



NVIDIA Jetson AGX Thor Developer Kit

The ultimate platform for robotics.



NVIDIA Jetson AGX Thor Developer Kit

A Compact Powerhouse for Physical AI and Robotics

The NVIDIA® Jetson AGX Thor™ Developer Kit unlocks real-time reasoning for general robotics and physical AI. It's powered by the NVIDIA Blackwell GPU and 128 GB of memory, delivering up to 2070 FP4 TFLOPS of AI compute to effortlessly run the latest generative AI models—all within a 130 W power envelope. Compared to NVIDIA Jetson AGX Orin™, it provides up to 7.5x higher AI compute and 3.5x better energy efficiency.

Jetson AGX Thor helps you accelerate low-latency, real-time applications with the new Blackwell Multi-Instance GPU (MIG) technology and a robust 14-core Arm® Neoverse®-V3AE CPU. It also includes a suite of accelerators, including a third-generation Programmable Vision Accelerator (PVA), dual encoders and decoders, an optical flow accelerator, and more. For high-speed sensor fusion, the developer kit offers extensive I/O options, including a QSFP slot with 4x25 GbE, a wired Multi-GbE RJ45 connector, multiple USB ports, and additional connectivity interfaces. It's also designed for seamless integration with existing humanoid robot platforms, allowing for easy tethering to jumpstart prototyping.



Key Features

Developer Kit Content

- > NVIDIA Jetson™ T5000 module with heat sink and reference carrier board
- > 140 W DC power supply
- > 802.11ax wireless network interface controller
- > 1 TB NVMe populated in M.2 Key-M slot
- > Quick Start Guide

Jetson T5000 Module

- > 2,560-core NVIDIA Blackwell architecture GPU with fifth-generation Tensor Cores
- > 14-core Arm® Neoverse®-V3AE 64-bit CPU
- > 128 GB 256-bit LPDDR5X, 273 GB/s

Reference Carrier Board

- > QSFP28+ connector
- > HDMI port
- > DisplayPort
- > 2x USB-A 3.2 | 2x USB-C 3.1
- > Gigabit Ethernet
- > 2x 13-pin CAN header
- > Microfit power jack

Jetson AGX Thor belongs to a new class of robotic computers, architected from the ground up to power next-generation humanoid robots. With the new Blackwell GPU architecture, it’s built for generative reasoning and multimodal sensor processing. It also supports a wide range of generative AI models, from vision-language-action (VLA) models like NVIDIA Isaac™ GR00T N to all popular LLMs and VLMs like Cosmos™ Reason. To deliver a seamless cloud-to-edge experience, Jetson Thor™ runs the NVIDIA AI software stack for physical AI applications, including NVIDIA Isaac for robotics, NVIDIA Metropolis for visual AI agents, and NVIDIA Holoscan for sensor processing. You can also build video analytics AI agents at the edge using NVIDIA agentic AI workflows like the Video Search and Summarization (VSS) blueprint with NVIDIA Cosmos Reason as the VLM.

Our ecosystem of partners offers all the carrier boards, design services, cameras, and other sensors you need, as well as additional AI and system software to accelerate solution development in industries such as robotics, smart spaces, retail, industrial, medical, and more.

Massive AI performance and sensor capabilities in a compact form factor make the Jetson AGX Thor Developer Kit the ideal platform for developers looking to unlock new possibilities for humanoid robotics and other physical AI applications.

NVIDIA Jetson AGX Thor Developer Kit Specifications

Technical Specifications

	Jetson T5000 Module
AI performance	2,070 TFLOPS (FP4—sparse)
GPU	2,560-core NVIDIA Blackwell architecture GPU with fifth-generation Tensor Cores
CPU	14-core Arm® Neoverse®-V3AE 64-bit CPU 64 KB I-Cache, 64 KB D-Cache 1 MB L2 cache per core 16 MB shared system L3 cache
Memory	128 GB 256-bit LPDDR5X 273 GB/s
Storage	1 TB NVMe M.2 Key M slot
Video encode	2x NVENC
Video decode	2x NVDEC
Power	40 W–130 W

Refer to the Software Features section of the latest NVIDIA Jetson Linux Developer Guide for a list of supported features.

Technical Specifications

	Reference Carrier Board
Camera	HSB camera via QSFP slot USB camera
PCIe	M.2 Key M slot with x4 PCIe Gen5 (populated with 1 TB NVMe) M.2 Key E slot with x1 PCIe Gen5 (populated with Wi-Fi and Bluetooth module)
USB	2x USB Type-A 3.2 Gen2 2x USB Type-C 3.1 1x USB Type-C (Debug purpose only)
Networking	1x 5GBe RJ45 connector 1x QSFP28 (4x 25Gbe) Wi-Fi 6E (Populated on M.2 Key E slot with x1 PCIe Gen5)
Display	1x HDMI 2.0b 1x DisplayPort 1.4a
Other I/O	2x 13-pin CAN header 2x 6-pin automation header 2x 5-pin JTAG connector 1x 4-pin fan connector—12 V, PWM, and Tach 2x 5-pin audio panel header 2-pin RTC backup battery connector Microfit power jack Power, force recovery, and reset buttons
Mechanical	243.19 mm x 112.40 mm x 56.88 mm (Height includes feet, carrier board, module, and thermal solution)

Ready to Get Started?

To learn more about the NVIDIA Jetson AGX Thor Developer Kit, visit nvidia.com/jetson-thor

© 2026 NVIDIA Corporation and affiliates. All rights reserved. NVIDIA, the NVIDIA logo, Cosmos, Isaac, Jetson, Jetson AGX Orin, Jetson AGX Thor, and Jetson Thor are trademarks and/or registered trademarks of NVIDIA Corporation and affiliates in the U.S. and other countries. Arm Neoverse is a registered trademark of Arm Limited (or its subsidiaries or affiliates) in the US and/or elsewhere. Other company and product names may be trademarks of the respective owners with which they are associated. 4767806. JAN26

