



Supported Platforms and Interoperability

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Supported NVIDIA BlueField-3 Platforms

SKU	PSID	Description
900-9D3B6-00CN-AB0	MT_000000883	NVIDIA BlueField-3 B3240 P-Series Dual-slot FHHL DPU; 400GbE / NDR IB (default mode); Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B6-00CV-AA0	MT_000000884	NVIDIA BlueField-3 B3220 P-Series FHHL DPU; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B6-00SN-AB0	MT_000000964	NVIDIA BlueField-3 B3240 P-Series Dual-slot FHHL DPU; 400GbE / NDR IB (default mode); Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B6-00SV-AA0	MT_000000965	NVIDIA BlueField-3 B3220 P-Series FHHL DPU; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B4-00CC-EA0	MT_000000966	NVIDIA BlueField-3 B3210L E-series FHHL SuperNIC; 100GbE (default mode) / HDR100 IB; Dual port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B4-00SC-EA0	MT_000000967	NVIDIA BlueField-3 B3210L E-series FHHL SuperNIC; 100GbE (default mode) / HDR100 IB; Dual port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B4-00EN-EA0	MT_000001010	NVIDIA BlueField-3 B3140L E-Series FHHL SuperNIC; 400GbE / NDR IB (default mode); Single-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B4-00PN-EA0	MT_000001011	NVIDIA BlueField-3 B3140L E-Series FHHL SuperNIC; 400GbE / NDR IB (default mode); Single-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Disabled

SKU	PSID	Description
900-9D3B6-00CC-AA0	MT_000001024	NVIDIA BlueField-3 B3210 P-Series FHHL DPU; 100GbE (default mode) / HDR100 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC;Crypto Enabled
900-9D3B6-00SC-AA0	MT_000001025	NVIDIA BlueField-3 B3210 P-Series FHHL DPU; 100GbE (default mode) / HDR100 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3D4-00EN-HA0	MT_000001069	Nvidia BlueField-3 B3140H E-series HHL SuperNIC; 400GbE (default mode) / NDR IB; Single-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on board DDR; integrated BMC; Crypto Enabled
900-9D3D4-00NN-HA0	MT_000001070	Nvidia BlueField-3 B3140H E-series HHL SuperNIC; 400GbE (default mode) /NDR IB; Single-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on board DDR; integrated BMC; Crypto Disabled
900-9D3C6-00CV-DA0	MT_000001075	NVIDIA BlueField-3 B3220SH E-Series FHHL Storage Controller; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 48GB on-board DDR; integrated BMC; Crypto Enabled; Secure Boot
900-9D3C6-00CV-GA0	MT_000001083	NVIDIA BlueField-3 B3220SH E-Series No heatsink FHHL Storage Controller; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 48GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B4-00CV-EA0	MT_000001093	NVIDIA BlueField-3 B3220L E-Series FHHL SuperNIC; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B4-00SV-EA0	MT_000001094	NVIDIA BlueField-3 B3220L E-Series FHHL SuperNIC; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3C6-0000	MT_000000000	NVIDIA BlueField-3 B3220SH E-Series No Heatsink FHHL Storage Controller; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112;

SKU	PSID	Description
00SV-GA0	01101	PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 48GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3C6-00SV-DA0	MT_000001102	NVIDIA BlueField-3 B3220SH E-Series FHHL Storage Controller; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 48GB on-board DDR; integrated BMC; Crypto Disabled;
900-9D3B6-00CC-EA0	MT_000001115	NVIDIA BlueField-3 B3210E E-Series FHHL DPU; 100GbE (default mode) / HDR100 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B6-00SC-EA0	MT_000001117	NVIDIA BlueField-3 B3210E E-Series FHHL DPU; 100GbE (default mode) / HDR100 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B6-00CN-PA0	MT_000001188	NVIDIA BlueField-3 B3240 P-Series FHHL DPU for Cold Aisle; 400GbE / NDR IB (default mode); Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B6-00CV-PA0	MT_000001196	NVIDIA BlueField-3 B3220 P-Series FHHL DPU for Cold Aisle; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled; Tall Bracket

Supported NVIDIA BlueField-2 Platforms

SKU	PSID	Description
900-9D3B6-00CN-AB0	MT_000000883	NVIDIA BlueField-3 B3240 P-Series Dual-slot FHHL DPU; 400GbE / NDR IB (default mode); Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B6-00CV-AA0	MT_000000884	NVIDIA BlueField-3 B3220 P-Series FHHL DPU; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled

SKU	PSID	Description
900-9D3B6-00SN-AB0	MT_000000964	NVIDIA BlueField-3 B3240 P-Series Dual-slot FHHL DPU; 400GbE / NDR IB (default mode); Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B6-00SV-AA0	MT_000000965	NVIDIA BlueField-3 B3220 P-Series FHHL DPU; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B4-00CC-EA0	MT_000000966	NVIDIA BlueField-3 B3210L E-series FHHL SuperNIC; 100GbE (default mode) / HDR100 IB; Dual port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B4-00SC-EA0	MT_000000967	NVIDIA BlueField-3 B3210L E-series FHHL SuperNIC; 100GbE (default mode) / HDR100 IB; Dual port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B4-00EN-EA0	MT_000001010	NVIDIA BlueField-3 B3140L E-Series FHHL SuperNIC; 400GbE / NDR IB (default mode); Single-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B4-00PN-EA0	MT_000001011	NVIDIA BlueField-3 B3140L E-Series FHHL SuperNIC; 400GbE / NDR IB (default mode); Single-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B6-00CC-AA0	MT_000001024	NVIDIA BlueField-3 B3210 P-Series FHHL DPU; 100GbE (default mode) / HDR100 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC;Crypto Enabled
900-9D3B6-00SC-AA0	MT_000001025	NVIDIA BlueField-3 B3210 P-Series FHHL DPU; 100GbE (default mode) / HDR100 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3D4	MT_00000000	Nvidia BlueField-3 B3140H E-series HHHL SuperNIC; 400GbE (default mode) / NDR IB; Single-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on board DDR; integrated BMC; Crypto Enabled

SKU	PSID	Description
-00EN- HA0	0106 9	
900- 9D3D4 -00NN- HA0	MT_0 0000 0107 0	Nvidia BlueField-3 B3140H E-series FHHL SuperNIC; 400GbE (default mode) /NDR IB; Single-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on board DDR; integrated BMC; Crypto Disabled
900- 9D3C6- 00CV- DA0	MT_0 0000 0107 5	NVIDIA BlueField-3 B3220SH E-Series FHHL Storage Controller; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 48GB on-board DDR; integrated BMC; Crypto Enabled; Secure Boot
900- 9D3C6- 00CV- GA0	MT_0 0000 0108 3	NVIDIA BlueField-3 B3220SH E-Series No heatsink FHHL Storage Controller; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 48GB on-board DDR; integrated BMC; Crypto Enabled
900- 9D3B4- 00CV- EA0	MT_0 0000 0109 3	NVIDIA BlueField-3 B3220L E-Series FHHL SuperNIC; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Enabled
900- 9D3B4- 00SV- EA0	MT_0 0000 0109 4	NVIDIA BlueField-3 B3220L E-Series FHHL SuperNIC; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16; 8 Arm cores; 16GB on-board DDR; integrated BMC; Crypto Disabled
900- 9D3C6- 00SV- GA0	MT_0 0000 0110 1	NVIDIA BlueField-3 B3220SH E-Series No Heatsink FHHL Storage Controller; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 48GB on-board DDR; integrated BMC; Crypto Disabled
900- 9D3C6- 00SV- DA0	MT_0 0000 0110 2	NVIDIA BlueField-3 B3220SH E-Series FHHL Storage Controller; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 48GB on-board DDR; integrated BMC; Crypto Disabled;
900- 9D3B6- 00CC- EA0	MT_0 0000 0111 5	NVIDIA BlueField-3 B3210E E-Series FHHL DPU; 100GbE (default mode) / HDR100 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled

SKU	PSID	Description
900-9D3B6-00SC-EA0	MT_000001117	NVIDIA BlueField-3 B3210E E-Series FHHL DPU; 100GbE (default mode) / HDR100 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Disabled
900-9D3B6-00CN-PA0	MT_000001188	NVIDIA BlueField-3 B3240 P-Series FHHL DPU for Cold Aisle; 400GbE / NDR IB (default mode); Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled
900-9D3B6-00CV-PA0	MT_000001196	NVIDIA BlueField-3 B3220 P-Series FHHL DPU for Cold Aisle; 200GbE (default mode) / NDR200 IB; Dual-port QSFP112; PCIe Gen5.0 x16 with x16 PCIe extension option; 16 Arm cores; 32GB on-board DDR; integrated BMC; Crypto Enabled; Tall Bracket

Embedded Software

The BlueField installation DOCA local repo package for this release is DOCA_2.7.0_BSP_4.7.0_Ubuntu_22.04-2.23-07.prod.bfb.

The following software components are embedded in it:

Component	Version	Description
ATF	v2.2(release): 4.7.0-25-g5569834	Arm-trusted firmware is a reference implementation of secure world software for Arm architectures
UEFI	4.7.0-42-g13081ae	UEFI is a specification that defines the architecture of the platform firmware used for booting and its interface for interaction with the operating system
BlueField-3 NIC firmware	32.41.1000	Firmware is used to run user programs on the BlueField-3 which allow hardware to run
BlueField-2 NIC firmware	24.41.1000	Firmware is used to run user programs on the BlueField-2 which allow hardware to run

Component	Version	Description
BMC firmware	24.04	BlueField BMC firmware
BlueField-3 eROT (Glacier)	cec_ota_BMG P-04.0f	BlueField-3 eROT firmware
BlueField-2 eROT (CEC)	00.02.0182.0 000.n02	BlueField-2 eROT firmware

Info

For more information about embedded software components and drivers, refer to the [DOCA Release Notes](#).

Supported DPU Linux Distributions (aarch64)

- Ubuntu 22.04

Supported Host OS per DOCA-Host Installation Profile

The default operating system included with the BlueField Bundle (for DPU and SuperNIC) is Ubuntu 22.04.

The supported operating systems on the host machine per DOCA-Host installation profile are the following:

Note

Only the following generic kernel versions are supported for DOCA local repo package for host installation.

OS	OS Version	Default Kernel Version	Arch	DOCA Profile		
				doca-all	doca-networking	doca-oped
Alinux	3.2	5.10.134-13.al8.x86_64	x86			
Anolis	8.6	5.10.134+	aarch64			
			x86			
BCLinux	21.10SP2	4.19.90-2107.6.0.0098.oe1.bclinux.aarch64	aarch64			
		4.19.90-2107.6.0.0100.oe1.bclinux.x86_64	x86			
CTYunOS	2.0	4.19.90-2102.2.0.0062.ctl2.aarch64	aarch64			
		4.19.90-2102.2.0.0062.ctl2.x86_64	x86			
	3.0 (23.01)	5.10.0-136.12.0.86.ctl3.aarch64	aarch64			
		5.10.0-136.12.0.86.ctl3.x86_64	x86			
Debian	10.13	4.19.0-21-arm64	aarch64			
		4.19.0-21-amd64	x86			
	10.8	4.19.0-14-arm64	aarch64			
		4.19.0-14-amd64	x86			
	10.9	4.19.0-16-amd64	x86			
	11.3	5.10.0-13-arm64	aarch64			
5.10.0-13-amd64		x86				

OS	OS Version	Default Kernel Version	Arch	DOCA Profile		
	12.1	6.1.0-10-arm64	aarch64			
		6.1.0-10-amd64	x86			
EulerOS	2.0sp1 1	5.10.0-60.18.0.50.h323.eulerosv2r11.aarch64	aarch64			
		5.10.0-60.18.0.50.h323.eulerosv2r11.x86_64	x86			
	2.0sp1 2	5.10.0-136.12.0.86.h1032.eulerosv2r12.aarch64	aarch64			
		5.10.0-136.12.0.86.h1032.eulerosv2r12.x86_64	x86			
Kylin	10sp2	4.19.90-24.4.v2101.ky10.aarch64	aarch64			
		4.19.90-24.4.v2101.ky10.x86_64	x86			
	10sp3	4.19.90-52.22.v2207.ky10.aarch64	aarch64			
		4.19.90-52.22.v2207.ky10.x86_64	x86			
Mariner	2.0	5.15.118.1-1.cm2.x86_64	x86			
Oracle Linux	7.9	5.4.17-2011.6.2.el7uek.x86_64	x86			
	8.4	5.4.17-2102.201.3.el8uek.x86_64	x86			
	8.6	5.4.17-2136.307.3.1.el8uek.x86_64	x86			
	8.7	5.15.0-3.60.5.1.el8uek.x86_64	x86			

OS	OS Version	Default Kernel Version	Arch	DOCA Profile		
	8.8	5.15.0-101.103.2.1.el8uek.x86_64	x86			
	9.1	5.15.0-3.60.5.1.el9uek.x86_64	x86			
	9.2	5.15.0-101.103.2.1.el9uek.x86_64	x86			
openEuler	20.03sp3	4.19.90-2112.8.0.0131.oe1.aarch64	aarch64			
		4.19.90-2112.8.0.0131.oe1.x86_64	x86			
	22.03	5.10.0-60.18.0.50.oe2203.aarch64	aarch64			
		5.10.0-60.18.0.50.oe2203.x86_64	x86			
RHEL/CentOS	8.0	4.18.0-80.el8.aarch64	aarch64			
		4.18.0-80.el8.x86_64	x86			
	8.1	4.18.0-147.el8.aarch64	aarch64			
		4.18.0-147.el8.x86_64	x86			
	8.2	4.18.0-193.el8.aarch64	aarch64			
		4.18.0-193.el8.x86_64	x86			
	8.3	4.18.0-240.el8.aarch64	aarch64			
		4.18.0-240.el8.x86_64	x86			
	8.4	4.18.0-305.el8.aarch64	aarch64			
		4.18.0-305.el8.x86_64	x86			

OS	OS Version	Default Kernel Version	Arch	DOCA Profile		
RHEL/Rocky	8.5	4.18.0-348.el8.aarch64	aarch64			
		4.18.0-348.el8.x86_64	x86			
	8.6	4.18.0-372.41.1.el8_6.aarch64	aarch64			
		4.18.0-372.41.1.el8_6.x86_64	x86			
	8.7	4.18.0-425.14.1.el8_7.aarch64	aarch64			
		4.18.0-425.14.1.el8_7.x86_64	x86			
	8.8	4.18.0-477.10.1.el8_8.aarch64	aarch64			
		4.18.0-477.10.1.el8_8.x86_64	x86			
	8.9	4.18.0-513.5.1.el8_9.aarch64	aarch64			
		4.18.0-513.5.1.el8_9.x86_64	x86			
	9.0	5.14.0-70.46.1.el9_0.aarch64	aarch64			
		5.14.0-70.46.1.el9_0.x86_64	x86			
	9.1	5.14.0-162.19.1.el9_1.aarch64	aarch64			
		5.14.0-162.19.1.el9_1.x86_64	x86			
	9.2	5.14.0-284.11.1.el9_2.aarch64	aarch64			
		5.14.0-284.11.1.el9_2.x86_64	x86			
	9.3	5.14.0-362.8.1.el9_3.aarch64	aarch64			
		5.14.0-362.8.1.el9_3.x86_64	x86			
SLES	15sp2	5.3.18-22-default	aarch64			

OS	OS Version	Default Kernel Version	Arch	DOCA Profile		
	15sp3	5.3.18-57-default	x86			
			aarch64			
	15sp4	5.14.21-150400.22-default	x86			
			aarch64			
	15sp5	5.14.21-150500.53-default	x86			
			aarch64			
TKLinux	3.3	5.4.119-19.0009.39	aarch64			
		5.4.119-19.0009.39	x86			
Ubuntu	20.04	5.4.0-26-generic	x86			
			aarch64			
	22.04	5.15.0-25-generic	x86			
			aarch64			
	24.04	6.8.0-31-generic	x86			
			aarch64			
UOS	20.1060a	5.10.0-46.uelc20.aarch64	aarch64			
		5.10.0-46.uelc20.x86_64	x86			
	20.1060e	5.10.0-46.uel20.aarch64	aarch64			
		5.10.0-46.uel20.x86_64	x86			

OS	OS Version	Default Kernel Version	Arch	DOCA Profile		
XenServer	8.2	4.19.0+1	x86			

Supported Open vSwitch

- 2.15.1

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