

NVIDIA DOCA

Glossary

Table of Contents

Chapter	1.	Terms	and	Acrony	/ms	 	 	 	1
Ollaptel		1 011110	arra	7 (01 011	, , , , , , , , , , , , , , , , , , , ,	 	 	 	

NVIDIA DOCA MLNX-15-060552 _v1.4 | ii

Chapter 1. Terms and Acronyms

Term	Description
ACE	AXI Coherency Extensions
ACPI	Advanced Configuration and Power Interface
AMBA®	Advanced Microcontroller Bus Architecture
ARB	Arbitrate
ATF	Arm Trusted Firmware
AXI4	Advanced eXtensible Interface 4
BERT	Boot error record table
BF_INST_DIR	The directory where the BlueField software is installed
BFB	BlueField bootstream
BMC	Board management controller
BSD	BlueField Software Distribution
BUF	Buffer
BSP	BlueField support package
CHI	Coherent Hub Interface; Arm [®] protocol used over the BlueField Skymesh specification
CL	Cache line
CMDQ	Command queue
СМО	Cache maintenance operation
COB	Collision buffer
DAT	Data
DMA	Direct memory access
DOCA	DPU SDK
DPDK	Data Plane Development Kit
DPI	Deep packet inspection
DPU	Data Processing Unit, the third pillar of the data center with CPU and GPU
DVM	Distributed virtual memory
ECPF	Embedded CPU Physical Function

NVIDIA DOCA MLNX-15-060552 _v1.4 | 1

Term	Description
EMEM/EMI	External memory interface; block in the MSS which performs the actual read/write from the DDR device
eMMC	Embedded Multi-media Card
ESP	EFI system partition
FS	File system
FW	Firmware
GDB	GNU debugger
GPT	GUID partition table
HNF	Home node interface
Host	When referring to "the host" this documentation is referring to the server host . When referring to the Arm based host, the documentation will specifically call out "Arm host".
	Server host OS refers to the Host Server OS (Linux or Windows)
	 Arm host refers to the AARCH64 Linux OS which is running on the BlueField Arm Cores
HW	Hardware
hwmon	Hardware monitoring
IB	InfiniBand
ICM	Interface Configuration Memory
IPMB	Intelligent Platform Management Bus
IPMI	Intelligent Platform Management Interface
KGDB	Kernel debugger
KGDBOC	Kernel debugger over console
LAT	Latency
LCRD	Link credit
MSS	Memory subsystem
MST	Mellanox Software Tools
NAT	Network address translation
NIC	Network interface card
OCD	On-chip debugger
00B	Out-of-band
OS	Operating system
OVS	Open vSwitch
PCle	PCI Express; Peripheral Component Interconnect Express
PF	Physical function
PK	Public key

Term	Description
PKA	Public key accelerator
POC	Point of coherence
RD	Read
RegEx	Regular expression
REQ	Request
RES	Response
RN	Request node
	RN-F – Fully coherent request node
	RN-D – IO coherent request node with DVM support
	RN-I – IO coherent request node
RNG	Random number generator/generation
RoCE	Ethernet and RDMA over Converged Ethernet
RQ	Receive queue
RShim	Random Shim
RX	Receive
SBSA	Server Base System Architecture
SDK	Software development kit
SF	Sub-function or scalable function
SMMU	System memory management unit
SNP	Snooping
SQ	Send queue
SR-IOV	Single Root IO Virtualization
STL	Stall
TBU	Translation Buffer Unit
TRB	Trail buffer
TS0	Total store order
TX	Transmit
UEFI	Unified Extensible Firmware Interface
UPVS	UEFI Persistent Variable Store
VF	Virtual function
VM	Virtual machine
VPI	Virtual Protocol Interconnect
VST	Virtual Switch Tagging
WR	Write
WRDB	Write data buffer

NVIDIA DOCA MLNX-15-060552_v1.4 | 3

Notice

This document is provided for information purposes only and shall not be regarded as a warranty of a certain functionality, condition, or quality of a product. NVIDIA Corporation nor any of its direct or indirect subsidiaries and affiliates (collectively: "NVIDIA") make no representations or warranties, expressed or implied, as to the accuracy or completeness of the information contained in this document and assume no responsibility for any errors contained herein. NVIDIA shall have no liability for the consequences or use of such information or for any infringement of patents or other rights of third parties that may result from its use. This document is not a commitment to develop, release, or deliver any Material (defined below), code, or functionality.

NVIDIA reserves the right to make corrections, modifications, enhancements, improvements, and any other changes to this document, at any time without notice.

Customer should obtain the latest relevant information before placing orders and should verify that such information is current and complete.

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

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

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

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

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

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

Trademarks

NVIDIA, the NVIDIA logo, and Mellanox are trademarks and/or registered trademarks of Mellanox Technologies Ltd. and/or NVIDIA Corporation in the U.S. and in other countries. The registered trademark Linux® is used pursuant to a sublicense from the Linux Foundation, the exclusive licensee of Linus Torvalds, owner of the mark on a world-wide basis. Other company and product names may be trademarks of the respective companies with which they are associated.

Copyright

 $^{\odot}$ 2022 NVIDIA Corporation & affiliates. All rights reserved.

