

## **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.

GPU, CUDA Toolkit, and CUDA Driver Requirements Table 1.

	CUDA	Supports	• •		CUDA	Supported	
cuDNN Package <sup>1</sup>	Toolkit Version	static linking? <sup>2</sup>	Linux	Windows	Compute Capability	NVIDIA Hardware	
cuDNN	12.1	Yes	>=525.60.13	>=527.41	9.0 <sup>3</sup>	NVIDIA _	
8.9.1 for CUDA 12.x	12.0	No			8.94	Hopper <sup>™5</sup>	
cuDNN 8.9.1 for CUDA 11.x	11.8	Yes	>= 450.80.02	>=452.39	8.6	NVIDIA Ada Lovelace	
	11.7	No		450.80.02		8.0	architecture <sup>6</sup>
CODA III.X	11.6					7.5	NVIDIA
	11.5				7.0	Ampere architecture	
	11.4				6.1	NVIDIA	
	11.3				6.0	Turing <sup>™</sup>	
	11.2				5.0	NVIDIA Volto™	
	11.1					Volta <sup>™</sup>	
	11.0					NVIDIA Pascal <sup>™</sup>	

Requires CUDA Toolkit >= 11.8. Requires CUDA Toolkit >= 11.8. Requires CUDA Toolkit >= 11.8.

Requires CUDA Toolkit >= 11.8.

	<u>CUDA</u> Supports		<b>NVIDIA Driver Version</b>		CUDA	Supported	
cuDNN Package <sup>1</sup>	_	static linking? <sup>2</sup>	Linux	Windows	Compute Capability	NVIDIA Hardware	
						NVIDIA Maxwell <sup>®</sup>	



Note: For best performance, the recommended configuration is cuDNN 8.9.1 on H100 with CUDA 12.0, and cuDNN 8.9.1 on all other GPUs with CUDA 11.8, because this is the configuration that was used for tuning heuristics.

NVIDIA cuDNN TRM-06762-001\_v8.9.1 | 2

# 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

			Distro Information		
Architecture	OS Name	<b>OS Version</b>	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

### 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	

NVIDIA cuDNN TRM-06762-001\_v8.9.1 | 4

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