seeed studio

INDUSTRIAL PRODUCT DATASHEET

reComputer J4012 - Edge AI Computer with NVIDIA® Jetson™ Orin™ NX 16GB (Super Mode NOT Supported)

The reComputer J4012 - Edge AI Computer with NVIDIA® Jetson™ Orin™ NX 16GB (Super Mode NOT Supported) supports hands-on AI NVR/AMR projects and toolchain mastery across CV, GenAI, ROS, agentic AI, and TensorRT...

SKU	UPDATED	PRICE
110110145	2026-10-21 10:00:50	$1399.00(Excl. VAT)



Overview



The reComputer J4012 - Edge AI Computer with NVIDIA® Jetson™ Orin™ NX 16GB （Super Mode NOT Supported) is an edge AI system featuring the Jetson Orin NX 16GB module; for optimal performance, Seeed 128GB–1TB SSDs are recommended. It supports hands-on projects from Linux basics to end-to-end AI NVR/AMR, with coverage of CV, GenAI, ROS, agentic AI, and TensorRT optimization, and toolchain mastery using NVIDIA JetPack SDK, CUDA, DeepStream, PyTorch, and TensorFlow.

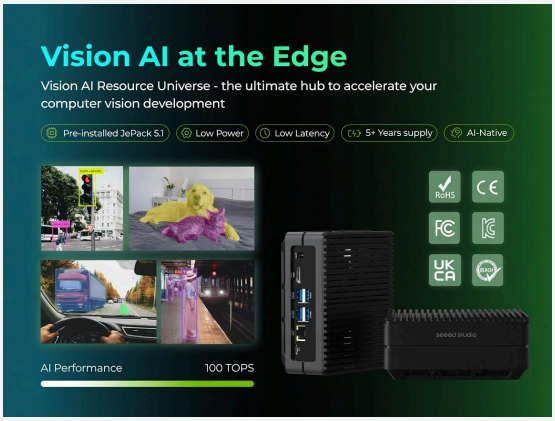
Key Features

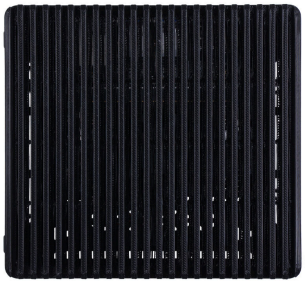
Note

- **reComputer Super J4012** comes with Jetson Orin NX 16GB module, delivers up to 157 TOPS in MAXN Super Mode.
- If you are looking for the version without power adapter, please check out **reComputer J4012 without power adapter**
- For optimal performance with reComputer, we recommend using **128GB** / **256GB** / **512GB** / **1TB** SSDs from Seeed. Since some SSDs on the market may only be compatible with specific JetPack versions which may cause the device to fail to function properly, and this issue is also present with official NVIDIA dev kits.

Product Gallery











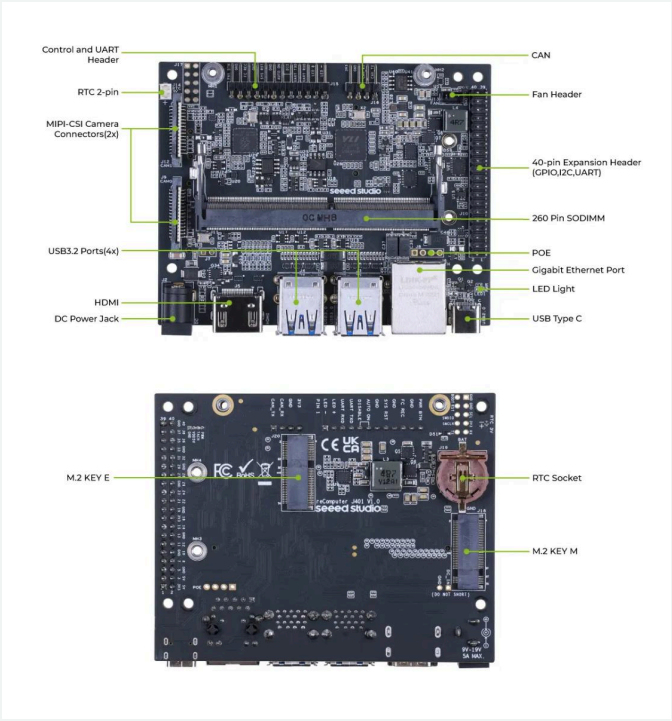




Specification

Jetson Orin NX System on Module		
AI Performance	reComputer J4012 - Orin NX 16GB, 100 TOPS	reComputer J4011- Orin NX 8GB – 70 TOPS
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores	
CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU (Orin NX 16GB)	6-core Arm® Cortex®-A78AE (Orin NX 8GB)
Memory	16GB 128-bit LPDDR5 (Orin NX 16GB)	8GB 128-bit LPDDR5 (Orin NX 8GB)
Video Encode	1x 4K60 (H.265) | 3x 4K30 (H.265) | 6x 1080p60 (H.265) | 12x 1080p30 (H.265)	
Video Decode	1x 8K30 (H.265) | 2x 4K60 (H.265) | 4x 4K30 (H.265) | 9x 1080p60 (H.265) | 18x 1080p30 (H.265)	
DL Accelerator	2x NVDLA v2	1x NVDLA v2
Carrier Board		
Storage		1x M.2 Key M PCIe (M.2 NVMe 2280 SSD 128G included)
Networking	Ethernet	1x RJ-45 Gigabit Ethernet (10/100/1000M)
	M.2 KEY E	1x M.2 Key E for WiFi/Bluetooth module（module not included)
I/O	USB	4x USB 3.2 Type-A (10Gbps) 1x USB2.0 Type-C (Device Mode)
	Camera	2x CSI (2-lane 15pin)
	Display	1x HDMI 2.1
	Fan	1x 4 pin Fan Connector (5V PWM)
	CAN	1x CAN
	Multifunctional Port	1x 40-Pin Expansion header 1x 12-Pin Control and UART header
	RTC	1x RTC 2-pin, supports CR1220 (not included)
Power		9-19V DC
Mechanical	Dimensions (W x D x H)	130mm x 120mm x 58.5mm (with case)
	Installation	Desk, wall-mounting
Operating Temperature		-10℃~60℃
Warranty		1 Year

Hardware Overview







Applications

- **From Zero to Real Projects:** Master Linux basics on the Jetson environment to build an end-to-end AI NVR/AMR.
- **Hardware Integration:** Tailored for reComputer Jetson devices for a seamless, out-of-the-box experience.
- **Coverage of Cutting-Edge Domains:** Deep dive into CV, GenAI, ROS, agentic AI, and TensorRT optimization.
- **Toolchain Mastery:** Hands-on tutorials with NVIDIA JetPack SDK, CUDA, DeepStream, PyTorch, and TensorFlow.

Part List

reComputer J4012 (System Installed)	x1
12V/5A(Barrel Jack 5.5/2.5mm) Power Adapter (Power cord not included)	x1

Compliance & Logistics

HSCODE	8471419000
USHSCODE	8517180050
UPC	
EUHSCODE	8471707000
COO	CHINA

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

15.21

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy.

If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Resource Links

- https://www.seeedstudio.com/reComputer-J4012-p-5586.html
- Datasheet
- Schematic
- 3D File
- Seeed Nvidia Jetson Product Catalog
- Nvidia Jetson Comparison
- Nvidia Jetson Product Comparison
- Seeed Nvidia Jetson Success Cases
- Seeed Jetson One Pager

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