

NVIDIA JETSON NANO DEVELOPER KIT

Get hands-on with AI and robotics



Bringing the Power of Modern AI to Millions of Devices

The NVIDIA[®] Jetson Nano[™] Developer Kit delivers the compute performance to run modern AI workloads at unprecedented size, power, and cost. Developers, learners, and makers can now run AI frameworks and models for applications like image classification, object detection, segmentation, and speech processing.

The developer kit can be powered by micro-USB and comes with extensive I/ Os, ranging from GPIO to CSI. This makes it simple for developers to connect a diverse set of new sensors to enable a variety of AI applications. It's incredibly power-efficient, consuming as little as 5 watts.

Jetson Nano is also supported by NVIDIA JetPack[™], which includes a board support package (BSP), Linux OS, NVIDIA CUDA[®], cuDNN, and TensorRT[™] software libraries for deep learning, computer vision, GPU computing, multimedia processing, and much more. The software is even available using an easy-to-flash SD card image, making it fast and easy to get started.

The same JetPack SDK is used across the entire NVIDIA Jetson[™] family of products and is fully compatible with NVIDIA's world-leading AI platform for training and deploying AI software. This proven software stack reduces complexity and overall effort for developers.



Key Features and Power

Jetson Nano Module

- > 128-core NVIDIA Maxwell[™] GPU
- > Quad-core ARM[®] Cortex[®] A57 CPU
- > 4 GB 64-Bit LPDDR4
- > 10/100/1000BASE-T Ethernet
- > HDMI/DisplayPort
- > M.2 Key E
- > Gigabit Ethernet
- > GPIOs, I2C, I2S, SPI, UART
- > MIPI-CSI camera connector
- Fan connector

Power Options

- > Micro-USB 5V 2A
- > DC power adapter 5V 4A

Kit Contents

- NVIDIA Jetson Nano module with heatsink and reference carrier board
- > Quick Start guide and support guide

I/O

- > USB 3.0 Type A
- > USB 2.0 Micro-B

TECHNICAL SPECIFICATIONS

| | Developer Kit |
|---------------|---|
| GPU | 128-core NVIDIA Maxwell architecture GPU |
| СРИ | Quad-core ARM [®] Cortex [®] -A57 MPCore processor |
| Memory | 4GB 64-bit LPDDR4 |
| Storage | microSD (Card not included) |
| Video Encoder | 1x 4K30 2x 1080p60 4x 1080p30 9x 720p30 (H.264/H.265) |
| Video Decoder | 1x 4K60 2x 4K30 4x 1080p60 8x1080p30 18x 720p30 (H.264/H.265) |
| Camera | 2x 15-pin 2-lane MIPI CSI-2 camera connectors |
| Connectivity | Gigabit Ethernet, M.2 Key E |
| Display | 1x HDMI 2.0, 1x DP 1.2 |
| USB | 4x USB 3.0 Type-A connectors 1x USB 2.0 Micro-B connector |
| Others | 40-pin header (UART, SPI, I2S, I2C, PWM, GPIO) 12-pin automation header 4-pin fan header 4-pin POE header DC power jack Power, Force Recovery, and Reset buttons |
| Mechanical | 100mm x 79mm x 30.21mm (height includes carrier board, module, and thermal solution.) |

Ready to get started?

Learn more at: www.nvidia.com/JetsonNano

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