



# NVIDIA cuDNN

Support Matrix | NVIDIA Docs

# Table of Contents

Chapter 1. GPU, CUDA Toolkit, and CUDA Driver Requirements.....	1
Chapter 2. CPU Architecture and OS Requirements.....	3
2.1. Linux.....	3
2.2. Windows.....	4

# Chapter 1. GPU, CUDA Toolkit, and CUDA Driver Requirements

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

For the CUDA driver requirements for a given CUDA Toolkit version, refer to the [CUDA Compatibility documentation](#).

Table 1. Supported NVIDIA Hardware and CUDA Version

cuDNN Package <sup>1</sup>	Supported NVIDIA Hardware	CUDA Toolkit Version	CUDA Compute Capability	Supports static linking? <sup>2</sup>
cuDNN 8.8.1 for CUDA 12.x	▶ NVIDIA Hopper™ <sup>3</sup>	<a href="#">12.0</a>	SM 5.0 and later	Yes
cuDNN 8.8.1 for CUDA 11.x	▶ NVIDIA Ada Lovelace Architecture <sup>4</sup> ▶ NVIDIA Ampere Architecture ▶ NVIDIA Turing™ ▶ NVIDIA Volta™ ▶ NVIDIA Pascal™	<a href="#">11.8</a>	SM 5.0 - SM 8.7	No
		11.7		
		11.6		
		11.5		
		11.4		
		11.3		
		11.2		
		11.1		
		11.0		

<sup>3</sup> Requires CUDA Toolkit >= 11.8

<sup>4</sup> Requires CUDA Toolkit >= 11.8

cuDNN Package <sup>1</sup>	Supported NVIDIA Hardware	<u>CUDA Toolkit Version</u>	<u>CUDA Compute Capability</u>	Supports static linking? <sup>2</sup>
	▶ NVIDIA Maxwell®			



Note: For best performance, the recommended configuration is cuDNN 8.8.0 on H100 with CUDA 12.0, and cuDNN 8.8.0 on all other GPUs with CUDA 11.8, because this is the configuration that was used for tuning heuristics.

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# Chapter 2. CPU Architecture and OS 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.

Table 2. Linux Versions for cuDNN

Architecture	OS Name	OS Version	Distro Information		
			Kernel	GCC	Glibc
x86_64	RHEL	9.x	5.14.0	8.5.0	2.34
		8.x	4.18.0	8.5.0	2.28
		7.x	3.10.0	4.8.5	2.19
	Rocky	8.6	4.18	8.5.0	2.28
	Ubuntu	22.04	5.15.0	11.2.0	2.35
		20.04	5.15.0	9.4.0	2.31
		18.04	4.15.0	8.2.0	2.27
Debian	11.4	5.10	10.2.1	2.31	
ppc64le	RHEL	8.x	4.18	8.5.0	2.28
AArch64 incorporates ARM® based CPU cores for Server Base System Architecture (SBSA).	RHEL	8.x	4.18	8.5.0	2.28
	Ubuntu	22.04	5.15.0	11.2.0	2.35
		20.04	5.13.0	9.3.0	2.31

Architecture	OS Name	OS Version	Distro Information		
			Kernel	GCC	Glibc
AArch64	Ubuntu	20.04	5.4.0	7.5.0.1	2.27

## 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 Based on Your Version of CUDA

	CUDA 12.x - 11.8	CUDA 11.7 - 11.0
Visual Studio	2019	2017

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