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INDUSTRIAL PRODUCT DATASHEET

reComputer Mini J5012 - Ultra-Compact Edge AI Computer with NVIDIA Jetson AGX Orin 64GB

reComputer Mini J5012 is an open-source, Ultra-Compact Edge AI Computer powered by the Jetson AGX Orin™ 64GB module.

SKU	UPDATED	PRICE
100051232	2026-11-11 09:29:53	$4299.00(Excl. VAT)



Overview



reComputer Mini J5012 is an open-source, Ultra-Compact Edge AI Computer powered by the Jetson AGX Orin™ 64GB module. Delivering up to 275 TOPS and per-installed JP6.2 (supports 7.2), making it a perfect candidate for humanoid controller and rapid prototyping. With the AGX Orin module, Mini J5012 is a perfect alternative option for NVIDIA® Jetson AGX Orin™ Dev Kit.

Key Features

01 **Powerful Embodied AI Platform Paired with the Jetson AGX Orin 64GB, offering up to 275 TOPS. Perfect platform for embodied AI and ultra-compact edge application development.**

02 **Ultra-Compact Size 119mm x 119mm footprint, suitable for robot prototyping and development, especially robots that has tight footprint such as humanoids.**

03 **Wide Voltage Input Range Can be used in 48V power system (max 54V input).**

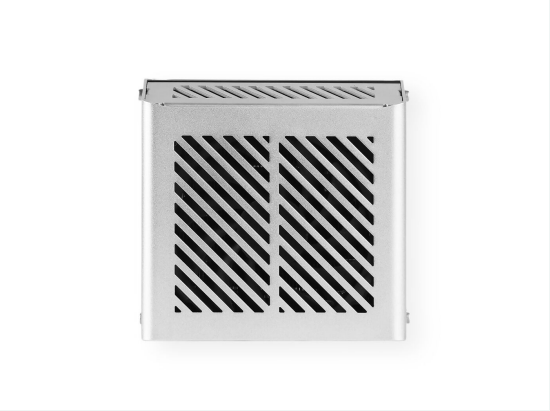
04 **Rich IO Capabilities**

Includes most common IOs used in robotics prototyping, such as USB, 10G Ethernet, 1G Ethernet, CAN, RS-485, GPI, GPO and I2S.

Product Gallery









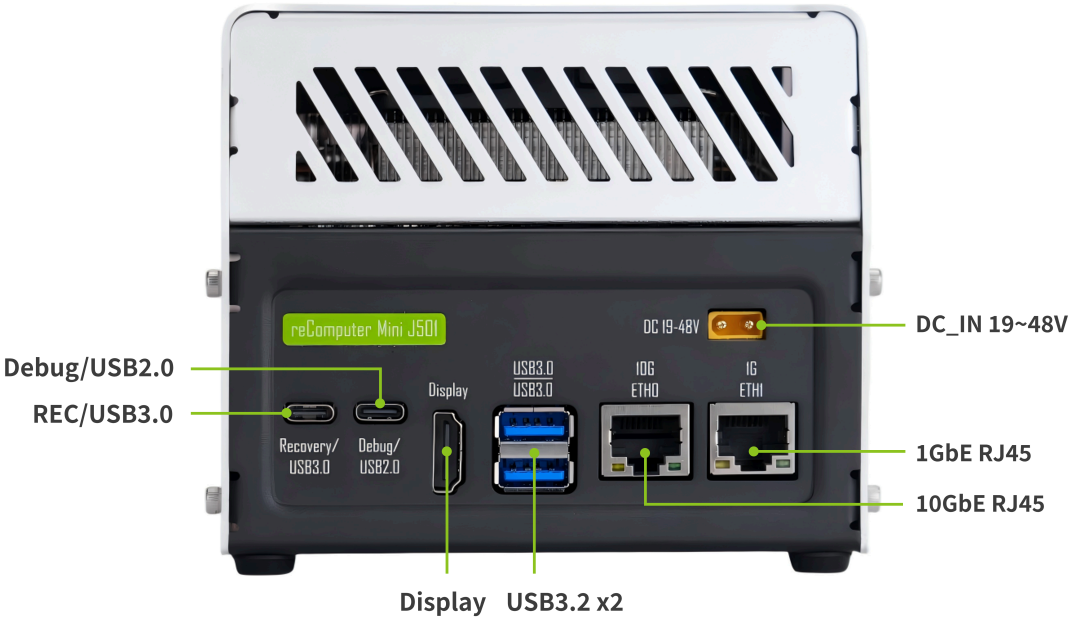


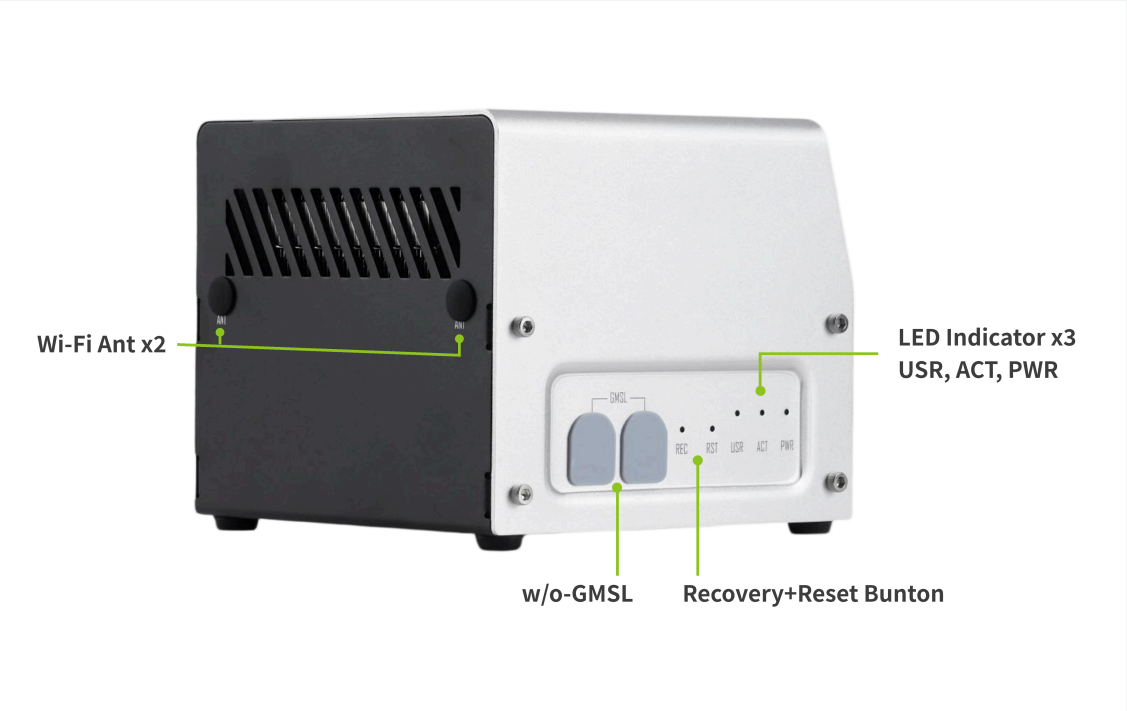


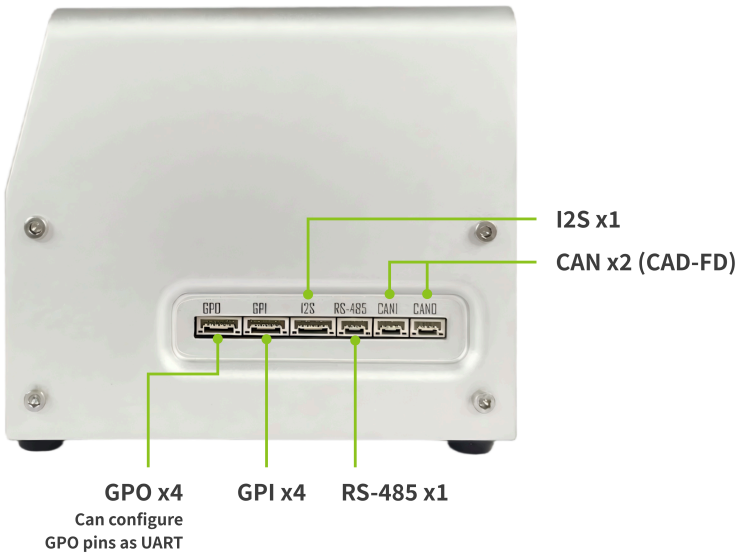



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100 mm
119 mm
119mm

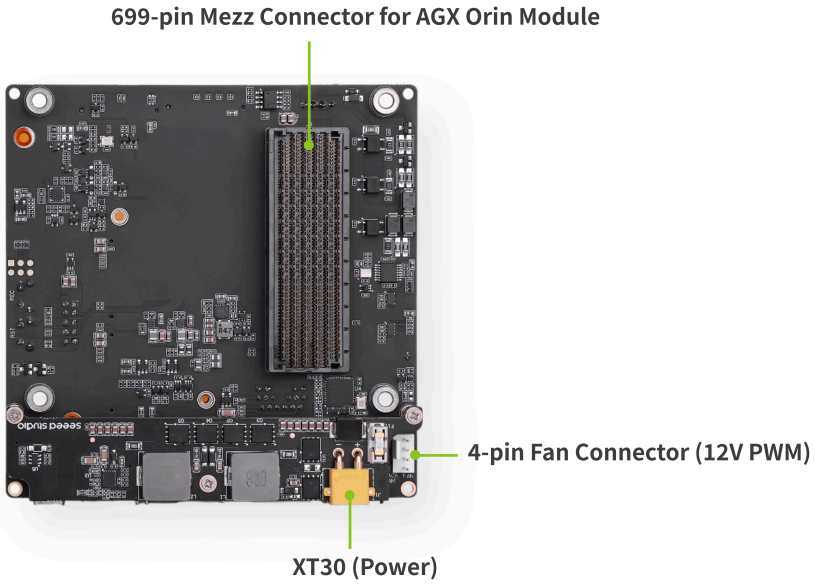
Hardware Overview



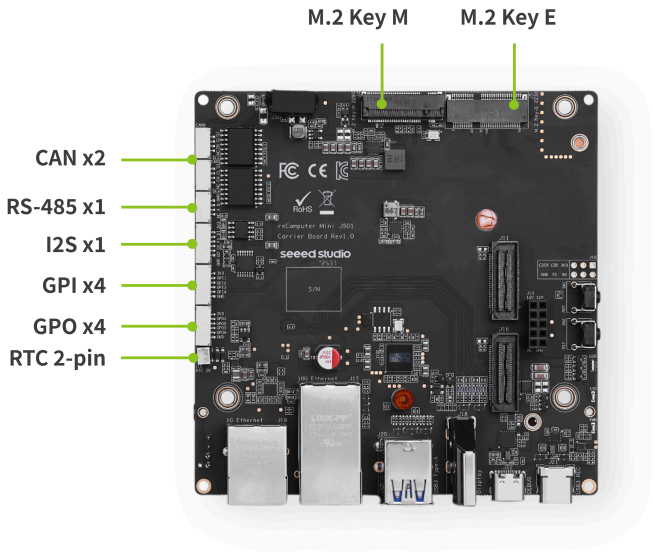




Carrier Board - Top View



Carrier Board - Bottom View



Applications

- **Humanoid Robotics**
- **AI Robot Development:** Powered by the Jetson AGX Orin™ module, this ultra-powerful embedded system accelerates advanced robotics and edge AI development for manufacturing, logistics, and healthcare. Leveraging the NVIDIA Isaac™ platform, it delivers accelerated libraries and generative AI models to elevate robot perception, manipulation, and simulation to the next level.
- **Learn about Issac platform in AI Robot Development.**
- **Multi-Sensor Fusion for Autonomous Mapping & Navigation:** reComputer Mini J501 supports sensor-rich autonomy by integrating data from LiDAR (via Ethernet/CAN), 3D cameras (via USB/CSI), GPS, and IMU (via UART). Using AI models and algorithms like ORB-SLAM,A-LOAM, or Nav2, it performs sensor fusion, real-time localization, path planning, and obstacle avoidance. The low-latency processing on the AGX Orin SoC allows autonomous systems to adapt to changing terrain or obstacles on the fly. Its wide voltage input and compact form factor make it suitable for mobile deployment, enabling robust, edge-level autonomy without external compute.
- **Learn more about sensor options compatible with reComputer Mini J501 to get started.**
- **Capable of Bringing Generative AI to the Edge**
- **Fruit Sorting with Mini J501 and StarAI Follower Arm Viola:** reComputer Mini J501 and StarAI Follower Arm Viola utilizes the LeRobot framework to execute fruit sorting tasks. The project showcases an end-to-end workflow from data collection to deployment, enabling the robot to intelligently grasp and organize fruits.
- **Designed for Developers — Out-of-the-Box Experience::** To improve the developer experience, Seeed offers reComputer AI Lab — a platform that helps you deploy AI applications with one-click tools and ready-to-use resources. It includes optimized edge AI model demos for CV, LLM, VLM, interactive tutorials, deployment tools, containerized applications, and community projects to speed up development on Jetson.
- **Seeed Jetson Develop Tool is a desktop client for all developers who are going to use reComputer Jetson device for the very first time. It brings the common bring-up and development workflow into one GUI: firmware flashing, first-boot initialization, device diagnostics, remote development, app deployment, skill-based automation, OTA updates (Upgrade to JetPack7.2), and community resources. All we provide here is to help you to get started with Seeed reComputer Jetson hardware much more easily and seamlessly.**
- **Ready to build a solution for the real world? We have Jetson-example prepared for you! It offers one-line deployable projects compatible with generative AI large models, including LeRobot, Ollama, Qwen, etc; with computer vision such as Ultraslytics YOLO26. We have configured all environment setups for you to provide a single command deployment of projects, easy to try out/verify if the trending model performance is suitable for your GPU needs and application scenarios.**

Resource Links

- https://www.seeedstudio.com/reComputer-Mini-J5012-p-6877.html
- User Manual & Datasheet
- Carrier Board Schematic
- Power Board Schematic
- 3D File
- Seeed Nvidia Jetson Product Catalog
- Nvidia Jetson Comparison
- Nvidia Jetson Product Comparison
- Seeed Nvidia Jetson Success Cases
- Seeed Jetson One Pager
- Flash BSP for Jetson

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