

# NVIDIA RTX Ampere Architecture-Based Graphics Card User Guide

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## RTX™ GPU QUICK START GUIDE

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## MINIMUM SYSTEM REQUIREMENTS

Thank you for choosing an NVIDIA® RTX™ Ampere architecture-based graphics card. Before you begin set-up, review the following Minimum System Requirements list to ensure your system meets the minimum hardware and software specification for your graphics card.

### Minimum System Requirements

- > **Motherboard:** PCI Express x16 slot
- > **Operating System:**

- Microsoft Windows 10 (64-bit)
- Linux 64-bit on:

- Red Hat Enterprise Linux 7.x
- SUSE Linux Enterprise Desktop 15.x
- OpenSuse 15
- Fedora 31
- Ubuntu 18.04
- FreeBSD 11.x
- Solaris 11

#### > **Processor:**

- Intel Core i5, or Xeon processor or later
- AMD Ryzen or Epyc class processor or later

#### > **System Memory:**

Greater than or equal to GPU memory; twice the GPU memory recommended

## **EQUIPMENT**

Included equipment with each NVIDIA RTX Ampere architecture-based graphics card.

<b>EQUIPMENT</b>	<b>RTX A6000</b>	<b>RTX A5000</b>	<b>RTX A4000</b>	<b>RTX A2000</b>
Quick Start Guide	√	√	√	√
Support Guide	√	√	√	√
DisplayPort to HDMI Adapter	1	1	1	—
Auxiliary Power Cable (2x 8-pin PCIe to 1x 8-pin CPU)	1	—	—	—
Mini-DisplayPort-to-DisplayPort Adapter	—	—	—	1
Full Height Bracket	—	—	—	1



**Attention:** Static electricity can severely damage electronic components. Take the following precautions when installing your new NVIDIA RTX graphics card:

- Before touching any electronic parts, discharge the static electricity from your body by touching the internal metal frame of your system while it is unplugged.
- Do not remove your card from the packaging until you are ready to install it. Whenever you remove a card from your system, always place it back in the packaging.
- Do not allow clothing or jewelry touch any electronic parts.
- When handling your graphics card, hold it by the edges and avoid touching any circuitry or the PCIe connector.

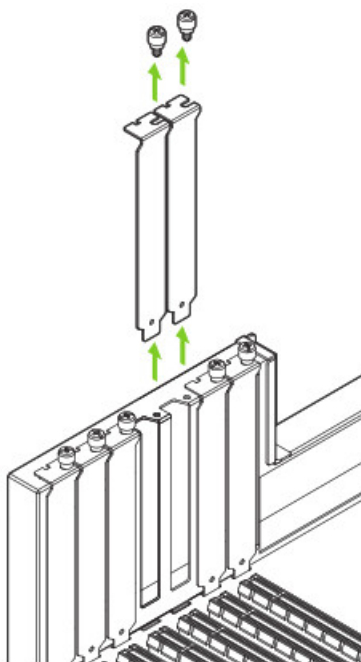
## **HARDWARE INSTALLATION**

1. Remove the current graphics driver installed on the host system.
2. Power down your system.
3. Unplug the power cord from the AC power source.
4. Remove the side panel from your system to gain access to the motherboard.



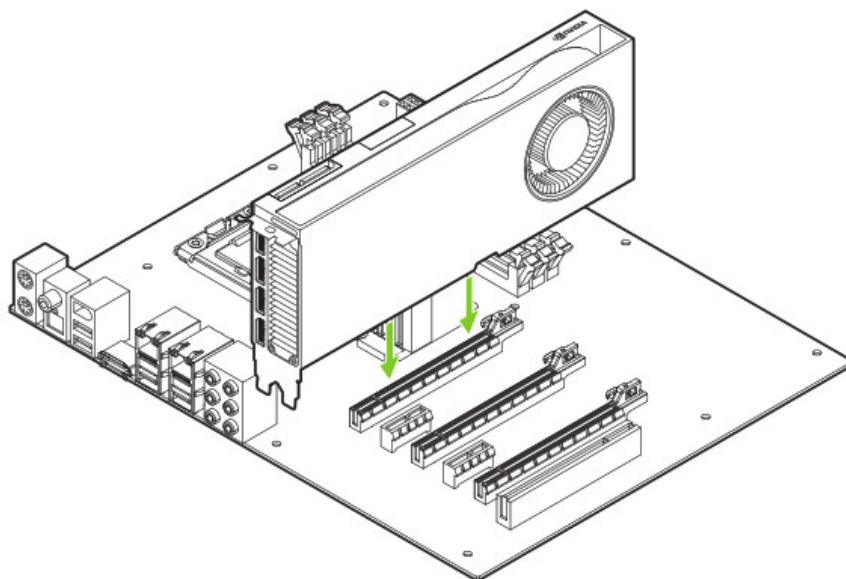
**Note:** Reference your specific computer documents for instructions on accessing the motherboard in your computer.

5. Remove the existing graphics card if present. If a retention bar is holding the card in place, remove the screw securing the card. OR, if there is no existing graphics card, remove the access covers from the primary x16 PCI Express slot.



The RTX A6000, RTX A5000, and RTX A2000 are dual-slot GPUs and will require removing two adjacent slot covers. The RTX A4000 is a single slot card and will only require a single-slot.

6. Install the card into the primary x16 PCI Express slot. Press gently on the card until it is seated securely in the slot and reattach the graphics card bracket retention mechanism.

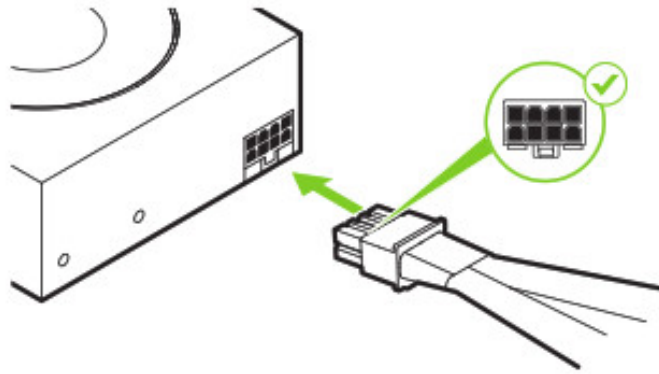


Install the graphics card into the primary x16 PCI Express slot. The RTX A6000, RTX A5000 and RTX A2000 are dual-slot GPUs and will cover the adjacent slot. The RTX A4000 is a single-slot card.

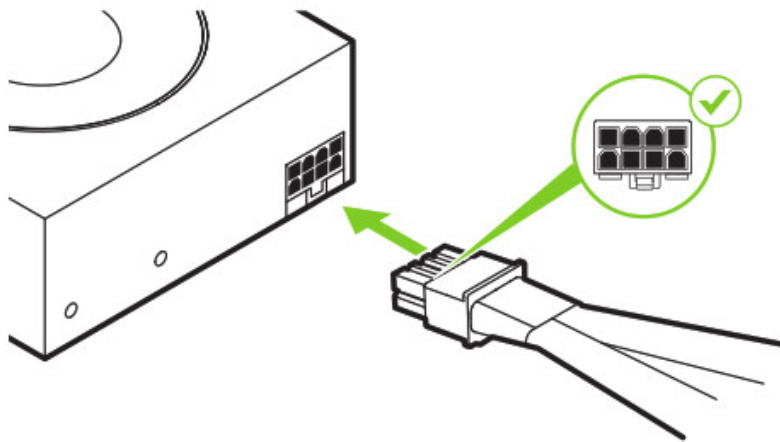


**Attention:** This GPU card should not be installed with the I/O brackets facing downwards.

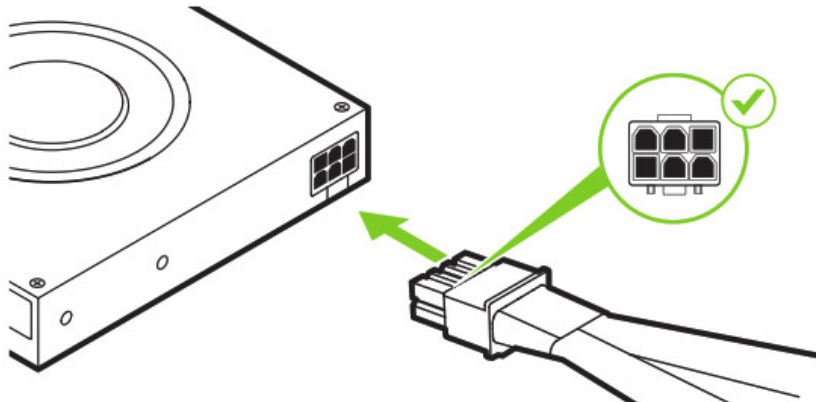
7. Secure the card to the system frame using the screw(s) removed in step 5.
8. Connect the auxiliary power cable from the power supply to the back edge of the RTX A6000, RTX A5000 and RTX A4000. Note that the RTX A2000 does not use a power cable.



For the RTX A6000 connect two separate PCI Express 8-pin cables from the system power supply to the NVIDIA Dual PCI Express 8-pin power adapter as necessary.



The RTX A5000 uses a PCI Express 8-pin cable.



The RTX A4000 uses a PCI Express 6-pin cable.

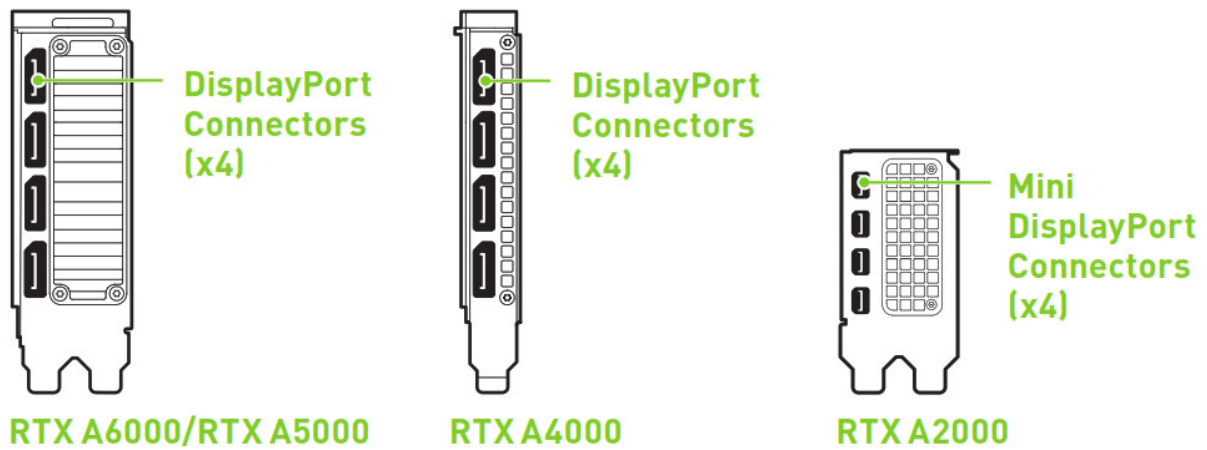


**Note:** Use the recommended power connector guidelines at [www.nvidia.com/quadropowerguidelines](https://www.nvidia.com/quadropowerguidelines).

9. Install the side panel removed in **step 4**.

## CONNECTING TO THE DISPLAY

1. Connect the display cable(s) to your GPU.
2. Reconnect your power cord to the workstation.



## SOFTWARE INSTALLATION AND CONFIGURATION

**Driver Installation:** With the hardware installed, it is now time to install the graphics driver.

1. Power up your computer, start Windows or Linux, and login with an account that has Administrator rights.



**Note:** Since there is no GPU driver currently loaded, the display may run at reduced resolution or image quality.

2. Download and install the driver.

Go to [www.nvidia.com/drivers](http://www.nvidia.com/drivers) and set the “Product Type” to NVIDIA RTX / Quadro.

- Use the various drop down menus to select your graphics card, operating system and then set the “Download Type” to Production Branch.
  - Launch the downloaded executable file, then follow the installer guides to complete installation.
- The installer may require you to reboot your system once the driver installation is complete.

**Congratulations! Your NVIDIA RTX graphics card is now ready to use!**

[www.nvidia.com](http://www.nvidia.com)



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## Documents / Resources



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