8 0- 9 4 4 7- 0 0 H 0 5 0	M F S 1 S 0 0 - H 0 5 0 V	N v i d i a a c t i v e - H o p t i c a l c a b l e, u p t o 2 0 0 G b p s , Q S F P 5 6 t o Q S F
				M P

				P 5 6, 5 0 m
HDR	N/A	9 8 0- 9 4 4 G - 0 0 H 1 0 0	M F S I S O O - H I O E	N V I D I A S a c t i v e f i b e r c a b l e, I B H D R, u p t o 2 0 0 G b/ s, Q S F P 5 6, L S Z
				E O L [H V M]

				H, b l a c k p u l t a b, 1 0 0 m
HDR	200GE	9 8 0- 9l 4 4 H - 0 0 H 1 0 0	M F S 1 S 0 0 - H 1 0 0 V	N v i d i a s a c t i v e o p t i c a l c a b l e, u p t o 2 0 0 G b p s , Q
				M P

				S F P 5 6 t o Q S F P 5 6, 1 0 0 m
HDR	N/A	9 8 0- 9 4 4 - 0 0 H 1 3 0	M F S I S O O - H I 3 O E	N V I D I A a c t i v e f i b e r c a b l e, I B H D R, u p t o 2 0 0 G
				E O L [H V M]

				b/ s, Q S F P 5 6, L S Z H, bl a c k p ul lt a b, 1 3 0 m
HDR	200GE	9 8 0- 9l 4 4 K- 0 0 H 1 3 0	M F S I S O O - H 1 3 0 V	N vi di a a ct iv e o p ti c al c a bl e, u p M P

				t o 2 0 0 G b p s , Q S F P 5 6 t o Q S F P 5 6, 1 3 0 m
HDR	200GE	9 8 0- 91 4 4 N - 0 0 H 1 5 0	M F S 1 S 0 - H 1 5 0 V	N v i d i a a c t i v e o p t i c a l c a b l M P

				e, u p r t o 2 0 0 G b p s , Q S F P 5 6 t o Q S F P 5 6, 1 5 0 m
N/A	200GE	9 8 0- 9I 4 4 P- 0 0 V 0 0 3 3	M F S I S O O - V O 3 E	N V I D I A a c t i v e f i b e r c a L T B [H V M]

				bl e, 2 0 0 G b E, 2 0 0 G b/ s, Q S F P 5 6, L S Z H, bl a c k p ul lt a b, 3 m
N/A	200GE	9 8 0- 9l 4 5 Q - 0	M F S I S O O - V	N V I D I A a ct iv e fi L T B [H V M]

		0V0005	005E	bercable, 200G bE, 200G b/s, QSP56, LSH, bl ack p ul t a b, 5 m
N/A	200GE	980-914	MFS1S	NVIDIA LTB [H

5R-00V010	00V010E	ctive fiber cable, 200GbE, 200Gb/s, QSFP56, LSZH, black pltab, 10m	VM]
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N/A	200GE	980-9144S-00V015	MFS1S00-V015E	NVIDIA Selective Fabrication, 200GbE, 200Gb/s, QSFP56, LSZH, backpulta	LTB [HVM]
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				b, 1 5 m
N/A	200GE	9 8 0- 9 4 4 T- 0 0 V 0 2 0	M F S 1 S O O - V O 2 O E	N V I D I A S a c t i v e f i b e r c a b l e, 2 0 0 G b E, 2 0 0 G b/ s, Q S F P 5 6, L S Z H, bl a c

				k p u l t a b, 2 0 m
N/A	200GE	9 8 0- 9l 4 4 U - 0 0 V 0 3 0	M F S I S O O - V 3 O E	N V I D I A a c t i v e f i b e r c a b l e, 2 0 0 G b E, 2 0 0 G b/ s, Q S F P 5 6, L S
				L T B [H V M]

				Z H, bl a c k p ul lt a b, 3 0 m
N/A	200GE	9 8 0- 9l 4 4 V- 0 0 V 0 5 0	M F S I S O - V O 5 O E	N V I D I A S a c t iv e fi b er c a bl e, 2 0 0 G b E, 2 0 0 G b/ s, Q S F
				L T B [H V M]

				P 5 6, L S Z H, bl a c k p ul t a b, 5 0 m
N/A	200GE	9 8 0- 9l 4 4 W - 0 0 V 1 0 0	M F S I S O W - V I O E	N V I D I A S a c t iv e fi b er c a bl e, 2 0 0 G b E, 2 0 0 G E O L [H V M] [H I B E R N /A T E]

				b/ s, Q S F P 5 6, L S Z H, bl a c k p ul t a b, 1 0 0 m
HDR	N/A	9 8 0- 9l 4 5 2- 0 0 H 0 0 3	M F S 1 S 5 0 - H 0 0 3 E	N V I D I A a c t i v e f i b e r s p l i t e r c a bl

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HDR	200GE	980-91445-00H0003	MFS1S50-H003V	Nvidia SaaS activation - Hop Optical splitter cable, 200Gb ps to 2x 100Gb ps , QSFP	HV M
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				56to2xQSFP56,3m
HDR	N/A	980-91956-00H005	MFS1S50-H005E	NVIDIA Santa Clara splitter cable, IB HDR, 200Gb/s EOL [HVM]

				t o 2 x 1 0 0 G b/ s, Q S F P 5 6 t o 2 x Q S F P 5 6 , L S Z H, 5 m
HDR	200GE	9 8 0- 91 9 6 9- 0 0 H 0	M F S I S 5 0 - H 0 0	N v i d i a a c t i v e o p t i c a l i z e d

0	5	c
5	V	a
		s
		p
		i
		t
		t
		r
		c
		a
		b
		e,
		2
		0
		0
		G
		b
		p
		s
		t
		o
		2
		x
		1
		0
		0
		G
		b
		p
		s
		,
		Q
		S
		S
		F
		P
		5
		6
		t
		o
		2
		x
		Q
		S
		S
		F
		P
		5

				6, 5 m
HDR	N/A	9 8 0- 9 9 5 A - 0 0 H 0 1 0	M F S I S 5 0 - - H 0 1 0 E	N V I D I A S a c t i v e f i b e r s p l i t t e r c a b l e, I B H D R, 2 0 0 0 G b/ s t o 2 x 1 0 0 G b/ s, Q

			SFP56to2xQSFP56,LSZH,10m
HDR	200GE	980-9196D-000H010	MFS1S50-H01V Nvidia act e optical split ter cable HV

				e, 2 0 0 G b p s t o 2 x 1 0 0 G b p s , Q S F P 5 6 t o 2 x Q S F P 5 6, 1 0 m
HDR	N/A	9 8 0- 9I 9	M F S I S	N V I D I A a E O L [H

5	5	ct	V
E-	0	iv	M
0	-	e]
0	H	fi	
H	0	b	
0	1	er	
1	5	s	
5	E	pl	
		it	
		te	
		r	
		c	
		a	
		bl	
		e,	
		IB	
		H	
		D	
		R,	
		2	
		0	
		0	
		G	
		b/	
		s	
		t	
		o	
		2	
		x	
		1	
		0	
		0	
		G	
		b/	
		s,	
		Q	
		S	
		F	
		P	
		5	
		6	
		t	
		o	
		2	
		x	

				Q S F P 5 6 . L S Z H, 1 5 m
HDR	200GE	9 8 0- 91 9 6 H - 0 0 H 0 1 5	M F S 1 S 5 0 - H 0 1 5 V	N v i d i a a c t i v e o p t i c a l s p l i t t e r c a b l e, 2 0 0 G b p s t

				0 2 x 1 0 0 G b p s , Q S F P 5 6 t o 2 x Q S F P 5 6, 1 5 m
HDR	N/A	9 8 0- 91 9 51 - 0 0 H 0 2 0	M F S 1 S 5 0 - H 0 2 0 E	N V I D I A a c t i v e f i b e r s p l i t

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P
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t
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				Z H, 2 0 m
HDR	200GE	9 8 0- 9l 9 6 L- 0 0 H 0 2 0	M F S l S 5 0 - H 0 2 0 V	N v i d i a a c t i v e o p t i c a l s p l i t t e r c a b l e, 2 0 0 G b p s t o 2 x 1 0 0 G b p
				H V M

				s , Q S S F P 5 6 t o 2 x Q S S F P 5 6, 2 0 m
HDR	N/A	9 8 0- 91 9 5 M - 0 0 H 0 3 0	M F S I S 5 O - H 0 3 E	N V I D I A a c t i v e f i b e r s p l i t t e r c a b l e, I B H D

				R, 2 0 0 G b/ s t o 2 x 1 0 0 G b/ s, Q S F P 5 6 t o 2 x Q S F P 5 6 , L S Z H, 3 0 m	
HDR	200GE	9 8 0-	M F S	N v i d i	H V M

9	1	a
9	S	a
6	5	ct
P-	0	iv
0	-	e
0	H	o
0	0	p
3	3	t
0	0	c
	V	al
		s
		pl
		it
		te
		r
		c
		a
		bl
		e,
		2
		0
		0
		G
		b
		p
		s
		t
		o
		2
		x
		1
		0
		0
		G
		b
		p
		s
		,
		Q
		S
		F
		P
		5
		6
		t

				o 2 x Q S F P 5 6, 3 0 m
HDR	200GE	9 8 0- 9 9 5 S- 0 0 H 0 4 0	M F S 1 S 5 0 - H 0 4 0 V	N v i d i a s a c t i v e - o p t i c a l s p l i t t e r c a b l e, 2 0 0 G b p s t o 2
				P r o t o t y p e

				x 1 0 0 G b p s , Q S F P 5 6 t o 2 x Q S F P 5 6, 4 0 m
HDR	200GE	9 8 0- 91 9 5 T- 00 H 0 5 0	M F S 1 S 5 0 - H 0 5 0 V	N v i d i a s a c t i v e o p t i c a l s p l i t P r o t o t y p e

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G
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b
p
s
,
Q
S
F
P
5
6
t
o
2
x
Q
S
F
P
5
6,
5
0
m

N/A	200GE	980-9195Q-00V003	MFS1S50-V03E	NVIDIA Selective fiber splitter cable, 200GbE, 200Gb/s to 2x100Gb/s, QSFP	EOL [HVM]
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				P56to2xQSFP56,LSZH,blackedpulatab,3m
N/A	200GE	980-9196R-00V005	MFS1S50-V005E	NVIDIAactivediversplitter EOL [HVM]

c
a
b
l
e,
2
0
0
0
G
b
E,
2
0
0
0
G
b/
s
t
o
2
x
1
0
0
0
G
b/
s,
Q
S
F
P
5
6
t
o
2
x
Q
S
F
P
5
6,
L
S
Z

				H, b l a c k p u l t a b, 5 m
N/A	200GE	9 8 0- 9l 9 6 S- 0 0 V 0 1 0	M F S 1 S 5 0 - V 0 1 0 E	N V I D I A a c t i v e f i b e r s p l i t t e r c a b l e, 2 0 0 G b E, 2 0 0 G b/ s
				E O L [H V M]

				t o 2 x 1 0 0 G b/ s, Q S F P 5 6 t o 2 x Q S F P 5 6, L S Z H, bl a c k p ul lt a b, 1 0 m
N/A	200GE	9 8	M F	N VI E O

0-9196T-00V015	S1S50-V015E	DLASactivewifibersplittercable, 2000GbE, 2000Gb/s to 2x1000Gb/s, QSFP5	L [HVM]
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				6 t o 2 x Q S F P 5 6, L S Z H, bl a c k p ul t a b, 1 5 m
N/A	200GE	9 8 0- 9l 9 5 U - 0 0 V 0 2 0	M F S 1 S 5 0 - V 0 2 0 E	N V I D I A S a ct iv e fi b er s pl it te r c E O L [H V M]

a
b|
e,
2
0
0
G
b
E,
2
0
0
G
b/
s
t
o
2
x
1
0
0
G
b/
s,
Q
S
F
P
5
6
t
o
2
x
Q
S
F
P
5
6,
L
S
Z
H,

				bl a c k p u l t a b, 2 0 0 m
N/A	200GE	9 8 0- 9l 9 5 V- 0 0 V 0 3 0	M F S 1 S 5 0 - V 0 3 0 E	N V I D I A S a c t i v e f i b e r s p l i t t e r c a b l e, 2 0 0 G b E, 2 0 0 G b/ s
				E O L [H V M]

				t o 2 x 1 0 0 G b/ s, Q S F P 5 6 t o 2 x Q S F P 5 6, L S Z H, b l a c k p u l t a b, 3 0 m
HDR	N/A	9 8	M F	N V I L T

0-91961-00H010	S1S90-H010E	DLA Sa ct iv e fi ber s pl it te r c a bl e, IB HD R, 2 x 2 0 0 0 G b/ s t o 2 x 2 0 0 0 G b/ s, 2 x QS S F	B [H V M]
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				P 5 6 t o 2 x Q S F P 5 6 , L S Z H, 1 0 m
HDR	N/A	9 8 0- 91 4 2 3- 0 0 H 0 2 0	M F S I S 9 0 - H 0 2 0 E	N V I D I A S a c t i v e f i b e r s p l i t t e r c a b l e, I B H D
				L T B [H V M]

R,
2
x
2
0
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b/
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x
2
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0
G
b/
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x
Q
S
F
P
5
6
t
o
2
x
Q
S
F
P
5
6
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L
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Z
H,
2
0
m

HDR	N/A	980-91424-00H030	MFS1S90-H030E	NVIDIA SaaS interactive Hobbies splitter cable, IBDR, 2x200Gb/s 2x200Gb/s, 2xQ	EOL [HVM]
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				S F P 5 6 t o 2 x Q S F P 5 6 , L S Z H, 3 0 m
HDR	N/A	9 8 0- 9I 1 7 S- 0 0 H S 0 0	M M A I T O - H S	N V I D I A t r a n s c e i v e r , H D R, Q S F P 5

				6, M P O, 8 5 0 n m , S R 4, u p t o 1 0 0 m
N/A	200GE	9 8 0-91 2 0 0 T-0 0 V 0 0 0	M M A 1 T 0 0 - V S	N V I D I A t r a n s c e i v e r , 2 0 0 G b E, u p t o H V M

200Gb/s QSFP56, MPO, 850nm SR4, up to 100m

EDR / 100GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy P/N	Description	Lifecycle Phase
N/A	100GE	980-916200-000001	MCPI600-0001	NVIDIA PaaSive Copper cable, ETH 100GbE, 100G	EOL [HVM]

				b/ s, Q S F P, P V C, I m 3 O A W G
N/A	100GE	9 8 0- 9I 6 2 0- 0 0 C 0 0 1	M C P I 6 0 - C 0 0 1 E 3 0 N	N V I D I A P a s s i v e C o p p e r c a b l e, E T H 1 0 0 G b E, H V M

				100Gb/s, QSFP28, 1m, Black, 30AWG, CAN
N/A	100GE	98062S00C001	MCP1600-CC01Z	ENVIADIPassive Copper Cable [MP]

				bl e, E T H 1 0 0 G b E, 1 0 0 G b/ s, Q S F P, 1 m , L S Z H, 3 0 A W G
N/A	100GE	9 8 0- 9I 6 2 1- 0 0 C C 0	M C P I 6 0 0 - C 0	N V I D I A P a s s i v e C E O L [H V M]

		02	02	o p p e r c a b l e, E T H 1 0 0 G b E, 1 0 0 G b / s, Q S F P, P V C, 2 m 3 0 A W G	
N/A	100GE	980-9162-2-	MCP1600	NVIDIA® Pa	Prelimina

0	-	s	r
0	C	si	y
C	0	v	
0	0	e	
0	2	C	
0	E	o	
2	2	p	
	6	p	
	N	er	
		c	
		a	
		bl	
		e,	
		E	
		T	
		H	
		1	
		O	
		O	
		G	
		b	
		E,	
		1	
		O	
		O	
		G	
		b/	
		s,	
		Q	
		S	
		F	
		P	
		2	
		8,	
		2	
		m	
		,	
		Bl	
		a	
		c	
		k,	
		2	
		6	
		A	
		W	

				G, C A- N
N/A	100GE	9 8 0- 9 6 2 V- 0 0 C 0 0 2	M C P 1 6 0 - C 0 2 E 3 0 N	N V I D I A P a s s i v e C o p p e r c a b l e, E T H 1 0 0 G b E, 1 0 0 G b/ s, Q S F P 2 8,

				2 m , Bl a c k, 3 0 A W G, C A- N
N/A	100GE	9 8 0- 9I 6 2 X- 0 0 C 0 0 3	M C P I 6 0 0 - C 0 0 3	N V I D I A P a s s i v e C o p p e r c a b l e, E T H 1 0 0 G b E, I E O L [H V M]

				G b E, 1 0 0 G b/ s, Q S F P 2 8, 3 m , B l a c k, 2 6 A W G, C A- N
N/A	100GE	9 8 0- 91 6 2 0- 0 0 C 0 0 3 3	M C P 1 6 0 0 - C 0 0 3 E 3	N V I D I A P a s s i v e C o p p
				H V M

			O L	er c a b l e, E T H 1 0 0 G b E, 1 0 0 G b/ s, Q S F P 2 8, 3 m , B l a c k, 3 0 A W G, C A- L
N/A	100GE	9 8 0-	M C P	N V I D I E O L

91	1	A	[
6	6	P	M
2	0	a	P
2-	0	s]
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0	L	p	
3	Z	p	
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		Z	
		H,	
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		A	

				W G
N/A	100GE	9 8 0- 9 6 2 5- 0 0 0 0 0 5	M C P 1 6 0 0 - C 0 0 5 E 2 6 L	N V I D I A P a s s i v e C o p p e r c a b l e, E T H 1 0 0 G b E, 1 0 0 G b/ s, Q S F P 2 8, 5 m
				H V M

				G b/ s, Q S F P, P V C, O. 5 m 3 0 A W G
N/A	100GE	9 8 0- 9I 6 2 7- 0 0 C 0 0 A	M C P I 6 0 0 - C 0 0 A E 3 0 N	N V I D I A P a s s i v e C o p p e r c a b l e, E T H 1 0 0 G
				E O L [H V M]

				b E, 1 0 0 G b/ s, Q S F P 2 8, O. 5 m , B l a c k, 3 O A W G, C A- N
N/A	100GE	9 8 0- 91 6 2 9- 0 0 C O O B E 3	M C P 1 6 0 0 - C O O B E 3	N V I D I A P a s i v e C o p p E O L [H V M]

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7
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k,
3
0
A
W
G,
C
A-
N

N/A	100GE	980-9162B-00C01A	MCP1600-CA	NVIDIA Pascal silicon Copper cable, ETH100GbE, 100Gb/s, QSFP, PVC, 1.5m3	EOL [HVM]
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				O A W G
N/A	100GE	9 8 0- 9 6 2 C - 0 0 C 0 1 A	M C P 1 6 0 0 - C 0 1 A E 3 0 N	N V I D I A P a s s i v e C o p p e r c a b l e, E T H 1 0 0 G b E, 1 0 0 G b/ s, Q S F P 2 8,

				1.5 m, Black, 30AWG, CAN
N/A	100GE	980-9162G-00C02A	MCP1600-CC2A	ENVIADIPASISveCCopper cable, ETH100GbE, EOL [HVM]

				100Gb/s, QSFP, P, PVC, 2.5m30AWG
N/A	100GE	980-9162H-00C02A	MCP1600-CCAE26N	NVIDIA PaaSivCooperable, ETH1 EOL [HVM]

2
A

A
E
3
0
L

o
p
p
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r
c
a
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l
e,
E
T
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0
0
G
b
E,
1
0
0
G
b/
s,
Q
S
F
P
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8,
2.
5
m
,
B
l
a
c
k,
3
0
A
W
G,
C
A-
L

N/A	100GE	980-9162M-00C03A	MCP1600-CA	NVIDIA Pascal series v32.43.2408	EOL [P - Rel]
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				6 A W G
EDR	100GE	9 8 0- 9 6 2 P- 0 0 C 0 0 1	M C P 1 6 0 0 - E 0 0 1	N V I D I A P a s s i v e C o p p e r c a b l e, I B E D R, u p t o 1 0 0 G b/ s, Q S F P, L S Z H, E O L [H V M]

				1 m 3 0 A W G
EDR	N/A	9 8 0- 9 6 2 Q - 0 0 E 0 0 1	M C P 1 6 0 0 - E 0 0 1 E 3 0	N V I D I A P a s s i v e C o p p e r c a b l e, I B E D R, u p t o 1 0 0 G b/ s, Q S F P 2

				8, 1 m , Bl a c k, 3 0 A W G
EDR	100GE	9 8 0- 9I 6 2 S- 0 0 C 0 0 2	M C P 1 6 0 0 - E 0 0 2	N V I D I A P a s s i v e C o p p e r c a b l e, I B E D R, u p t o 1 0 0 G b/ E O L [H V M]

				S, Q S F P, L S Z H, 2 m 2 8 A W G
EDR	N/A	9 8 0- 9I 6 2 T- 0 0 E 0 0 2	M C P 1 6 0 0 - E 0 0 2 E 2 6	N V I D I A ® P a s s i v e C o p p e r c a b l e, I B E D R, u p t o 1

				O O G b/ s, Q S F P 2 8, 2 m , B l a c k, 2 6 A W G
EDR	N/A	9 8 0- 9I 6 2 U - 0 0 E 0 0 2	M C P I 6 0 0 - E 0 0 2 E 3 0	N V I D I A P a s s i v e C o p p e r c a b l e, I B E

				D R, u p t o 1 0 0 G b/ s, Q S F P 2 8, 2 m , B l a c k, 3 0 A W G
EDR	100GE	9 8 0- 9I 6 2 V- 0 0 C 0 0 3	M C P 1 6 0 0 - E 0 0 3	N V I D I A P a s s i v e C o p p e r E O L [H V M]

			03	E26	ppercable, IB EDR, upto 100Gb/s, QSFP28, 3m, Black, 26AWG	
EDR	N/A		980-9162	MCPI60	NVIDIA Pa	EOL [HV

Y-00E004	0-EE04E26	s si v e C o p p e r c a b l e, I B E D R, u p t o 1 0 0 G b/ s, Q S F P 2 8, 4 m , B l a c k, 2 6 A W G	M]
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EDR	N/A	980-9162Z-00E005	MCP1600-E005E26	NVIDIA Passiv e Co pp er ca ble, IB EDR, up to 100Gb/s, QSFP28, 5m, Blac k,	HVM
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				2 6 A W G
EDR	N/A	9 8 0- 9I 6 2 0- 0 0 E 0 0 A	M C P I 6 0 - E 0 0 A	N V I D I A P a s s i v e C o p p e r c a b l e, I B E D R, u p t o I O O G b/ s, Q S F P, L S Z
				E O L [H V M]

				H, O. 5 m 3 0 A W G
EDR	N/A	9 8 0- 9I 6 2 1- 0 0 E 0 0 A	M C P I 6 0 0 - E 0 0 A E 3 0	N V I D I A P a s s i v e C o p p e r c a b l e, I B E D R, u p t o 1 0 0 G b/ s, Q S F

				O G b/ s, Q S F P 2 8, O. 7 5 m , B l a c k, 3 O A W G
EDR	100GE	9 8 0- 9I 6 2 3- 0 0 C 0 1 A	M C P 1 6 0 0 - E O 1 A	N V I D I A P a s i v e C o p p e r c a b l e, I B E O L [H V M]

				able, IB EDR, up to 100G b/s, QS FP 28, 1.5m, Black, 30AWG
EDR	N/A	980-91625-000	MCPI600-E	ENVIDIA [HVMS]

		E O I C	O I B E 3 O	e C o p p e r c a b l e, I B E D R, u p t o 1 0 0 G b/ s, Q S F P 2 8, 1. 2 5 m , B l a c k, 3 O A W G	H I B E R N /A T E]
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EDR	100GE	980-91626-00C02A	MCP1600-E02A	NVIDIA Pascal series Evolved Copper capable, IB EDR, up to 100Gb/s, QSFP, LSH, 2.5m26	EOL [HVM]
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				A W G
EDR	N/A	9 8 0- 9 6 2 7- 0 0 0 2 2 A	M C P 1 6 0 0 - E 0 2 A E 2 6	N V I D I A P a s s i v e C o p p e r c a b l e, I B E D R, u p t o 1 0 0 G b/ s, Q S F P 2 8, 2. 5 m

				X 2 5 G b E, Q S F P 2 8 to 4 x S F P 2 8, c o l o r e d p u l t a b s, 1 m , 3 0 A W G	
N/A	100GE	9 8 0- 9I 4	M C P 7 F	N V I D I A p	L T B [H

8	0	a	V
6-	0	s	M
0	-	si]
0	A	v	
C	0	e	
0	0	c	
0	1	o	
0	R	p	
1	3	p	
	0	er	
	N	h	
		y	
		br	
		id	
		c	
		a	
		bl	
		e,	
		E	
		T	
		H	
		1	
		0	
		0	
		G	
		b	
		E	
		to	
		4	
		x	
		2	
		5	
		G	
		b	
		E,	
		Q	
		S	
		F	
		P	
		2	
		8	
		to	
		4	
		x	
		S	

				FP28, 1m, Colored, 30AWG, CAN
N/A	100GE	980-9148A-00C002	MCPI7F00-A002R	NVIDIA passthrough silicon accelerated copper hybrid cable, EOL [HVM]

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H
1
0
0
G
b
E
to
4
x
2
5
G
b
E,
Q
S
F
P
2
8
to
4
x
S
F
P
2
8,
c
o
l
o
r
e
d
p
u
l
t
a
b
s,
2
m
,
3

				O A W G
N/A	100GE	9 8 0- 9 4 8 B - 0 0 C 0 0 2	M C P 7 F 0 0 - A 0 0 2 R 3 0 N	N V I D I A p a s s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 0 G b E t o 4 x 2 5 G b E, L T B [H V M]

				Q S F P 2 8 to 4 x S F P 2 8, 2 m , C o l o r e d, 3 O A W G, C A- N
N/A	100GE	9 8 0- 9I 4 8 G - 0 0 C 0 0 3	M C P 7 F 0 - - A 0 0 3 R 2	N V I D I A p a s s i v e c o p p E O L [H V M]

6 N er h y br id c a bl e, E T H 1 0 0 G b E to 4 x 2 5 G b E, Q S F P 2 8 to 4 x S F P 2 8, 3 m . C ol

				or e d, 2 6 A W G, C A- N
N/A	100GE	9 8 0- 9 4 8 H - 0 0 C 0 0 3	M C P 7 F 0 0 - A 0 0 3 R 3 0 L	N V I D I A p a s s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 0 G b E t o

				4 x 2 5 G b E, Q S F P 2 8 to 4 x S F P 2 8, 3 m , C o l o r e d, 3 0 A W G, C A- L
N/A	100GE	9 8 0- 9I 4 8 J-	M C P 7 F 0 0	N V I D I A p a s
				L T B [H V

0	-	si	M
0	A	v]
C	0	e	
0	0	c	
0	5	o	
5	R	p	
	2	p	
	6	er	
	L	h	
		y	
		br	
		id	
		c	
		a	
		bl	
		e,	
		E	
		T	
		H	
		1	
		0	
		0	
		G	
		b	
		E	
		to	
		4	
		x	
		2	
		5	
		G	
		b	
		E,	
		Q	
		S	
		F	
		P	
		2	
		8	
		to	
		4	
		x	
		S	
		F	
		P	

				28,5m, Colored, 26AWG, C A-L
N/A	100GE	980-9148M-00C01A	MCP7F00-AA01R	ENVIADIPFA001R [HVMM] Ethernet capable, ETH

1
0
0
G
b
E
to
4
x
2
2
5
G
b
E,
Q
S
F
P
2
8
to
4
x
S
F
P
2
8,
c
o
l
o
r
e
d
p
u
l
t
a
b
s,
1.
5
m
,
3
0

				A W G
N/A	100GE	9 8 0- 9 4 8 N - 0 0 C 0 1 A	M C P 7 F 0 0 - A 0 1 A R 3 0 N	N V I D I A p a s s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 0 G b E t o 4 x 2 5 G b E, Q
				L T B [H V M]

				SFP28 to 4x SFP28, 1.5m, Colored, 30AWG, CAN
N/A	100GE	980-9148S-00C02A	MCP7F0-A02AR2	NVIDIA [HVMS] EOL

6 N er h y br id c a bl e, E T H 1 0 0 G b E to 4 x 2 5 G b E, Q S F P 2 8 to 4 x S F P 2 8, 2. 5 m ' C

				ol or e d, 2 6 A W G, C A- N
N/A	100GE	9 8 0- 9 4 8 T- 0 0 C 0 2 A	M C P 7 F 0 0 - A 0 2 A R 3 0 L	N V I D I A p a s s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 0 G b E
				L T B [H V M]

				to 4 x 2 5 G b E, Q S F P 2 8 to 4 x S F P 2 8, 2. 5 m , C o l o r e d, 3 0 A W G, C A- L	
N/A	100GE	9 8 0- 9I 4	M C P 7 F	N V I D I A p	E O L [P

8	0	a	-
U	0	s	R
-	-	si	el
0	A	v]
0	0	e	
C	2	c	
0	A	o	
2	R	p	
A	L	p	
	Z	er	
		h	
		y	
		br	
		id	
		c	
		a	
		bl	
		e,	
		E	
		T	
		H	
		1	
		0	
		0	
		G	
		b	
		E	
		to	
		4	
		x	
		2	
		5	
		G	
		b	
		E,	
		Q	
		S	
		F	
		P	
		2	
		8	
		to	
		4	
		x	
		S	

				FP28, 2.5m, LSSH, Colored, 28AWG
N/A	100GE	980-9148X-00C03A	MCPI7F00-A03AR26L	NVIDIA [HVMM]

e,
E
T
H
1
0
0
G
b
E
to
4
x
2
5
G
b
E,
Q
S
F
P
2
8
to
4
x
S
F
P
2
8,
3.
5
m
,
C
o
l
o
r
e
d,
2
6
A
W

				G, C A- L	
N/A	100GE	9 8 0- 9 6 1 C - 0 0 C 0 0 5	M C P 7 H O - - G O O O O	N V D I A ® p a s s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 0 G b/ s t o 2 x 5 0 G b/	P r e l i m i n a r y

0
1

p
p
e
r
h
y
b
r
i
d
c
a
b
l
e,
E
T
H
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0
0
G
b/
s
t
o
2
x
5
0
G
b/
s,
Q
S
F
P
2
8
t
o
2
x
Q
S
F
P
2
8,
1
m

				30AWG	
N/A	100GE	980-91999F-00C001	MCP7H00-G001R	NVIDIA Pascal silicon vendor copper hybrid cable, ETH100Gb/s to 2x50G	EOL [HVM]

				b/ s, Q S F P 2 8 to 2 x Q S F P 2 8, c o l o r e d p u l t a b s, 1 m , 3 0 A W G
N/A	100GE	9 8 0- 9I 9 9 G -	M C P 7 H O O -	N V I D I A p a s si L T B [H V M]

00C001
G001R30N
vecoopperhybrid cable, ETH100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP

1
0
0
G
b/
s
to
2
x
5
0
G
b/
s,
Q
S
F
P
2
8
to
2
x
Q
S
F
P
2
8,
c
o
l
o
r
e
d
p
u
l
t
a
b
s,
2
m
,
3
0

				A W G
N/A	100GE	9 8 0- 9I 9 K- 0 0 C 0 0 2	M C P 7 H 0 0 - G 0 0 2 R 2 6 N	N V I D I A ® p a s s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 0 G b/ s t o 2 x 5 0 G b/ s,

				Q S F P 2 8 to 2 x Q S F P 2 8, 2 m , C o l o r e d, 2 6 A W G, C A- N
N/A	100GE	9 8 0- 9I 9 9 L- 0 0 0 0 2	M C P 7 H 0 0 - G 0 0 2 R	N V I D I A h p s i v e c o p L T B [H V M]

30N per hybrid cable, ETH100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2m.

s
to
2
x
5
0
G
b/
s,
Q
S
F
P
2
8
to
2
x
Q
S
F
P
2
8,
c
o
l
o
r
e
d
p
u
l
t
a
b
s,
3
m
,
2
8
A
W
G

N/A	100GE	980-9199Q-00C003	MCP7H00-G003R26N	NVIDIA Pascal series vcoeopper hybrid cable, ETH100Gb/s to 2x50Gb/s, QSFP2	EOL [HVM]
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				8 to 2 x QSFP28, 3m, Colored, 26AWG, CAN
N/A	100GE	980-9139R-00003	MCP7H003R30L	NVIDIA [HVMS] copper hybrid

id
c
a
b
l
e,
E
T
H
1
0
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b/
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t
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2
x
5
0
G
b/
s,
Q
S
F
P
2
8
t
o
2
x
Q
S
F
P
2
8,
3
m
,
C
o
l
o
r
e
d,

				3 0 A W G, C A- L
N/A	100GE	9 8 0- 9 9 9 S- 0 0 C 0 0 4	M C P 7 H 0 0 - G 0 0 4 R 2 6 L	N V I D I A p a s s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 0 G b/ s t o 2 x 5
				E O L [H V M]

				0 G b/ s, Q S F P 2 8 to 2 x Q S F P 2 8, 4 m , C o l o r e d, 2 6 A W G, C A- L
N/A	100GE	9 8 0- 9I 9 9 W - 0	M C P 7 H 0 0 - G	N V I D I A h p s s i v E O L [H V M]

O
C
O
1
A

O
1
A
R

e
c
o
p
p
e
r
h
y
b
r
i
d
c
a
b
l
e,
E
T
H
1
0
0
G
b/
s
t
o
2
x
5
0
G
b/
s,
Q
S
F
P
2
8
t
o
2
x
Q
S
F
P
2

				8, c ol or e d p ul t a b s, 1. 5 m , 3 0 A W G
N/A	100GE	9 8 0- 9I 9 9 X- 0 0 C 0 1 A	M C P 7 H 0 0 - G 0 1 A R 3 0 N	N V I D I A H p a s i v e c o p p e r h y b r i d c a b l e, L T B [H V M]

E
T
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1
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0
G
b/
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to
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0
G
b/
s,
Q
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to
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x
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8,
1.
5
m
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C
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l
o
r
e
d,
3
0
A
W

				G, C A- N
N/A	100GE	9 8 0- 9 9 9 2- 0 0 C 0 2 A	M C P 7 H O - G O 2 A R	N V I D I A p a s - s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 0 G b/ s t o 2 x 5 0 G b/ s, E O L [H V M]

				Q S F P 2 8 to 2 x Q S F P 2 8, c o l o r e d p u l t a b s, 2. 5 m , 3 0 A W G
N/A	100GE	9 8 0- 9I 9 9 4- 0 0	M C P 7 H 0 0 - G	N V I D I A p a s s i v E O L [H V M]

C
O
2
A
A

O
2
A
R
2
6
N

e
c
o
p
p
e
r
h
y
b
r
i
d
c
a
b
l
e,
E
T
H
1
0
0
G
b/
s
t
o
2
x
5
0
G
b/
s,
Q
S
F
P
2
8
t
o
2
x
Q
S
F
P
2

				8, 2.5 m, Color d, 26 AWG, CAN
N/A	100GE	980-91395-00002A	MCP7H00-G02AR30L	NVIDIA [HVMM] LTB [HVMM]

1
0
0
G
b/
s
to
2
x
5
0
G
b/
s,
Q
S
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P
2
8
to
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x
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2
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G,
C

				A-L
N/A	100GE	980913500003	MFA1A00-CC003	NVIDIA active fiber cable, Ethernet 100Gb/s, QSFP, LSZH, 3m
N/A	100GE	98	MF	NVHV

		0-9I13X-00C005	A1A00-C005	DI A a ct iv e - C f i b e r c a b l e, E T H 1 0 0 G b E, 1 0 0 G b / s, Q S F P, L S Z H, 5 m	M
N/A	100GE	980-9I13	MFA1A0	NVI DA a ct	HVM

		4-00C010	0-0010	ive fiber cable, ETH100GbE, 100Gb/s, QSFP, LSZH, 10m	
N/A	100GE	980913A-0	MFA1A0-C	NVIDIA Acti-ve	HVM

		0C015	015	bercable, ETH100GbE, 100Gb/s, QSFP, LSZH, 15m	
N/A	100GE	980-913F-00C0	MFA1A0-C020	NVIDIA Active Fiber	HVM

				20	a b l e, E T H 1 0 0 G b E, 1 0 0 G b / s, Q S F P, L S Z H, 2 0 m
N/A	100GE	980-913N-00C030	MFA1A0-C030	NVIDIA Active fiber capable,	HVM

				E T H 1 0 0 G b E, 1 0 0 G b/ s, Q S F P, L S Z H, 3 0 m
N/A	100GE	9 8 0- 91 1 3 0- 0 0 C 0 5 0	M F A 1 A 0 0 - C 0 5 0	N V I D I A a c t i v e f i b e r c a b l e, E T H

				100GbE, 100Gb/s, QSFP, LSZH, 50m
N/A	100GE	980-913B-00C100	MFA1A00-C100	NVIDIA [HV] MLX5 Ethernet Controller capable, ETH100

				G b E, 1 0 0 G b/ s, Q S F P, L S Z H, 1 0 0 m
EDR	N/A	9 8 0- 91 1 3 D - 0 0 E 0 0 1	M F A 1 A 0 - E 0 0 1	N V I D I A a c t i v e e f f i c i e n c y a b l e, I B E D R, u p t o 1

				O O G b/ s, Q S F P, L S Z H, 1 m
EDR	N/A	9 8 0- 9 1 3 F- 0 0 E 0 0 3	M F A 1 A 0 0 - E 0 0 3	N V I D I A a c t i v e e f f i c i a b l e, I B E D R, u p t o 1 0 0 G b/ s, Q

				S F P, L S Z H, 3 m
EDR	N/A	9 8 0- 9 1 3 J- 0 0 E 0 0 5	M F A I A O - E O 5	N V I D I A a c t i v e e f f e c t i v e , I B E D R, u p t o 1 0 0 G b/ s, Q S F P, L S Z

					H, 5 m
EDR	N/A			9 8 0- 9I 1 3 M - 0 0 E 0 0 7	N V I D I A a c t i v e f i b e r c a b l e, I B E D R, u p t o 1 0 0 G b/ s, Q S F P, L S Z H, 7 m
					L T B [H V M]

EDR	N/A	980-91300-00E010	MFA1A00-E010	NVIDIA active fiber cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 10m	HVM
EDR	N/A	980-911	MFA1A	NVIDIA a	HVM

				3000E015	00E015	ctive fiber cable, B E D R, up to 100Gb/s, QSFP, LSZH, 15m	
EDR	N/A			980913V00E	MF1A00E0	NVIDIA Active fiber	HVM

			020	20	er cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 20m	
EDR	N/A		980-913Y-00E030	MFA1A0-E030	NVIDIA Active Ethernet cable,	HVM

				p to 1 0 0 G b/ s, Q S S F P, L S Z H, 5 0 m
EDR	N/A	9 8 0- 91 1 3 5- 0 0 E 1 0 0	M F A 1 A 0 0 - E 1 0 0	N V I D I A a c t i v e f i b e r c a b l e, I B E D R, u p t o 1 0 0
				L T B [H V M]

				G b/ s, Q S F P, L S Z H, 1 0 0 m
N/A	100GE	9 8 0- 9I 3 7 H - 0 0 C 0 0 3	M F A 7 A 2 0 - C 0 0 3	N V I D I A a c t i v e f i b e r h y b r i d s o l u t i o n, E T H 1 0 0 G b E
				E O L [H V M]

				to 2 x 50GbE, QSFP28 to 2 x QSFP28, 3m
N/A	100GE	980-91371-000005	MFDA 7A20-C005	NVIDIA [Hybrid solutions]

C 0 1 0	0 1 0	b e r h y b r i d s o l u t i o n , E T H 1 0 0 G b E t o 2 x 5 0 G b E , Q S F P 2 8 t o 2 x Q S F P 2 8 , 1
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N/A	100GE	980-91400K-00C020	MFAA20-C020	NVIDIA Active Ethernet 100GbE to 2x50GbE, QSFP2	Oml [HV M]
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				8 to 2 x QSFP28, 20m
N/A	100GE	980-9140L-00C002	MFDA7A20-CC02A	Preliminary NVIDIA® active fiber hybrid solution, ETH100GbE to

				2 x 50GbE, QSFP28 to 2 x QSFP28, 2.5m
N/A	100GE	980-9140M-00C003	MF7A20-C03A	NVIDIA® Active Fabricerhybrid solution Preliminary

				io n, E T H 1 0 0 G b E to 2 x 5 0 G b E, Q S F P 2 8 to 2 x Q S F P 2 8, 3. 5 m
N/A	100GE	9 8 0- 9I 4 0 N	M F A 7 A 5 0	N V I D I A a c t iv E O L [H V

-	0	0	C	0	0	3	
-	C	0	0	3			
							e
							fi
							b
							er
							h
							y
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							id
							s
							ol
							ut
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							n,
							E
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							1
							0
							0
							G
							b
							E
							to
							4
							x
							2
							5
							G
							b
							E,
							Q
							S
							S
							F
							P
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				3 m
N/A	100GE	9 8 0- 9 4 0 0 - 0 0 C 0 0 5	M F A 7 A 5 0 - C 0 0 5	N V I D I A a c t i v e f i b e r h y b r i d s o l u t i o n, E T H 1 0 0 G b E t o 4 x 2 5 G b E, Q S F P 2

				8 to 4 x SFP 28, 5 m
N/A	100GE	98049P00C010	MFA7A50-C010	EO L [HVM] NVIDIA Active Ethernet 100GbE to 4 x 2

				5 GbE, QSFP28 to 4xSFP28, 10m
N/A	100GE	980-9149Q-00C015	MFA7A50-C015	NVIDIA Activa fiber hybrid solution, ETH EOL [HVM]

				100GbE to 4x25GbE, QSFP28 to 4xSFP28, 15m
N/A	100GE	980-9149R-00C020	MA7A50-C020	NVIDIA [HVM] EOL [HVM] October 2020

				br id s ol ut io n, E T H 1 0 0 G b E to 4 x 2 5 G b E, Q S F P 2 8 to 4 x S F P 2 8, 2 0 m	
N/A	100GE	9 8 0-	M F A	N V I D I	E O L

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		to	
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		S	
		F	

				P 2 8, 3 0 m
N/A	100GE	9 8 0- 91 1 4 9- 0 0 C S 0 0	M M A 1 B 0 - C 1 0 0 D	N V I D I A t r a n s c e i v e r , 1 0 0 G b E, Q S F P 2 8, M P Q, 8 5 0 n m , S R 4, u

				28, MPO, 850nm, SR4, up to 100m
N/A	100GE	980-917P-00CROO	MMA1L1O-CR	NVDA Optical transceiver, 100GbE, HV M

				100Gb/s, QSFP28, LC-LC, 1310nm, LR4 up to 10km
N/A	100GE	980-917Q-000	MMAL30-CM	NVIDIA Optical module MP

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N/A	100GE	980-916X-00C0000	MMSLC100-CCM	NVIDIA ActiveCore Optical module, 100Gb/s, QSFP, MPO, 1310nm, PSM4, up to 5	EOL [MP]
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N/A	100GE	9809163F00C00	X65406	NVIDIA® optical module, 100GbE, 100Gb/s, QSFP28, LC-LC, 131nm	Preliminary
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				W D M 4, u p t o 2 k m
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FDR / 56GbE Cables

IB Data Rate	Eth Data Rate	N V I D I A P/ N	L e g a c y P/ N	D e s c r i p t i o n	L i f e C y c l e P h a s e
FDR	56GE	9 8 0- 9 6 7 9- 0 0 L 0 0 4	M C 2 2 0 7 1 2 6 - 0 0 4	N V I D I A p a s i v e c o p p e r c	E O L [H V M]

				able, VPI, up to 56 Gb/s, QSFP, 4m
FDR	56GE	980-9167A-00003	MCD2107128-003	ENCLOSURE [HVMM]

					PI , u p t o 5 6 G b /s , Q S F P, 3 m
FDR	56GE	9 8 0- 9 6 7 C - 0 0 L 0 2 A	M C 2 2 0 7 1 2 8 - 0 A 2	N V D I A p a s s i v e c o p p e r c a b l e, V P I , u p	E O L [M P]

					6 G b /s , Q S F P, 1 m
FDR	56GE	9809167E00L0002	M C 2 2 0 7 1 3 0 - 0 0 2	N V I D I A p a s i v e c o p p e r c a b l e, V P I , u p t o 5 6 G b /s	E O L [H V M]

				P, 0. 5 m
FDR	56GE	9 8 0- 9 6 7 G - 0 0 L 0 1 A	M C 2 2 0 7 1 3 0 - 0 A 1	N V I D I A p a s s i v e c o p p e r c a b l e, V P I , u p t o 5 6 G b /s , Q S F P, 1.

				5 m
FDR	56GE	980-9115U-00L0003	MC220731V-003	NVIDIA Active fiber optic 56Gb/s, QSFP, 3m EOL [HV M]
FDR	56GE	980-9110	MC220A	NVIDIA EOL [H

		5 V- 0 0 L 0 0 5	7 3 1 V- 0 0 5	a c t i v e f i b e r c a b l e, V P I , u p t o 5 6 G b /s , Q S F P, 5 m	V M]
FDR	56GE	9 8 0- 9 1 5 W - 0 0 L 0	M C 2 2 0 7 3 1 V- 0 0 1 0	N V I D I A a c t i v e f i b	E O L [H V M]

			10	ercable, VPI, up to 56Gb/s, QSFP, 10m
FDR	56GE	980-9115X-00L015	MC210731V-015	ENVIAD [HV M] ercable,

				VPI, up to 56Gb/s, QSFP, 15m
FDR	56GE	980915Y00L020	MCD210731V020	ENCLOSURE [HVM]

				o 5 6 G b /s , Q S F P, 2 0 m
FDR	56GE	9 8 0- 9 1 5 Z- 0 0 L 0 2 5	M C 2 2 I 0 7 3 1 V- 0 2 5	N V I D I A a c t i v e f i b e r c a b l e, V P I , u p t o 5 6 G b /s
				E O L [H V M]

		152-00L050	0731V-050	Acitiv-050 able, VPI, upto 56Gb/s, QSFP, 50m	HVM]
FDR	56GE	980-9153-00L	MC220731V-0	NVIDIA activ-0	EOL [HVM]

			075	75	fiber cable, VPI, up to 56 Gb/s, QSFP, 75 m	
FDR	56GE		980915400L1000	MC210731V100	NVIDIA Acentiva fiber cable	EOL [HVM]

				bl e, V PI , u p t o 5 6 G b /s , Q S F P, 1 0 0 m
FDR	56GE	9 8 0- 9 6 7 5- 0 0 L 0 0 1	M C P 1 7 0 L- F 0 0 1	N V I D I A p a s s i v e c o p p e r c a bl e, E O L [P - R el]

				V P , u p t o 5 6 G b /s , Q S F P, L S Z H , i m
FDR	56GE	9 8 0- 9 6 7 8- 0 0 L 0 0 A	M C P I 7 0 L- F O O A	N V I D I A p a s i v e c o p p e r c a b l E O L [P - R e l]

				e, VPI, up to 56 Gb/s, QSFP, LSZH, 0.5m
FDR	56GE	980-91679-00L01A	MCP170L-F01A	NVIDIA [Parsiv] [HIBERN/A]T

R, Q, S, F, P, +, M, P, O, , 8, 5, 0, n, m, , S, R, 4, u, p, t, o, 3, 0, m, , D, D, M, I

25GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA P/N	Legacy P/N	Description	Lifecycle Phase
N/A	10GE	98071G-00J0000	MAM1Q00A-QSA	NVIDIA capable module, ETH10GbE, 40Gb/s to 10G	HVM

				b /s , Q S F P t o S F P +
N/A	10GE	9 8 0 - 9 6 5 P - 0 0 J 0 0 5	M C 2 3 0 9 1 2 4 - 0 0 5	N V I D I A p a s s i v e c o p p e r h y b r i d c a b l e, E T H 1 0 E O L [P - R e l]

				G b E, 1 0 G b /s , Q S S F P t o S F P + 5 m	
N/A	10GE	9 8 0 - 9 6 5 Q - 0 0 J 0 0 7	M C 2 3 0 9 1 2 4 - 0 0 7	N V I D I A p a s s i v e c o p p e r h y b r i d c	E O L [P - R el]

				a b l e, E T H 1 0 G b E, 1 0 G b /s , Q S S F P t o S S F P +, 7 m
N/A	10GE	9 8 0 - 9 6 5 R - 0 0 J 0 0 1	M C 2 3 0 9 1 3 0 - 0 1	N V I D I A p a s s i v e c o p p E O L [H V M]

				e r h y b r i d c a b l e, E T H 1 0 G b E, 1 0 G b /s , Q S F P t o S F P +, 1 m
N/A	10GE	9 8 0 - 91 6 5	M C 2 3 0 9 1	N V I D I A p a r t n e r s h i p p r o g r a m m e n t s

		S - 0 0 J 0 0 2	3 0 - 0 0 2	s si v e c o p p e r h y b r i d c a b l e, E T H 1 0 G b E, 1 0 G b /s , Q S F P t o S F P +, 2 m	M]
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N/A	10GE	98065T00J0003	MC-9165T00J0003	NVIDIA Corporation 98065T00J0003	EOL [HVMM]
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				b /s , Q S F P t o S F P +, 0.5 m
N/A	10GE	9803-91682-00J004	MNC3309124-004	NVIDIA AppAssist vccopperecable, ETHIOG b EOL [HVM]

				E, 10 Gb/s , SFP +, 4m
N/A	10GE	9800-91683-00J005	MNC33091683-00J005	NONVIDI ALL [HVM] switchable, ETH10GbE, 10

				G b /s , S F P + 5 m
N/A	10GE	9 8 0 - 9 6 8 4 - 0 0 J 0 0 6	M C 3 3 0 9 1 2 4 - 0 0 6	N V I D I A p a s s i v e c o p p e r c a b l e, E T H 1 0 G b E, 1 0 G b /s

N/A	10GE	9800-916866-000J0001	MC3309130-001	P+, 7m NVIDIA NIC 10Gb/s SFP+	EOL [HVM]
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				1	m
N/A	10GE	9800-9688-0000J0002	MCC330913-002	NVIDIA Appassive connector able, ETH 10Gb/s, SFP+, 2m	EOL [HV M]

N/A	10GE	9800-9168B-000J0003	MC3309130-0003	NVIDIA passthrough peer card, Ethernet 10Gb/s, SFP+, 3m	EOL [HVM]
N/A	10GE	9800	MC3	NVIDIA	EOL

				3 0 9 1 3 0 - 0 J 0 0 A	I A p a s s i v e c o p p e r c a b l e, E T H 1 0 G b E, 1 0 G b /s , S F P +, 0. 5 m	[H V M]
N/A	10GE	9 8 0 - 9l	M C 3 3 0	N V I D I A	E O L [H	

		68G-00J01A	9130-0A1	passive copper cable, ETH10GbE, 10Gb/s, SFP+, 1.5m	VML]
N/A	10GE	980-9168	MC33091	NVIDIA	EOL [HV

		H - 0 0 J 0 2 A	3 0 - 0 A 2	s s i v e c o p p e r c a b l e, E T H 1 0 G b E, 1 0 G b /s , S F P +, 2. 5 m	M]
N/A	10GE	9 8 0 - 9 6 8 A -	M C P 2 1 0 0 - X	N V I D I A p a s s i	E O L [H V M] [

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N/A	10GE	9800-9168B-00J002	MCPI00-X002B	NVIDIA pasivcore, Ethernet 10Gb/s	EOL [HVMS] [HIBERNATE]

				SFP+, 2m, BlueField-3, Connector Label
N/A	10GE	9800-9168C-000J003	MCPIA00-X003B	NVIDIA Apollo Superconnect EOL [HVM]

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N/A	10GE	98068E-000J0001	MCP2104-X001B	NVIDIA [HVM] [HIBERNATE], ETH10GbE, 10Gb/s, SFP+, 1m,	bel EOL [HVM] [HIBERNATE]
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				Backpul tab, C onnect or L abel
N/A	10GE	9800-9168F-00J002	MCPI04-X002B	NVIDIA Apollo switch copper cable, EOL [HVM]

				T H 1 0 G b E, 1 0 G b /s , S F P + 2 m , B l a c k P u l t a b, C o n n e c t o r L a b e l
N/A	10GE	9 8	M C	N V E O

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6	0	p	V
8	4	a	M
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				ul lt a b, C o n n e c t o r L a b e l
N/A	10GE	9 8 0 - 9l 6 8 H - 0 0 J 0 1 A	M C P 2 1 0 4 - X 0 1 A B	N V I D I A p a s s i v e c o p p e r c a b l e, E T H 1 0 G E O L [H V M]

				b E, 1 0 G b /s , S F P +, 1. 5 m , Bl a c k P ul t a b, C o n n e c t o r L a b el
N/A	10GE	9 8 0 - 91 6	M C P 2 1 0	N V I D I A p E O L [H V

8l	4	a	M
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				b, C o n n e c t o r L a b e l
N/A	10GE	9 3 0 - 9 0 0 0 0 - 0 0 0 - 3 4 3	M F M I T O 2 A - L R	N V I D I A S F P + o p t i c a l m o d u l e f o r I O G B A S E -

				L R
N/A	10GE	M F M 1 T O 2 A - L R -F	M F M 1 T O 2 A - L R -F	N V D I A o p t i c a l m o d u l e, E T H 1 0 G b E, 1 0 G b /s , S F P +, L C - L C, 1 3 1 0
				H V M

N/A	10GE	MFM1T02A-SR-F	MFM1T02A-SR-F	SR NVI DMA Optical module, ETH10GbE, 10Gb/s, SFP+, LC-LC, 850nm	HVM
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				m , S R u p t o 3 0 0 m
N/A	10GE	M F M 1 T O 2 A - S R - P	M F M 1 T O 2 A - S R - P	N V I D I A o p t i c a l m o d u l e , E T H 1 0 G b E , 1 0 G b / s , S F P
				H V M

		71G-00J000	0A-QSA	able module, ETH10GbE, 40Gb/s to 10Gb/s, QSFP to SFP+
N/A	10GE	980-9	MC30	ENVIDL [P

165P-000J005	9124-0005	passive copper hybrid cable, ETH 10GbE, 10Gb/s, QSFP to SFP+,	- Rel]
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N/A	10GE	9803-90165Q-000J0007	MC2309124--007	MNC2309124--007	5m EOL [P-R el] NVIDIA Ethernet 10Gb/s QSFP
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				F P t o S F P +, 7 m
N/A	10GE	9800-9165R-000J0001	MC2309165R-000J0001	NVIDIA Apollo series vcoeopper hybrid cable, ETH10GbE, EOL [HV M]

				10 Gb/s, QSFP to QSFP+, 1m
N/A	10GE	9800-1655-0000J002	MC230916550002	NVIDIA Aquantia NVMe over Ethernet Converged Network Adapter [Hybrid cable]

				ETH10GbE, 10Gb/s, QSFP to QSFP+, 2m
N/A	10GE	980165T-00J003	MC2309165T-00J003	NVIDIA Apollo-SiV copper ethernet EOL [HV M]

				y b r i d c a b l e, E T H 1 0 G b E, 1 0 G b /s , Q S F P t o S F P +, 3 m
N/A	10GE	9 8 0 - 9 1 6 5 U -	M C 2 3 0 9 1 3 0 -	N V I D I A p a s i v E O L [H V M] [H

N/A	10GE	9800-91682-00J004	MC3309124-004	NVIDIA passive copper Ethernet 10Gb/s SFP+, 4m	EOL [HVM]
N/A	10GE	98003	MC3	NVIDIA	EOL

		-916833-000J005	309124--005	1A pasiv copercable, ETH10GbE, 10Gb/s, SFP+, 5m	[HVM]
N/A	10GE	980-91	MC309	NVIDIA	EOL [HV]

		6844-0006	1244-0006	assive copper cable, Ethernet 10GbE, 10Gb/s, SFP+, 6m	M]
N/A	10GE	9803-91685	M3C30916854	NVIDIA Aquantia	EOL [HVMS]

				- 0 0 J 0 0 7	- 0 0 7	v e c c o p p e r c a b l e, E T H 1 0 G b E, 1 0 G b /s , S F P +, 7 m	
N/A	10GE			9 8 0 - 9 1 6 8 6 - 0 0	M C 3 3 0 9 1 3 0 - 0	N V I D I A p a s i v e c	E O L [H V M]

			J O O 1	O 1	o p p e r c a b l e, E T H 1 O G b E, 1 O G b /s , S F P +, 1 m
N/A	10GE		9 8 0 - 9 1 6 8 8 - 0 0 J 0	M C 3 3 0 9 1 3 0 - 0 2	N V I D I A p a s s i v e c o p p E O L [H V M]

				02	ercable, ETH10GbE, 10Gb/s, SFP+, 2m
N/A	10GE	9803-9168B-000J003	MCD30913B-000J003		ENVIAD [HV M] sivco perc

				b E, 1 0 G b /s , S F P + 2 m , Bl ue P ul t a b, C o n n e c t o r L a b e l	
N/A	10GE	9 8 0 - 9 1 6 8	M C P 2 1 0 0 -	N V I D I A p a s	E O L [H V M]

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				necto r L a b e l
N/A	10GE	9800-9168E-00J0001	MCPI04-X001B	NVIDIA [HVM] [HIBERNATE] e, ETH10GbE, 10Gb/s

02

per cable, ETH10GbE, 10Gb/s, SFP+, 2m, Black Pulsar, Connector

				r L a b e l	
N/A	10GE	9 8 0 - 9 1 6 8 G - 0 0 J 0 0 3	M C P 2 1 0 4 - X 0 0 3 B	N V I D I A p a s s i v e c o p p e r c a b l e, E T H 1 0 G b E, 1 0 G b /s , S F P +	E O L [H V M]

				3 m , Bl a c k P u l t a b, C o n n e c t o r L a b e l
N/A	10GE	9 8 0 - 9 1 6 8 H - 0 0 J 0 1 A	M C P 2 1 0 4 - X 0 1 A B	N V I D I A p a s s i v e c o p p e r c a E O L [H V M]

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N/A	10GE	980-91681-002A	MCP2104-X02B	NVIDIA 10Gb/s SFP+, 2.5m	EOL [HV M]
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				r l O G B A S E - L R
N/A	10GE	9 3 0 - 9 0 0 0 0 0 - 0 0 0 0 - 4 0 9	M F M 1 T 0 2 A - S R	N V I D I A S F P + o p t i c a l m o d u l e f o r l O G B A S E - S R H V M

1GbE Cables

IB Data Rate	Eth Data Rate	NVIDIA AP/N	Legacy P/N	Description	Lifecycle Phase
N/A	1GE	9800-91270-001M000	MC328011-SX	NVIDIA OptiCal module, ETH 1GbE, 1Gb/s, SF	EOL [Pre-Rel]

				P, L C C - L C C, S X 8 5 0 n m , u p t o 5 0 0 0 m
N/A	1GE	9 8 0 0 - 9 1 2 5 1 - 0 0 1 S 0 0 0	M C 3 2 0 8 4 1 1 - T	N V I D I A m o d u l e , E T H 1 G b E, 1 G b /s , H V M

SFP, Base-T, up to 100m

Supported 3rd Party Cables and Modules

Speed	Cable OPN	Description
800GbE	RTXM600-710	800G OSFP to 2x400G

Speed	Cable OPN	Description
		QSFP112A O C (O S F P re v 1 1 3 . 5 . 0 , Q S F P re v 6 . 0 . 0)
800GbE	DME8821-EC30	O S F P to

Speed	Cable OPN	Description
		2 x QSFP112 AOC 800 Gb/s to 2 x 400 Gb/s Active Optical C

Speed	Cable OPN	Description
		able (OSFP rev 0.1.0, QSFP rev 3.2.1.0)
800GbE	C-OSG8CNSxxx-N00	800G OSFP DR8 to 2

Speed	Cable OPN	Description
		X400GQSFP112DR4AOC
400GbE	CTF4XFR4CS1-01	QSFP-400G-FR4,Opt

Speed	Cable OPN	Description
		ic al M o d u l e (s e p a r a t e d) , 1 3 1 0 n m E M L, F W : 0. 9. 0
400GbE	AQLBCQ4EDLA1729	Q S F P 1 1

Speed	Cable OPN	Description
		2400GFR4 Transceiver
400GbE	T-GQ4CNT-N00	Innolight 400GQSFP112FR4 Tr

Speed	Cable OPN	Description
		a n s c e i v e r , D u p l e x L C I n t e r f a c e , 4 C W D M L a n e s , u p t o 2 k

Speed	Cable OPN	Description
		m, P <ul style="list-style-type: none">Tab
400GbE	C-DQF8FNMxxx-N00	QSF-P-DD to 2 x QSF P 56 active optical cable w

Speed	Cable OPN	Description
		thful real-time digital diagnosticnostic monitoring (Rev 1A)
400GbE	FCBN950QE1C05	40

Speed	Cable OPN	Description
		0G-2x2000G split 5M AOC cables (4000G QSFP-DD breake ki

Speed	Cable OPN	Description
		n g o u t t o 2 x 2 0 0 G Q S F P 5 6) (R e v A 0)
400GbE	RTXM600-610	4 0 0 G Q S F P- D D t o Q S F

Speed	Cable OPN	Description
		P112AOC (Rev 01)
400GbE	C-GD4CNS010-N00	InnoLight 400G QSFP112 to 400G QS

Speed	Cable OPN	Description
		FP-DD active optical cable with full real-time digital diagnosis

Speed	Cable OPN	Description
		Optic monitoring (Rev 1A)
400GbE	DME8811-EC07	400G - 2x200G split 7 MAOCA

Speed	Cable OPN	Description
		bles (400GQSFP-DD breaking out to 2x200GQSFP56) (Release

Speed	Cable OPN	Description
		v1.2)
400GbE	RTXM500-910	400G - 2x200G split 10M AOC cables (400G QSFP-

Speed	Cable OPN	Description
		DD Breathing out to 2x200GQSFP56) (Rev 1.0)
200GbE	TR-HM4M085V-CF2 1	200GQSFP

Speed	Cable OPN	Description
		112VR2
200GbE	RTXM500-301-F1	200GQSFP56SR4100mOpticalTransceiver

Speed	Cable OPN	Description
200GbE	RTXM500-905	400G - 2x200G split 5M AOC cables (400G QSFP-DD Dbr e

Speed	Cable OPN	Description
		a k i n g o u t t o 2 x 2 0 0 0 G Q S F P 5 6) (R e v C 0)
100GbE	1AT-3Q4M01XX-12A	O - N E T Q S F P 2 8 1

Speed	Cable OPN	Description
		00G Active cable/module
100GbE	AQPMANQ4EDMA0784	QSFP28 100G SSMF500m Trans

Speed	Cable OPN	Description
		Receiver
100GbE	CAB-Q-Q-100G-3M	Passive 3 meter, QSFP + to QSFP + QSFP 100TW

Speed	Cable OPN	Description
		IN A X 1 0 3. 1 2 5 G b p s- C R 4
100GbE	CAB-Q-Q-100GbE-3M	P a s s i v e 3 m e t e r , Q S F P + t o Q S F

Speed	Cable OPN	Description
		P+QSFP100TWINAX103.125Gbpps-CR4
100GbE	FCBN425QE1C30-C1	100GbE Quana

Speed	Cable OPN	Description
		d w i r e ® Q S F P 2 8 A c t i v e O p t i c a l C a b l e 3 0 M
100GbE	FTLC1151RDPL	T R A N S C I V E R 1

Speed	Cable OPN	Description
		100GbE QSFP LR4
100GbE	FTLC9152RGPL	100G100M QSFP28 SMD M4 OPTTR

Speed	Cable OPN	Description
		ANS
100GbE	FTLC9555REPM3-E6	100m Parallel MMF 100G QSFP28 Optical Transceiver

Speed	Cable OPN	Description
		ver
100GbE	NDAAFJ-C102	S F- N D A A F J 1 0 0 G - 0 0 5 M
100GbE	QSFP-100G-AOC30M	3 0 m (9 8 ft) C i s c o Q S F P- 1

Speed	Cable OPN	Description
		00GG-AOC30M Compatible 100G QSFP28 Active Optical C

Speed	Cable OPN	Description
		able
100GbE	QSFP28-LR4-AJ	CISCO - PRE100GbE LR4 QSFP28 Transceiver Mo

Speed	Cable OPN	Description
		Module
100GbE	QSFP-40/100-SRBD	CISCO - PRE100G AOM BiDi
100GbE	SQF1002L4LNC101P	Cisco-SUMITOMO 100G

Speed	Cable OPN	Description
		bEAO M
40GbE	2231254-2	Cisco 3m40GbE copper
40GbE	AFBR-7QER15Z-CS1	Cisco 40GbE 15m A

Speed	Cable OPN	D e s c r i p t i o n
		O C
40GbE	BN-QS-SP-CBL-5M	P A S S I V E C O P P E R S P L I T T E R C A B L E E T H 4 0 G B E T O

Speed	Cable OPN	Description
		4 X 10 GBE 5M
40GbE	NDCCGJ-C402	15m (49ft) Avago AFBR-7QER15ZCopp

Speed	Cable OPN	Description
		at ible 4 0 G Q S F P + A c t i v e O p t i c a l C a b l e
40GbE	QSFP-40G-SR-BD	C i s c o 4 0 G B A S E - S R-

Speed	Cable OPN	D e s c r i p t i o n
		Bi Di , d u p l e x M M F

Release Notes History

Changes and New Feature History

Note

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
32.43.1014	
Programmable Congestion Control (PCC)	<p>Migrated PCC NP solution from ACE hardware platform to DPA hardware platform. The new capability is applicable to the following 2 modes:</p> <ul style="list-style-type: none">• PCC_INT_EN=True and PCC_INT_NP_RTT_DATA_MODE=INGRESS_BYTE• PCC_INT_EN=True and PCC_INT_NP_RTT_DATA_MODE=NO_DATA <p>The first mode is used to support ZTRCC RX bytes in RTT response.</p>
HPCC2 Custom Header	<p>Added support for HPCC2 custom header insertion in RTT request packets for DOCA PCC. The capability will be supported when setting <code>ROCE_CC_STEERING_EXT = ENABLED</code>.</p>
High Availability for virtio-net-controller	<p>Added support for a second emulation VirtIO blk and net device on the same vHCA to enable switching to the second emulation device and reduce downtime.</p>
RDMA Telemetry	<p>Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the</p>

Feature/ Change	Description
y	<p>relevant information about the error (such as: syndrome, function_id, timestamp, QPs num etc.).</p> <p>The feature is configured using a new general object: RDMA-Telemetry object, and depends on the following new caps:</p> <p><code>HCA_CAP.rdma_telemetry_notification_types</code> and <code>HCA_CAP.rdma_telemetry</code>.</p>
UID Permissi ons	<p>Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS_RESOURCES) using new HCA capability bitmask field: tool_partial_cap.</p> <p>The 5 sub-operations are:</p> <ul style="list-style-type: none"> • QUERY_HCA_CAP with other function • QUERY_VUID with direct data • QUERY_ROCE_ADDRESS with other vport • SET_HCA_CAP with other function • POSTPONE_CONNECTED_QP_TIMEOUT with other vport <p>The new added caps are:</p> <ul style="list-style-type: none"> • tool_partial_cap.postpone_conn_qp_timeout_other_vport, • tool_partial_cap.set_hca_cap_other_func • tool_partial_cap.query_roce_addr_other_vport • tool_partial_cap.query_vuid_direct_data • tool_partial_cap.query_hca_cap_other_func
Cross E-Switch Scheduli ng	<p>Added support for QoS scheduling across multiple E-Switches grouped in a LAG. VPort members of a Physical Function can be added to a rate group from another Physical Function and rate limits of the group will apply to those VPort members as well.</p>
Jump from NIC_TX to FDB_TX	<p>Added <code>'table_type_valid'</code> and <code>'table_type'</code> fields to the steering action (STC) "Jump To Flow" table parameters to enable the user to jump from NIC_TX to FDB_TX and bypass the ACL table.</p>
Jump to TIR or queue from FDB on Tx	<p>Enabled hop reduction by bypassing NIC domain in various use cases. Such action reduces the number of hops (improves PPS) to deal with mass number of flows and devices.</p> <p>To enable this new capability, a new STC action type "JUMP_TO_FDB_RX" was added to allow jumping into the RX side of a table.</p>

Feature/Change	Description
Virtual Quality of Service	Added a new scheduling element type ("TC_ARB") capability in the VQoS domain (Virtual Quality of Service), to support TC arbitration between functions (VPORTs).
Hotplug/Unplug on VirtIO Devices when the Host is Powered OFF	Enabled hotplug/hotunplug during device's power off or power cycle to prevent the device from getting stuck.
2-steps-hotplug	Added support for 2-steps-hotplug capability. The device is plugged with "free" status by default, and it will not appear on the bus until being modified to "hotplug" status.
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Feature/Change	Description
32.42.1000	
Memory Slow Release	Added a new command interface "Memory slow release" to enable/disable holding memory pages for a defined period of time. Once the timer expires, the firmware will return the pages to the driver.
Server's Resource Size	Increased the server's resource size for 10k data QP (connections from NVME initiator) attached to the XRQ upon 32MB, 64MB, 128MB, 256MB staging buffer.
Hotplug Power Off for Virtio FS	Added support for Hotplug Power Off for Virtio FS (hotplug_power_off).
Kernel Lockdown	Added support for MVTs register via a miscellaneous driver using the access_register PRM command.

Feature/ Change	Description
Dynamic Queue Modification	Added support for Virtio devices' dynamic queue modification. A Virtio PF manages the available number of queues (doorbells) that can be allocated to its Virtio VFs.
Managed Hot-Plug	<p>Added support for remove/plugged-in Memory Device units while the system is active. To insert/remove the device while the system is active, use the Attention Button Control or User OS Commands, press Attention Button if exists or write SW Command if not exists.</p> <p>Note: This capability is not enabled by default, to enable managed hot plug, configure the following setting using mlxconfig and then power-cycle:</p> <ul style="list-style-type: none"> • setting name: OFF_BOARD_SERIALIZER <ul style="list-style-type: none"> ◦ *cmd: mlxconfig -d <device> set OFF_BOARD_SERIALIZER=1 ◦ *Description: when set, the BlueField-3 enables the serializer that is connected to the SMC bridge board and enables the bitstream.
Resource Dump QP_INFO	Added QP_INFO segment to resource dump access_register command.
Maximum Number of EQs	<p>Added a new <code>hca_cap</code> call <code>max_num_eqs_24b</code> to report the number of EQs for VFs, PFs of ECPFs, and SFs.</p> <p>Note: It is only writable for SFs.</p>
MSIX	<p>Firmware allocates the MSIX/VQ resources according to the function number, thus, every VF function will get the same number of MSIX/VQ.</p> <p>For example: In case of a total of 8K MSIX locked ICMC resource, each VF will get $8K \text{ MSIX} / (384 \text{ vblk VF} + 128 \text{ vnet VF}) = 16 \text{ MSIX}$ by symmetric distribution.</p> <p>As of firmware v32.42.100x, <code>X_EMULATION_NUM_VF_MSIX</code> are added to set the Emulation VF device MSIX number in NVCONFIG, such as <code>VIRTIO_VBLK_EMULATION_NUM_VF_MSIX</code> (=8 MSIX for this user case) and <code>VIRTIO_NET_EMULATION_NUM_VF_MSIX</code> (=32 MSIX for this user case).</p>
MSIX Allocation	The user can now know the exact number of allocated MSIX by the firmware using the new added call <code>actual_msix_number</code> .
Dynamic MSIX Allocation	Each VF can allocate all VFs' MSIX of the PF as a free pool of the PF. The new modification, increased the maximum VNET/VBLK VF MSIX number from 64 to 256. To see the new value, query the <code>cmd_hca_cap.max_dynamic_vf_msix_table_size</code> .

Feature/Change	Description
	Now each VF will get the number of MSI by the asymmetric distribution according to the new VF MSIX configuration (X_EMULATION_NUM_VF_MSIX). If there are not enough MSIX to be allocated, the actual number of MSIXs will be deduced from the total free number and not from the NVCONFIG value. The <code>actual_msix_number</code> value is shown as LSPCI value. To get the <code>actual_msix_number</code> in the PCI device, query the "Current" column of the <code>mlxconfig</code> , which is the same as the 'lspci' shown.
MMO: Cache-Invalidate WQE	Enabled Cache-Invalidate WQE (OPCODE="MMO") with OPC_MOD="DPU_CACHE_INVALIDATE" by default for DPU GVM. Additionally, added related capabilities to show if this capability is supported and what is the maximum supported data size to be invalidated (2MB by default.).
Steering SF Traffic to a Specific PF MSI-X	MSI-X on SF can be received now through the PF's MSI-X vector.
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Feature/Change	Description
32.41.1000	
SuperNIC Mode	SuperNIC mode is now the default mode for the following SKUs: <ul style="list-style-type: none"> • 900-9D3B4-00CC-EA0 • 900-9D3B4-00SC-EA0 • 900-9D3B4-00CV-EA0 • 900-9D3B4-00SV-EA0 • 900-9D3B4-00EN-EA0 • 900-9D3B4-00PN-EA0 • 900-9D3D4-00EN-HA0 • 900-9D3D4-00NN-HA0
virtio-net	Added support for VIRTIO_NET_F_HASH_REPORT(57) bit for the virtio-net emulation device.

Feature/ Change	Description
Emulation Device	Added support for VIRTIO_NET_F_SPEED_DUPLEX(63) bit for the virtio-net emulation device.
virtio Full Emulation	Added support for virtio full emulation scale up to 2k devices.
ODP Event	Added support for the following prefetch fields on ODP event: pre_demand_fault_pages, post_demand_fault_pages.
TRNG FIPS Compliance	Implemented Deterministic Random Bit Generator (DRBG) algorithm on top of firmware TRNG (the source for raw data input) in accordance with NIST SP800-90A.
PSP	Added support for PSP in Hardware Steering.
NVConfig	Added a new NVConfig option to copy AR bit from the BTH header to the DHCP header.
Generic Emulation	Generic Emulation enables the programmers to define their own custom PCI devices to be exposed to the host using the new hot-plug/unplug function flow. The API enables the programmer to control the device BARs layout, software defined BAR registers and hardware offloading mechanisms (MSI-X, DBs).
Steering	Added the option provide field's offset and length in Steering add_action option.
Steering Match	Added support for steering match on packet I4_type through FTG/FTE.
RSHIM PF	RSHIM PF functionalities are now dynamically locked/unlocked during runtime by Platform BMC via the NC-SI commands.
BAR Pages	<p>Added support for 64KB pages. Note: Configuring BAR_PAGE_ALIGNMENT to ALIGN_64KB(2) while one of the following is configured will cause the device to ignore the BAR_PAGE_ALIGNMENT configuration:</p> <ul style="list-style-type: none"> • PF_NUM_PF_MSIX>256 on any of the Physical Functions • VIRTIO_EMULATION_HOTPLUG_TRANS/VIRTIO_NET_EMULATION_PF_PCI_LAYOUT/ VIRTIO_NET_EMULATION_VF_PCI_LAYOUT/ VIRTIO_BLK_EMULATION_PF_PCI_LAYOUT/ VIRTIO_BLK_EMULATION_PF_PCI_LAYOUT=VIRTIO_TRANSITIONAL(1)

Feature/ Change	Description
ATF/UEFI Version Query	Added the ability to query ATF/UEFI version via the MISOC register.
Program mable Congesti on Control	Added support for PCC NP for RTT according to the IFA2.0 standards.
Flex Parser Merge Mechani sm	Extended Flex Parser merge mechanism to support hardware capabilities.
Flex Parser	Enabled the option to disable the native parser when the parse graph node is configured with the same conditions.
Flex Parser	Added support for father/son headers parsing.
LRO	Added support for tunnel_offload in LRO.
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Feature/ Change	Description
32.40.1000	
Socket Direct Single netdev Mapped to Two PCIe Devices	<p>Enabled Single Netdev mapping to two PCIe devices (Socket Direct). Now multiple devices (PFs) of the same port can be combined under a single netdev instance. Traffic is passed through different devices belonging to different NUMA sockets, thus saving cross-NUMA traffic and allowing apps running on the same netdev from different NUMAs to still feel a sense of proximity to the device and achieve improved performance.</p> <p>The netdev is destroyed once any of the PFs is removed. A proper configuration would utilize the correct close NUMA when working on a certain app/CPU.</p> <p>Currently, this capability is limited to PFs only, and up to two devices (sockets). To enable the feature, one must configure the same Socket Direct group (non zero) for both PFs through mlxconfig SD_GROUP.</p>

Feature/ Change	Description
ACL	Added support for egress ACL to the uplink by adding a new bit to the Set Flow Table Entry: allow_fdb_uplink_hairpin.
Port Rate Limiting	Added a new access register (PBWS) to set the port maximum bandwidth to a value between 95% to 100%.
mlxconfig	Added a new NVConfig parameter to force Congestion Control algorithm to be SW-DCQCN.
Bug Fixes	See <i>Bug Fixes in this Firmware Version</i> section.

Bug Fixes History

Note

This section includes history of bug fixes of 3 major releases back. For [older releases history](#), please refer to the relevant firmware versions Release Notes .

Internal Ref.	Issue
4040226	Description: Added a recovery step in case of CQ doorbell getting lost during VF migration.
	Keywords: VF migration
	Discovered in Version: 32.42.1000
	Fixed in Release: 32.43.1014
4120411	Description: Fixed an issue that occasionally caused PTP accuracy degradation for port speed configured to 1G or 10G.
	Keywords: PTP
	Discovered in Version: 32.42.1000

Internal Ref.	Issue
	Fixed in Release: 32.43.1014
4029209	Description: Modified the UEFI driver MFLR send behavior upon boot. Now MFLR is send only if there is a setting change and not per boot.
	Keywords: UEFI, reset, warm reboot
	Discovered in Version: 32.40.1000
	Fixed in Release: 32.43.1014
4014351	Description: Fixed the query for FACTORY default NV configuration values. The firmware always returned the "next" value to be applied.
	Keywords: Access register MNVDA, QUERY / SET configurations
	Discovered in Version: 32.42.1000
	Fixed in Release: 32.43.1014
4049465	Description: Changed the PCI Gen4/5 default CTLE VGA gain.
	Keywords: PCI Gen4/5 CTLE VGA gain
	Discovered in Version: 32.39.2048
	Fixed in Release: 32.43.1014
4042576	Description: Changed the static configuration for Gen4/5 in the SerDes to support high gain signal.
	Keywords: PCIe Gen4/5 static serdes configuration
	Discovered in Version: 32.39.2048
	Fixed in Release: 32.43.1014
3605828 / 3629606	Description: Some pre-OS environments may fail when sensing a hot-plug operation during their boot stage.
	Keywords: Hot-plug operation
	Discovered in Version: 32.39.2048
	Fixed in Release: 32.43.1014
4075068	Description: Added address validation in MLNX OEM CMD 0x0032 (get debug info) to be 4-bytes aligned.
	Keywords: Address validation, 0x0032
	Discovered in Version: 32.40.1000

Internal Ref.	Issue
	Fixed in Release: 32.43.1014
4050367	Description: Fixed an issue that resulted in MCTP SMBUS TX buffer corruption in multi-bmc topology. To resolve it, a separate buffer for each BMC was implemented.
	Keywords: MCTP SMBUS TX buffer
	Discovered in Version: 32.40.1000
	Fixed in Release: 32.43.1014

Internal Ref.	Issue
3949320	Description: Fixed the partition default value in firmware when MFT builds the bin file. Additionally, in "root certificate" partition, modified the discovery flow in case both of the "root certificate" partition are invalid by erasing them before they are used.
	Keywords: Partition
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000
3985535	Description: Fixed an issue that caused RDE PortMetrics property Transceivers.SupplyVoltage to be reflected in incorrect units of 100uV instead of V.
	Keywords: RDE
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000
3938744	Description: Prevented HCA_CAP from allowing rogue drivers to create more EQs than the number allowed in the HCA_CAP.max_num_eqs.
	Keywords: HCA_CAP
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000
3898979	Description: Fixed the CMIS deactivation process for 2 lanes modules.
	Keywords: CMIS
	Discovered in Version: 32.41.1000

Internal Ref.	Issue
	Fixed in Release: 32.42.1000
3885845	Description: Added support for unique boot configuration for Micron SSDs via ALT5 INI.
	Keywords: Micron SSDs, ALT5 INI
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000
3937932	Description: Fixed an issue that prevented RTT response from being send thus resulting in a firmware assert with <code>ext_synd=0x8175</code> in dmesg when starting the DoCA PCC NP application and the queue size is higher than 16.
	Keywords: PCC NP, pcc_np_config_obj, queue size
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000
3949792	Description: Fixed the esw scheduling rate limiter behavior to present more accurate information for virtio_net VFs and irtio_blk VFs.
	Keywords: Rate limiter
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000
3652616	Description: Fixed an issue that prevented CNP or RTT counters from wrapping around properly.
	Keywords: CNP, RTT, counter
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000
3932734	Description: Fixed an issue that prevented virtio blocked devices from being re-enabled after rebooting the server with a Virtio Block device enabled, because of a firmware internal error 7 which appears in the Host Dmesg. The following error will appear in the SNAP logs "Failed to start pci device: open BLK device for vhca_id 0x2 failed".
	Keywords: Virtio, Internal error, server reboot
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000

Internal Ref.	Issue
3546668	Description: Fixed an issue in systems with 64k page size, where applications opening a substantial amount of RDMA resources such as UARs, QPs, and CQs might encounter errors during the creation of these resources due to limitations in PCI BAR size.
	Keywords: RDMA
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000
3976276	Description: Fixed an issue that prevented the SFF module from accessing the EEPROM data when removing the CMIS module and inserting the SFF module instead of it.
	Keywords: EEPROM, SFF, CMIS
	Discovered in Version: 32.41.1000
	Fixed in Release: 32.42.1000

Internal Ref.	Issue
3675068	Description: Added the TX_SCHEDULER_FWS_REACTIVITY nvconfig flag to solved an mlnx_qos ETS settings issue.
	Keywords: nvconfig, ETS
	Discovered in Version: 32.39.2048
	Fixed in Release: 32.41.1000
3787123	Description: Improved ZTR_RTTCC algorithm fairness when running with 4K MTU.
	Keywords: PCC
	Discovered in Version: 32.39.2048
	Fixed in Release: 32.41.1000
3729783	Description: Fixed an issue where Congestion Control could malfunction due to an invalid database.
	Keywords: Congestion Control
	Discovered in Version: 32.39.2048
	Fixed in Release: 32.41.1000

Internal Ref.	Issue
3809139	Description: Enabled NC-SI NVIDIA OEM command Get PF MAC Address accessed inexistent PF MAC when "Hide second port".
	Keywords: NC-SI
	Discovered in Version: 32.39.2048
	Fixed in Release: 32.41.1000

Internal Ref.	Issue
3712016	Description: Fixed an issue that prevented Congestion Control from behaving properly when GRH is used in traffic of an IB cluster.
	Keywords: IB Congestion Control, CNP, SL
	Discovered in Version: 32.39.2048
	Fixed in Release: 32.40.1000
3708035	Description: Fixed an issue with Selective-Repeat configuration which occasionally caused retransmission to wait for timeout instead of out-of-sequence NACK.
	Keywords: RoCE, SR
	Discovered in Version: 32.38.1002
	Fixed in Release: 32.40.1000
3695219	Description: Enabled the lowest minimum rate for SW DCQCN to enable congestion control to hold a larger amount of QPs without pauses or drops.
	Keywords: Congestion control, PCC, DCQCN
	Discovered in Version: 32.38.3056
	Fixed in Release: 32.40.1000
3481864	Description: Fixed an issue that resulted in console getting stuck and kernel call trace when trying to destroy native VFs or unload the MLNX_OFED driver when setting the mlxconfig configuration of 192 native VFs + 416 VBLK VFs + 416 VNET VFs.
	Keywords: Call trace, host, NIC mode, DPU mode
	Discovered in Version: 32.38.3056
	Fixed in Release: 32.40.1000

Internal Ref.	Issue
3659549	<p>Description: Fixed an issue that resulted in packets loss in 3rd party NVMF target when using <code>migreq==0</code> over ethernet. Such error is now ignored, and the systems stays with the current (MIGRATED) PA state.</p>
	<p>Keywords: NVMe-oF Connectivity</p>
	<p>Discovered in Version: 32.38.3056</p>
	<p>Fixed in Release: 32.40.1000</p>
3469692	<p>Description: Added support for 16M IPsec sessions.</p>
	<p>Keywords: IPsec</p>
	<p>Discovered in Version: 32.38.3056</p>
	<p>Fixed in Release: 32.40.1000</p>
3671356	<p>Description: Added new parameters for PLDM temperature thresholds to the B3140H DPU cards:</p> <ul style="list-style-type: none"> • Warning - 97 C • Critical - 102 C • Hysteresis - 5 C
	<p>Keywords: PLDM, temperature</p>
	<p>Discovered in Version: 32.38.3056</p>
	<p>Fixed in Release: 32.40.1000</p>
3686150	<p>Description: Fixed an issue in the RTT template that resulted in letters at the end of the filename being dropped from its description as they were not aligned when querying for the description using the PPCC command.</p>
	<p>Keywords: PPCC, DOCA PCC</p>
	<p>Discovered in Version: 32.38.3056</p>
	<p>Fixed in Release: 32.40.1000</p>

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Product	Version	Legal Notices and 3rd Party Licenses
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