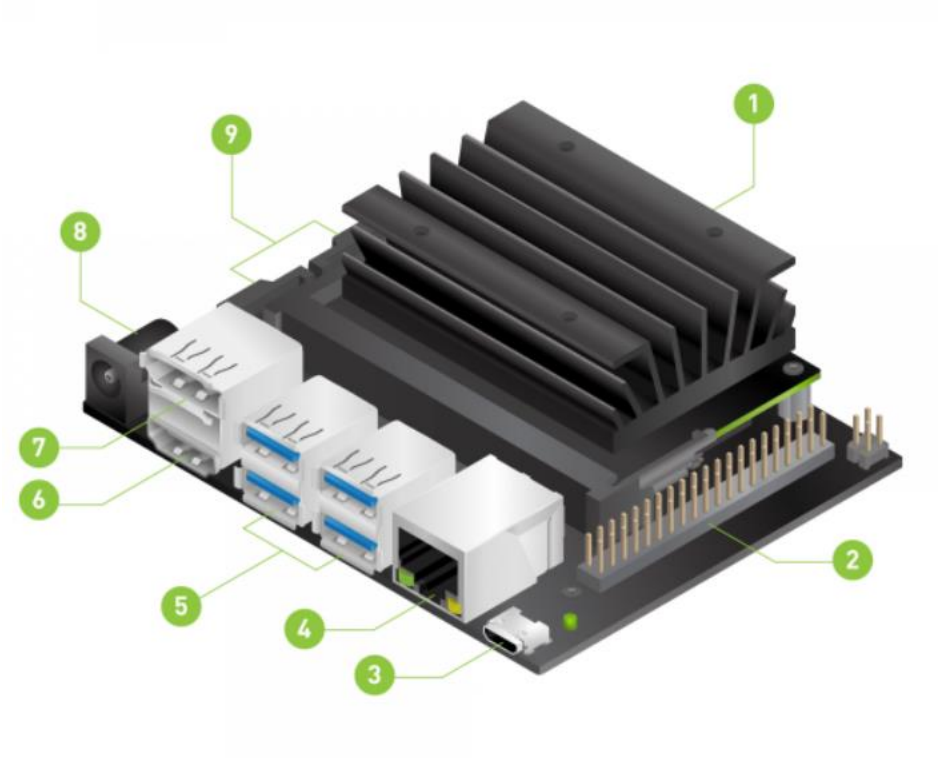
How to setup Jetson Nano out of the box



Prepare for Setup

Items for Getting Started

microSD Card

The Jetson Nano Developer Kit uses a microSD card as a boot device and for main storage. It's important to have a card that's fast and large enough for your projects; the minimum recommended is a 32 GB UHS-1 card.

See the instructions below to flash your microSD card with operating system and software.

Micro-USB Power Supply

You'll need to power the developer kit with a good quality power supply that can deliver 5V⎓2A at the developer kit's Micro-USB port. Not every power supply promising "5V⎓2A" will actually do this.

As an example of a good power supply, NVIDIA has validated Adafruit's 5V 2.5A Switching Power Supply with 20AWG MicroUSB Cable (GEO151UB-6025). It was

specifically designed to overcome common problems with USB power supplies; see the linked product page for details.

Write Image to the microSD Card

To prepare your microSD card, you'll need a computer with Internet connection and the ability to read and write SD cards, either via a built-in SD card slot or adapter.

1. Download the Jetson Nano Developer Kit SD Card Image, and note where it was saved on the computer.
2. Write the image to your microSD card by following the instructions below according to your computer's operating system: Windows, macOS, or Linux.

Setup and First Boot

There are two ways to interact with the developer kit: 1) with display, keyboard and mouse attached, or 2) in "headless mode" via connection from another computer.

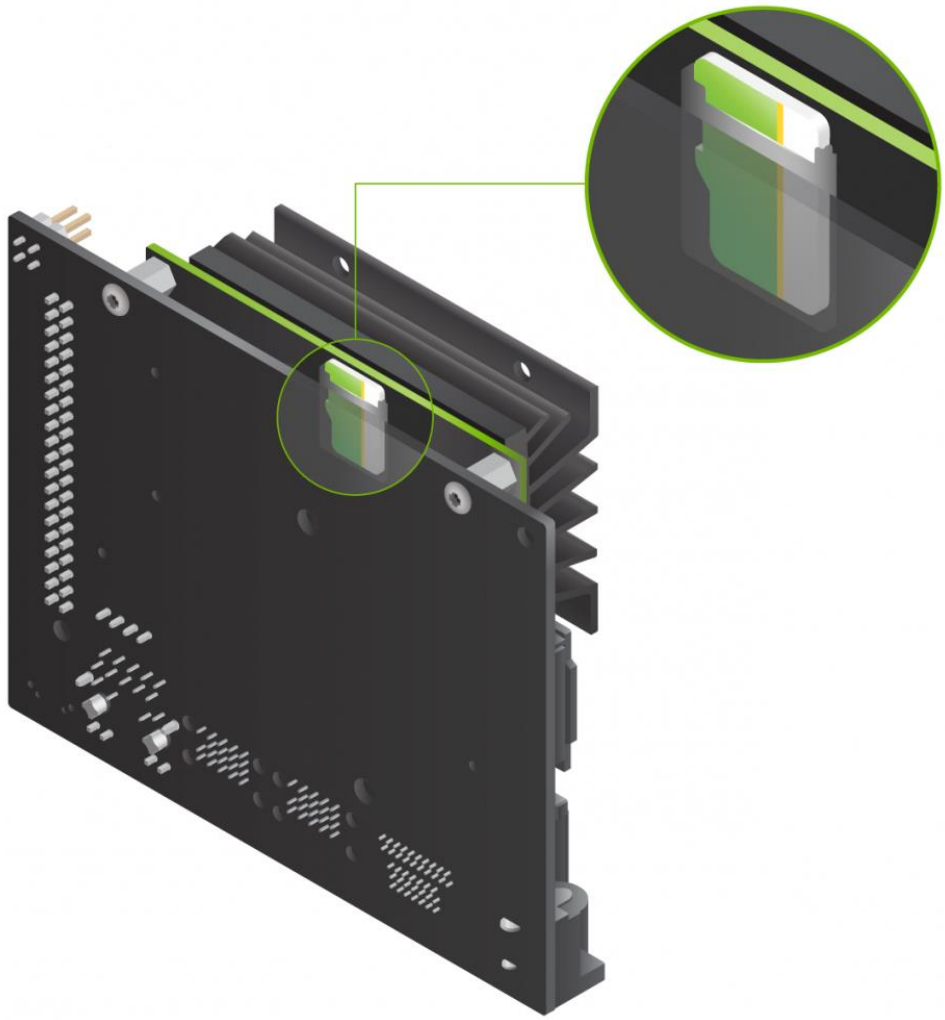
You can conduct the initial setup either way.

	Initial setup with display attached
Monitor, keyboard and mouse	Required
Extra computer	Not required
Power options	Either Micro-USB or DC power supply can be used

Initial Setup with Display Attached

Setup Steps

1. Unfold the paper stand and place inside the developer kit box.
2. Insert the microSD card (with system image already written to it) into the slot on the underside of the Jetson Nano module.



3. Set the developer kit on top of the paper stand.
4. Power on your computer display and connect it.
5. Connect the USB keyboard and mouse.
6. Connect your Micro-USB power supply (or see the Jetson Nano Developer Kit User Guide for details about using DC a power supply with a barrel jack connector). The developer kit will power on and boot automatically.

First Boot

A green LED next to the Micro-USB connector will light as soon as the developer kit powers on. When you boot the first time, the developer kit will take you through some initial setup, including:

- Review and accept NVIDIA Jetson software EULA
- Select system language, keyboard layout, and time zone
- Create username, password, and computer name
- Select APP partition size—it is recommended to use the max size suggested

After Logging In

You will see this screen. Congratulations!

Initial Setup Headless Mode

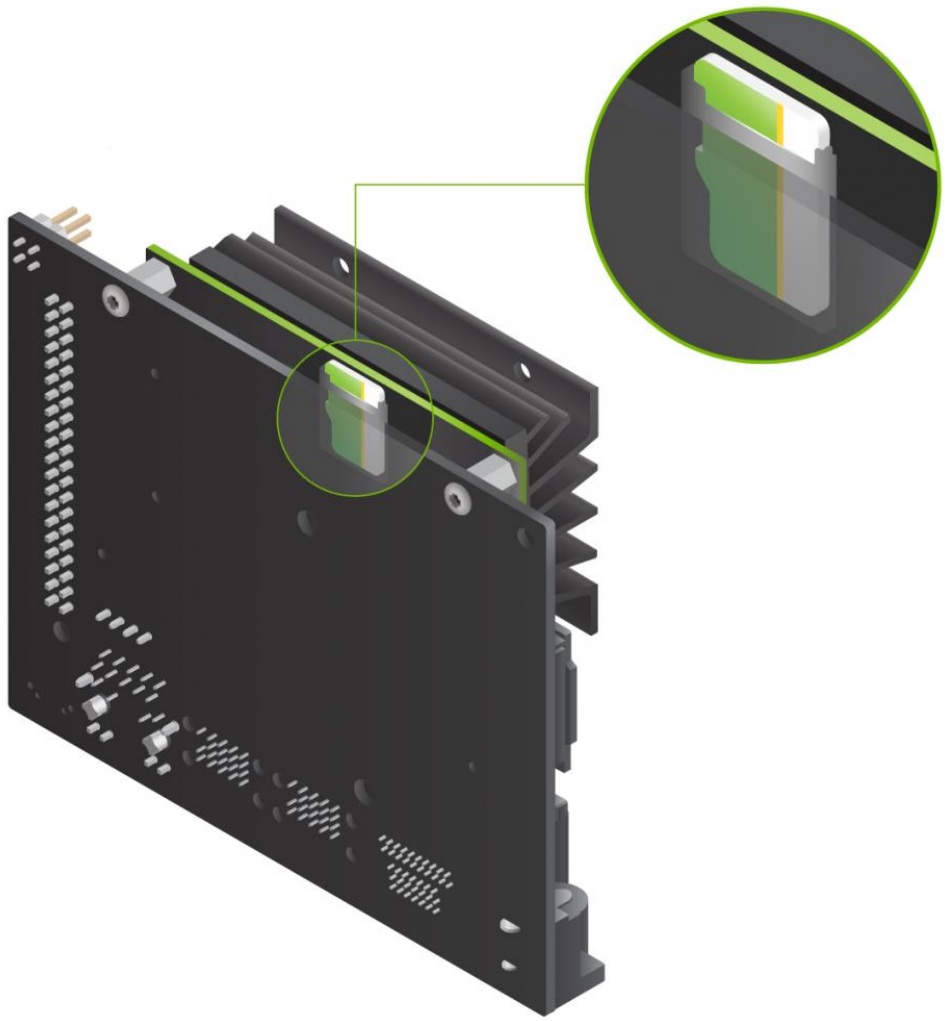
To complete setup when no display is attached to the developer kit, you'll need to connect the developer kit to another computer and then communicate with it via a terminal application (e.g., PuTTY) to handle the USB serial communication on that other computer.

Note: Headless initial configuration requires the developer kit to be powered by a DC power supply with barrel jack connector, since the Micro-USB port is required to access the initial configuration prompts.

Setup Steps

1. Unfold the paper stand and place inside the developer kit box.

2. Insert the microSD card (with system image already written to it) into the slot on the underside of the Jetson Nano module.



3. Set the developer kit on top of the paper stand.
4. Check the Jetson Nano Developer Kit User Guide for location of J48 Power Select Header and J25 Power Jack.
5. Jumper the J48 Power Select Header pins.
6. Connect your other computer to the developer kit's Micro-USB port.
7. Connect a DC power supply to the J25 Power Jack. The developer kit will power on automatically.
8. Allow 1 minute for the developer kit to boot.
9. On your other computer, use the serial terminal application to connect via host serial port to the developer kit.

Once connected to the developer kit, hit SPACE if the initial setup screen does not appear automatically.

First Boot

A green LED next to the Micro-USB connector will light as soon as the developer kit powers on. When you boot the first time, the developer kit will take you through some initial setup, including:

- Review and accept NVIDIA Jetson software EULA
- Select system language, keyboard layout, and time zone
- Create username, password, and computer name
- Select APP partition size—it is recommended to use the max size suggested

After Logging In

You will see a standard Linux command line prompt in your serial terminal application. Congratulations!

References

https://developer.nvidia.com/embedded/learn/get-started-jetson-nano-devkit#next