



SUPPORT MATRIX FOR CUDNN

DA-06762-001_v7.6.4 | September 2019

Support Guide



TABLE OF CONTENTS

Chapter 1. CUDA And NVIDIA Hardware For cuDNN.....	1
1.1. cuDNN v7.6.3 - v7.6.4.....	1
1.2. cuDNN v7.5.1 - v7.6.1.....	2
1.3. cuDNN v7.3.1 - v7.5.0.....	3
1.4. cuDNN v7.1.4 - v7.2.1.....	3
Chapter 2. OS Versions For cuDNN.....	5

Chapter 1.

CUDA AND NVIDIA HARDWARE FOR CUDNN

The following sections highlight the compatibility of cuDNN versions with the various supported CUDA, CUDA driver, and NVIDIA hardware versions.

1.1. cuDNN v7.6.3 - v7.6.4

Table 1 Supported NVIDIA hardware, CUDA, and CUDA driver versions for cuDNN v7.6.3 - v7.6.4

Supported NVIDIA Hardware (Compute Capability)	CUDA Version	CUDA Driver Version
<ul style="list-style-type: none">▶ Turing (7.5)▶ Volta (7.x)▶ Xavier (7.2)▶ Pascal (6.x)▶ Maxwell (5.x)▶ Kepler (3.x)	CUDA 10.1.243	r418.39
<ul style="list-style-type: none">▶ Turing (7.5)▶ Volta (7.x)▶ Xavier (7.2)▶ Pascal (6.x)▶ Maxwell (5.x)▶ Kepler (3.x)	CUDA 10.0.x	r410.48
<ul style="list-style-type: none">▶ Volta (7.x)▶ Xavier (7.2)▶ Pascal (6.x)▶ Maxwell (5.x)▶ Kepler (3.x)	CUDA 9.2.148	r396.26
	CUDA 9.1.85 (Not Supported)	
<ul style="list-style-type: none">▶ Volta (7.x)	CUDA 9.0.176	r384.111

Supported NVIDIA Hardware (Compute Capability)	CUDA Version	CUDA Driver Version
<ul style="list-style-type: none"> ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 		
	CUDA 8.0.61 (Not Supported)	

1.2. cuDNN v7.5.1 - v7.6.1

Table 2 Supported NVIDIA hardware, CUDA, and CUDA driver versions for cuDNN v7.5.1 - v7.6.1

Supported NVIDIA Hardware (Compute Capability)	CUDA Version	CUDA Driver Version
<ul style="list-style-type: none"> ▶ Turing (7.5) ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 10.1.105	r418.39
<ul style="list-style-type: none"> ▶ Turing (7.5) ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 10.0.x	r410.48
<ul style="list-style-type: none"> ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 9.2.88	r396.26
	CUDA 9.1.85 (Not Supported)	
<ul style="list-style-type: none"> ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 9.0.176	r384.111
	CUDA 8.0.61 (Not Supported)	

1.3. cuDNN v7.3.1 - v7.5.0

Table 3 Supported NVIDIA hardware, CUDA, and CUDA driver versions for cuDNN v7.3.1 - v7.5.0

Supported NVIDIA Hardware (Compute Capability)	CUDA Version	CUDA Driver Version
<ul style="list-style-type: none"> ▶ Turing (7.5) ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 10.0.x	r410.48
<ul style="list-style-type: none"> ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 9.2.88	r396.26
	CUDA 9.1.85 (Not Supported)	
<ul style="list-style-type: none"> ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 9.0.176	r384.111
	CUDA 8.0.61 (Not Supported)	

1.4. cuDNN v7.1.4 - v7.2.1

Table 4 Supported NVIDIA hardware, CUDA, and CUDA driver versions for cuDNN v7.1.4 - v7.2.1

Supported NVIDIA Hardware (Compute Capability)	CUDA Version	CUDA Driver Version
	CUDA 10.0.x (Not Supported)	
<ul style="list-style-type: none"> ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 9.2.88	r396.26

Supported NVIDIA Hardware (Compute Capability)	CUDA Version	CUDA Driver Version
	CUDA 9.1.85 (Not Supported)	
<ul style="list-style-type: none"> ▶ Volta (7.x) ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 9.0.176	r384.111
<ul style="list-style-type: none"> ▶ Xavier (7.2) ▶ Pascal (6.x) ▶ Maxwell (5.x) ▶ Kepler (3.x) 	CUDA 8.0.61	r375.88

Chapter 2.

OS VERSIONS FOR CUDNN

The following table highlights the compatibility of cuDNN versions with the various supported OS versions.

Table 5 cuDNN Compatibility with OS Versions

Linux	Mac OS	Windows
Ubuntu 18.04, Ubuntu 16.04 and Ubuntu 14.04 Install cuDNN with Debian files on x86_64. Ubuntu 18.04 Install cuDNN on POWER8 and POWER9.	Mac OS X 10.13 or later.	<ul style="list-style-type: none"> ▶ Windows 10 ▶ Windows 7 ▶ Windows Server 2016 or Windows Server 2012
RHEL7.5 or later Install cuDNN on POWER8 and POWER9.		
Any Linux distribution Install cuDNN with tgz files on x86_64.		

Notice

THE INFORMATION IN THIS GUIDE AND ALL OTHER INFORMATION CONTAINED IN NVIDIA DOCUMENTATION REFERENCED IN THIS GUIDE IS PROVIDED “AS IS.” NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE WITH RESPECT TO THE INFORMATION FOR THE PRODUCT, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. Notwithstanding any damages that customer might incur for any reason whatsoever, NVIDIA’s aggregate and cumulative liability towards customer for the product described in this guide shall be limited in accordance with the NVIDIA terms and conditions of sale for the product.

THE NVIDIA PRODUCT DESCRIBED IN THIS GUIDE IS NOT FAULT TOLERANT AND IS NOT DESIGNED, MANUFACTURED OR INTENDED FOR USE IN CONNECTION WITH THE DESIGN, CONSTRUCTION, MAINTENANCE, AND/OR OPERATION OF ANY SYSTEM WHERE THE USE OR A FAILURE OF SUCH SYSTEM COULD RESULT IN A SITUATION THAT THREATENS THE SAFETY OF HUMAN LIFE OR SEVERE PHYSICAL HARM OR PROPERTY DAMAGE (INCLUDING, FOR EXAMPLE, USE IN CONNECTION WITH ANY NUCLEAR, AVIONICS, LIFE SUPPORT OR OTHER LIFE CRITICAL APPLICATION). NVIDIA EXPRESSLY DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR SUCH HIGH RISK USES. NVIDIA SHALL NOT BE LIABLE TO CUSTOMER OR ANY THIRD PARTY, IN WHOLE OR IN PART, FOR ANY CLAIMS OR DAMAGES ARISING FROM SUCH HIGH RISK USES.

NVIDIA makes no representation or warranty that the product described in this guide will be suitable for any specified use without further testing or modification. Testing of all parameters of each product is not necessarily performed by NVIDIA. It is customer’s sole responsibility to ensure the product is suitable and fit for the application planned by customer and to do 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 guide. NVIDIA does not accept any 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 guide, or (ii) customer product designs.

Other than the right for customer to use the information in this guide with the product, no other license, either expressed or implied, is hereby granted by NVIDIA under this guide. Reproduction of information in this guide is permissible only if reproduction is approved by NVIDIA in writing, is reproduced without alteration, and is accompanied by all associated conditions, limitations, and notices.

Trademarks

NVIDIA, the NVIDIA logo, and cuBLAS, CUDA, cuDNN, DALI, DIGITS, DGX, DGX-1, DGX-2, DGX Station, DLProf, Jetson, Kepler, Maxwell, NCCL, Nsight Compute, Nsight Systems, NvCaffe, PerfWorks, Pascal, SDK Manager, Tegra, TensorRT, TensorRT Inference Server, Tesla, TF-TRT, and Volta are trademarks and/or registered trademarks of NVIDIA Corporation in the United States and other countries. Other company and product names may be trademarks of the respective companies with which they are associated.

Copyright

© 2019 NVIDIA Corporation. All rights reserved.

www.nvidia.com

