

Table of Contents

Software Hardware List

Chapter number	Software required (With version)	Free/Proprietary	If proprietary, can code testing be performed using a trial version	If proprietary, then cost of the software	Download links to the software	Hardware specifications	OS required
1, 2, 4, 5, 6, and 7	CUDA Toolkit 9.x/10.x	Free			https://developer.nvidia.com/cuda-toolkit	Common X86 system with NVIDIA GPUs later than Pascal architecture	Linux
3	CUDA Toolkit 9.x/10.x	Free			https://developer.nvidia.com/cuda-toolkit https://developer.nvidia.com/nsight-compute-2019_1-new-features	Common X86 system with NVIDIA GPUs later than Pascal architecture	Linux
8	CUDA Toolkit 9.x/10.x Matlab (later than 2010a)	Free Property	Yes	It depends on the software plan	https://developer.nvidia.com/cuda-toolkit	Common X86 system with NVIDIA GPUs later than Pascal architecture	Linux

9	CUDA Toolkit 9.x/10.x PGI Compilers 18.x/19.x	Free Free (Community Edition)			https://developer.nvidia.com/cuda-toolkit https://www.pgroup.com/products/community.htm	Common X86 system with NVIDIA GPUs later than Pascal architecture	Linux
10	CUDA Toolkit 9.x/10.x NGC	Free			https://developer.nvidia.com/cuda-toolkit https://developer.nvidia.com/cudnn	Common X86 system with NVIDIA GPUs later than Pascal architecture	Linux
Appendix	CUDA Toolkit 9.x/10.x	Free			https://developer.nvidia.com/cuda-toolkit	Common X86 system with NVIDIA GPUs later than Pascal architecture	Linux

Before installing any CUDA software or getting any help we suggest the users register themselves onto CUDA Developer Forum at <https://devtalk.nvidia.com>.

The steps should be listed in a way that it prepares the system environment to be able to test the codes of the book.

1. CUDA Installation: CUDA installation comes with 3 components (Driver, Toolkit, Sample Codes)
 1. All the detailed steps to install CUDA for different OS can be found at:
 1. For Linux: <https://docs.nvidia.com/cuda/cuda-installation-guide-linux/index.html>
 2. For Windows: <https://docs.nvidia.com/cuda/cuda-installation-guide-microsoft-windows/index.html>
 2. If you find any issues related to CUDA installation you can go to CUDA Developer forum and either search for similar issues or start a new thread on same
2. PGI Installation: PGI compilers support OpenACC feature which needs to be installed after the CUDA installation is complete
 - All the detailed steps to install PGI compilers for different OS can be found at:
 - <https://www.pgroup.com/resources/docs/19.1/x86/pgi-install-guide/index.htm>

Index