

# NVIDIA cuDNN

Support Matrix | NVIDIA Docs

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# Chapter 1. Hardware Requirements

The following sections highlight the compatibility of NVIDIA<sup>®</sup> cuDNN versions with the various supported NVIDIA CUDA<sup>®</sup>, CUDA driver, and NVIDIA hardware versions.

For the requirements of previously released versions of cuDNN documentation, refer to the *NVIDIA cuDNN Archives*.

### Table 1. Supported NVIDIA hardware, CUDA, and CUDA driver

Supported NVIDIA Hardware	CUDA Version	<u>CUDA Compute</u> <u>Capability</u>	CUDA Driver Version
► NVIDIA Ampere	<u>11.5</u> <sup>1</sup>	SM 3.5 and later	r495
Architecture	<u>11.4</u>		r470
► NVIDIA Turing <sup>™</sup>	<u>11.3</u>		r465
► NVIDIA Volta <sup>™</sup>	<u>11.2</u>		r460, r455, r450
► NVIDIA Pascal <sup>™</sup>	<u>11.1</u>		r450, r455
► NVIDIA Maxwell <sup>®</sup>	<u>11.0</u>		r450
► NVIDIA Kepler <sup>™</sup>			
<ul> <li>NVIDIA Turing</li> </ul>	<u>10.2</u>	SM 3.0 and later	r440
NVIDIA Volta			
► Xavier™			
<ul> <li>NVIDIA Pascal</li> </ul>			
<ul> <li>NVIDIA Maxwell</li> </ul>			
<ul> <li>NVIDIA Kepler</li> </ul>			

<sup>&</sup>lt;sup>1</sup> The cuDNN build with CUDA 11.5 is compatible with CUDA 11.0 - 11.4. There is no separate build for CUDA 11.0 - 11.4 drivers.

# Chapter 2. Software Requirements

The following tables highlight the compatibility of cuDNN versions with the various supported OS versions.

For the requirements of previously released versions of cuDNN documentation, refer to the *NVIDIA cuDNN Archives*.

# 2.1. Linux

Refer to the following table to view the list of supported Linux versions for cuDNN.

			Distro Informa	ation	
Architecture	OS Name	<b>OS Version</b>	Kernel	GCC	Glibc
x86_64 RHEL	RHEL	7.8	3.10.0	4.8.5 <sup>2</sup>	2.19
		8.2	4.18	8.3.1	2.28
	Ubuntu	20.04	5.4.0	9.3.0	2.31
		18.04.5 LTS	4.15.0	8.2.0	2.27
ppc64le	RHEL	8.2	4.18	8.3.1	2.28
AArch64	RHEL	8.2	4.18	8.3.1	2.28
incorporates ARM <sup>®</sup> based CPU cores for Server Base System Architecture (SBSA)	Ubuntu	20.04	5.4.0	9.3.0	2.27
AArch64	Ubuntu	18.04	4.15	7.3.1	2.31

### Table 2. Linux versions for cuDNN

<sup>&</sup>lt;sup>2</sup> For platforms that ship a compiler version older than GCC 6 by default, linking to static cuDNN using the default compiler is not supported.

## 2.2. Windows

Windows 10 and Windows Server 2019 and 2016 are supported. Refer to the following table to view the list of supported Visual Studio versions for cuDNN.

## Table 3.Visual Studio versions for based on your version of CUDA

	CUDA 11.x	CUDA 10.2
Visual Studio	2015	2012

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