



# NVIDIA TensorRT

Support Matrix | NVIDIA Docs

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# Chapter 1. Features for Platforms and Software

This section lists the supported NVIDIA® TensorRT™ features based on which platform and software.

Table 1. List of Supported Features per Platform

	Linux x86-64	Windows x64	Linux ppc64le	Linux SBSA	JetPack
	10.4.x	10.4.x	8.5.x	10.4.x	10.4.x
Supported NVIDIA CUDA® versions	<a href="#">12.6</a> <a href="#">12.5 update 1</a> <a href="#">12.4 update 1</a> <a href="#">12.3 update 2<sup>1</sup></a> <a href="#">12.2 update 2<sup>2</sup></a> <a href="#">12.1 update 1<sup>3</sup></a>	<a href="#">12.6</a> <a href="#">12.5 update 1</a> <a href="#">12.4 update 1</a> <a href="#">12.3 update 2<sup>13</sup></a> <a href="#">12.2 update 2<sup>14</sup></a> <a href="#">12.1 update 1<sup>15</sup></a>	<a href="#">11.8</a>	<a href="#">12.6</a>	<a href="#">12.6</a>

<sup>1</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 12.6. It is compatible with all CUDA 12.x versions and only requires driver 525.x.

<sup>13</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 12.6. It is compatible with all CUDA 12.x versions and only requires driver 525.x.

<sup>2</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 12.6. It is compatible with all CUDA 12.x versions and only requires driver 525.x.

<sup>14</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 12.6. It is compatible with all CUDA 12.x versions and only requires driver 525.x.

<sup>3</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 12.6. It is compatible with all CUDA 12.x versions and only requires driver 525.x.

<sup>15</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 12.6. It is compatible with all CUDA 12.x versions and only requires driver 525.x.

	Linux x86-64	Windows x64	Linux ppc64le	Linux SBSA	JetPack
	10.4.x	10.4.x	8.5.x	10.4.x	10.4.x
	<a href="#">12.0 update</a> <u>1</u> <sup>4</sup>	<a href="#">12.0 update</a> <u>1</u> <sup>16</sup>			
	<a href="#">11.8</a>	<a href="#">11.8</a>			
	<a href="#">11.7 update</a> <u>1</u> <sup>5</sup>	<a href="#">11.7 update</a> <u>1</u> <sup>17</sup>			
	<a href="#">11.6 update</a> <u>2</u> <sup>6</sup>	<a href="#">11.6 update</a> <u>2</u> <sup>18</sup>			
	<a href="#">11.5 update</a> <u>2</u> <sup>7</sup>	<a href="#">11.5 update</a> <u>2</u> <sup>19</sup>			
	<a href="#">11.4 update</a> <u>4</u> <sup>8</sup>	<a href="#">11.4 update</a> <u>4</u> <sup>20</sup>			
	<a href="#">11.3 update</a> <u>1</u> <sup>9</sup>	<a href="#">11.3 update</a> <u>1</u> <sup>21</sup>			
	<a href="#">11.2 update</a> <u>2</u> <sup>10</sup>	<a href="#">11.2 update</a> <u>2</u> <sup>22</sup>			

<sup>4</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 12.6. It is compatible with all CUDA 12.x versions and only requires driver 525.x.

<sup>16</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 12.6. It is compatible with all CUDA 12.x versions and only requires driver 525.x.

<sup>5</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>17</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>6</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>18</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>7</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>19</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>8</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>20</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.


<sup>9</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>21</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>10</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>22</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

	Linux x86-64	Windows x64	Linux ppc64le	Linux SBSA	JetPack
	10.4.x	10.4.x	8.5.x	10.4.x	10.4.x
	<a href="#">11.1 update 1</a> <sup>11</sup>	<a href="#">11.1 update 1</a> <sup>23</sup>			
	<a href="#">11.0 update 3</a> <sup>12</sup>	<a href="#">11.0 update 3</a> <sup>24</sup>			
<a href="#">Supported cuDNN versions (Optional)</a>	<a href="#">cuDNN 8.9.7</a>	<a href="#">cuDNN 8.9.7</a>	<a href="#">cuDNN 8.6.0</a>	<a href="#">cuDNN 8.9.7</a>	<a href="#">cuDNN 8.9.6</a>
TensorRT Python API	Yes	Yes	Yes	Yes	Yes
NvOnnxParser	Yes	Yes	Yes	Yes	Yes
<a href="#">Loops</a>	Yes	Yes	Yes	Yes	Yes

 **Note:**

- ▶ Serialized engines are not portable across platforms.
- ▶ If a serialized engine was created using the version-compatible flag, it could run with newer versions of TensorRT within the same major version.
- ▶ If a serialized engine was created with hardware compatibility mode enabled, it can run on more than one kind of GPU architecture; the specifics depend on the hardware compatibility level used. Otherwise, serialized engines are not portable across devices.
- ▶ Refer to the minimum compatible driver versions in the [NVIDIA CUDA Release Notes](#) for specific [NVIDIA Driver](#) versions.

<sup>11</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>23</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>12</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

<sup>24</sup> These CUDA versions are supported using a single build, built with CUDA toolkit 11.8. It is compatible with all CUDA 11.x versions and only requires driver 450.x.

# Chapter 2. Hardware and Precision

The following table lists NVIDIA hardware and the precision modes each hardware supports. TensorRT has been compiled to support all NVIDIA hardware with SM 7.0 or higher capability. The table also lists the availability of DLA on this hardware. Refer to the following tables for the specifics.

Table 2. Supported Hardware

CUDA Compu Capabi	Examp Device	TF32	FP32	FP16	FP8	BF16	INT8	FP16 Tensor Cores	INT8 Tensor Cores	DLA
9.0	NVIDIA H100  NVIDIA GH200 480GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
8.9	NVIDIA L40S	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
8.7	NVIDIA DRIVE AGX Orin™	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
8.6	NVIDIA A10	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
8.0	NVIDIA A100	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
7.5	NVIDIA T4	No	Yes	Yes	No	No	Yes	Yes	Yes	No

## Deprecated Hardware

Table 3. Deprecated Hardware

<b>CUDA Compu Capabi</b>	<b>Examp Device</b>	<b>TF32</b>	<b>FP32</b>	<b>FP16</b>	<b>FP8</b>	<b>BF16</b>	<b>INT8</b>	<b>FP16 Tensor Cores</b>	<b>INT8 Tensor Cores</b>	<b>DLA</b>
7.0	NVIDIA V100	No	Yes	Yes	No	No	Yes	Yes	No	No

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# Chapter 3. Compute Capability Per Platform

The section lists the supported computing capability based on the platform.

Table 4. Compute Capability per Platform

Platform	Compute capability
Linux x86-64	7.0, 7.5, 8.0, 8.6 <sup>25</sup> , 8.9 <sup>26</sup> , 9.0 <sup>27</sup>
Windows 10 x64	7.0, 7.5, 8.0, 8.6 <sup>28</sup> , 8.9 <sup>29</sup> , 9.0 <sup>30</sup>
CentOS 8.5 ppc64le	7.0, 7.5, 8.0, 8.6, 9.0
Ubuntu 22.04 SBSA	7.0, 7.5, 8.0, 8.6, 9.0
NVIDIA JetPack AArch64	8.7

<sup>25</sup> Requires CUDA Toolkit 11.1 or newer.

<sup>26</sup> Requires CUDA Toolkit 11.8 or newer.

<sup>27</sup> Requires CUDA Toolkit 11.8 or newer.

<sup>28</sup> Requires CUDA Toolkit 11.1 or newer.

<sup>29</sup> Requires CUDA Toolkit 11.8 or newer.

<sup>30</sup> Requires CUDA Toolkit 11.8 or newer.



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# Chapter 4. Software Versions Per Platform

The section lists the supported software versions based on platform.

Table 5. List of Supported Platforms per Software Version

Platform	Compiler version	Python version
Ubuntu 20.04 x86-64	<a href="#">gcc 8.3.1</a>	<a href="#">3.8</a>
Ubuntu 22.04 x86-64	<a href="#">gcc 8.3.1</a>	<a href="#">3.10</a>
Ubuntu 24.04 x86-64	<a href="#">gcc 8.3.1</a>	<a href="#">3.12</a>
Rocky Linux 8.9 x86-64	<a href="#">gcc 8.3.1</a>	<a href="#">3.8</a>
Rocky Linux 9.3 x86-64	<a href="#">gcc 8.3.1</a>	
SLES 15 x86-64	<a href="#">gcc 8.3.1</a>	N/A
<ul style="list-style-type: none"><li>▶ Windows 10 x64</li><li>▶ Windows 11 x64</li><li>▶ Windows Server 2019 x64</li><li>▶ Windows Server 2022 x64</li></ul>	<a href="#">MSVC 2019 v16.9.2</a>	N/A
CentOS 8.5 ppc64le	<a href="#">Clang 14.0.6</a>	<a href="#">3.8</a>
Ubuntu 24.04 SBSA	<a href="#">gcc 8.4</a>	<a href="#">3.12</a>
NVIDIA JetPack AArch64	<a href="#">gcc 11.4</a>	<a href="#">3.10</a>



Note: The Python version listed in the table is the version supported by the Debian or RPM packages. Python versions 3.8, 3.9, 3.10, 3.11, and 3.12 are supported when using Python wheel files from the tar or zip packages.

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# Chapter 5. ONNX Operator Support

The ONNX operator support list for TensorRT can be found [here](#).

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