

NeoEdge Series

Edge AI Box

Built with NVIDIA AI Embedded System

Powered by NVIDIA® Jetson Orin™ NX/Nano module, CamThink NG4500 features a fanless chassis and high-performance hardware. It provides extensive I/Os and wireless connectivity for seamless integration into diverse applications. With NVIDIA JetPack 6.0+ and 12V-36V DC-in support, it streamlines AI deployment of VLMs, LLMs, and deep learning models. Operating reliably from -25°C to 60°C, it delivers exceptional stability for next-gen AI applications.



Jetson
Orin™ NX/
Nano

NG4500



Key Features



Powerful AI at the Edge

Up to 157 TOPs AI performance, powered by the Jetson Orin™ Super Developer Kit with 12V-36V DC-in support.



Seamless Device Integration

Equipped with extensive industrial I/Os (RJ-45, RS-232/RS-485, DI/DO, CAN, USB 3.1, HDMI) to ensure seamless integration.



Next-Gen AI Ready

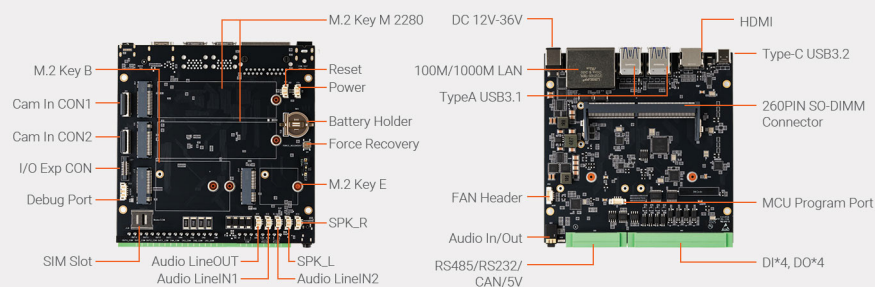
Built-in JetPack 6.0+ simplifies deployment of visual and language models (VLMs, LLMs) and advanced deep learning applications.



Built to Perform Anywhere

Fanless design with an operating range of -25°C to 60°C ensures durability in harsh environments without sacrificing performance.

CamThink NG4500 enhances edge AI development by providing a carrier board packed with versatile interfaces to simplify AI development and prototyping.



Compatible with Mainstream AI Platforms



Open AI



Gemma (Google)



Ollama



YOLO



Mistral AI



TensorFlow



Qwen-VL



Pytorch



Open CV



Llama

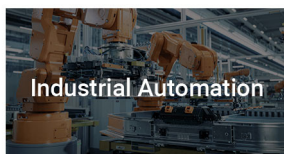


Speech5 (Microsoft)

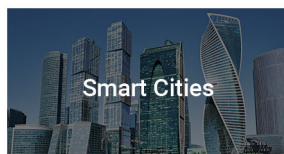


DeepSeek

Application Scenarios



Industrial Automation



Smart Cities



Security & Surveillance



Smart Factories

NeoEdge NG4500



Model		NG4510	NG4511	NG4520	NG4521
System Core	Module	Jetson Orin Nano 4GB	Jetson Orin Nano 8GB	Jetson Orin NX 8GB	Jetson Orin NX 16GB
	AI Performance	20 TOPS	40 TOPS	70 TOPS	100 TOPS
	AI Performance (Update to SUPER)	34 TOPS	67 TOPS	117 TOPS	157 TOPS
	GPU	512 NVIDIA® CUDA® cores 16 Tensor cores	1024 NVIDIA® CUDA® cores 32 Tensor cores	1024 NVIDIA® CUDA® cores 32 Tensor cores	
	CPU	6-core Arm® Cortex® A78AE (64-bit)		6-cores Arm® Cortex® A78AE v8.2 (64-bit)	8-cores Arm® Cortex® A78AE v8.2 (64-bit)
	DRAM SIZE	4GB	8GB	8GB	16GB
	DRAM BW	34 GB/s	68 GB/s	102 GB/s	102 GB/s
	OS	Ubuntu 22.04 (supports Jetpack 6.2 Super Developer Kit)			
Mechanical	Dimensions	160 x 125 x 75 mm			
	Installation	Desk/Wall mounting			
	Thermal	Fanless			



NeoEdge Carrier Board

Model		Carrier Board	
Storage		1 x M.2 Key M PCIe*4_Gen3 SSD 1 x M.2 Key M PCIe*1_Gen3 SSD	1 x M.2 Key M PCIe*4_Gen4 SSD 1 x M.2 Key M PCIe*1_Gen4 SSD
I/O	Ethernet	2 x RJ45 (1000Mbps Ethernet)	
	USB	4 x Type-A (USB3.1), 1 x Type-C (USB3.2)	
	Multifunctional Port	4 x DI, 4 x DO, 4 x GND_DI, 4 x GND_DO, 1 x CAN, 1 x RS232, 1 x RS485, 1 x DC 5V Power	
	HDMI	1 x HDMI	
	Audio	1 x Audio Jack	
Communication	M.2 Key B	M.2 Key B 2242/2252 Support 4G/5G/Wi-Fi Halow (Module Optional)	
	M.2 Key E	M.2 Key E 2230 Support Wi-Fi/Bluetooth	
Power	Power Supply	DC Input 12V-36V	
	RTC	1 x CR2032 RTC Battery	
Operating Temperature		-25°C to 70°C	
Dimensions		125 x 125 x 23 mm	
Certification		CE/FCC/RoHS	