

GPTrack.ai GB200 Manual

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2025 GPT LLC

For the latest information and updates please see: <https://GPTrack.ai>

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Quickstart:

Username and password for BMC:

Username: root

Password: 0penBmc (zero!!!)

Username and password for preinstalled OS (optional):

Username: x

Password: xy

1.) Install OS

Ubuntu Server for ARM: <https://cdimage.ubuntu.com/releases/24.04/release/ubuntu-24.04.2-live-server-arm64+largemem.iso>

2.) Install Nvidia kernel

```
sudo DEBIAN_FRONTEND=noninteractive apt purge linux-image-$(uname -r) linux-headers-$(uname -r) linux-modules-$(uname -r) -y
```

```
sudo apt update
```

```
sudo apt install linux-nvidia-64k-hwe-24.04 -y
```

```
sudo reboot
```

3.) Install Drivers

```
curl -O https://us.download.nvidia.com/tesla/580.65.06/NVIDIA-Linux-aarch64-580.65.06.run
```

```
sudo apt install build-essential
```

```
sudo sh 580.65.06/NVIDIA-Linux-aarch64-580.65.06.run
```

BMC

How to connect to BMC:

Connect a network cable to the dedicated IPMI port. Get the IP.

Open browser and enter IP: https://192.168.178.x

Standard username and password for BMC

username: root

password: 0penBmc (zero!!!)

Firmware Update

Download the firmware from <https://GPTrack.ai>

Select update firmware in BMC to update (use tar file, do not extract).

Operating system

Standard username and password for preinstalled OS (optional):

username: x
password: xy

Install OS yourself:

Example Ubuntu (standard):

Download the version you would like to have.

Ubuntu Server for ARM: <https://ubuntu.com/download/server/arm>

Install with USB stick or over network via BMC (slower).

With older versions (not recommended) you might need to select the HWE kernel. Using the newest Nvidia 64k kernel is highly recommended:

<https://packages.ubuntu.com/search?keywords=linux-nvidia-64k-hwe>

If you want to install a Nvidia kernel do it like this:

```
sudo DEBIAN_FRONTEND=noninteractive apt purge linux-image-$(uname -r) linux-headers-$(uname -r) linux-modules-$(uname -r) -y
```

```
sudo apt update
```

```
sudo apt install linux-nvidia-64k-hwe-24.04
```

```
sudo reboot
```

Drivers

There are two main ways to install the Nvidia drivers

1.) Via Nvidia driver installer

Download Nvidia GB200 drivers: <https://www.nvidia.com/Download/index.aspx?lang=en-us>

Select product type "data center", product series "DGX-Series" and operating system "Linux aarch64"

Copy the download url (may change with version and over time)

example:

```
curl -O https://us.download.nvidia.com/tesla/xxx/NVIDIA-Linux-aarch64-xxx.run (xxx = version number)
```

```
sudo apt install build-essential
```

```
sudo sh NVIDIA-Linux-aarch64-xxx.run -m=kernel-open (xxx = version number)
```

2.) Via package installer (example Ubuntu)

Check version if already installed:

```
cat /proc/driver/nvidia/version
```

List possible driver for install

For desktop:

```
sudo ubuntu-drivers list
```

or, for servers:

```
sudo ubuntu-drivers list --gpgpu
```

Automatic install (desktop):

```
sudo ubuntu-drivers install
```

Installing the drivers on servers

```
sudo ubuntu-drivers install --gpgpu
```

You will also want to install the following additional components:

```
sudo apt install nvidia-utils-xxx-server (xxx = version number)
```

Alternatively, manual driver installation (using APT)

```
sudo apt install nvidia-driver-xxx (xxx = version number)
```

Software

Nvidia CUDA

There are two ways to install the Nvidia CUDA

1.) Nvidia installation guide:

<https://docs.nvidia.com/cuda/cuda-installation-guide-linux/contents.html>

Download from:

https://developer.nvidia.com/cuda-downloads?target_os=Linux&target_arch=arm64-sbsa

2.) Via package intaller (example Ubuntu)

```
sudo apt install nvidia-cuda-toolkit
```

```
sudo apt install nvidia-cuda-dev (optional)
```

Nvidia resources

Official Nvidia GB200 Manual: <https://docs.nvidia.com/dgx/dgxgb200-service-manual/index.html>

Official Nvidia Grace Manual: <https://docs.nvidia.com/grace/#grace-cpu>

Official Nvidia Grace getting started: <https://docs.nvidia.com/grace/#getting-started-with-nvidia-grace>