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INDUSTRIAL PRODUCT DATASHEET

reComputer Robotics J401 Carrier Board for Jetson Orin Nano/Orin NX

The reComputer Robotics J401 Carrier Board for Jetson Orin Nano/Orin NX delivers up to 157 TOPS edge AI performance with multiple robotics interfaces and JetPack 6.2 support for rapid autonomous robot development.

SKU	UPDATED	PRICE
114110327	2026-10-16 10:57:02	$189.00(Excl. VAT)



Overview



The reComputer Robotics J401 Carrier Board for Jetson Orin Nano/Orin NX is a compact, high-performance edge AI computer compatible with NVIDIA Jetson Orin Nano/NX modules in Super/MAXN mode, providing up to 157 TOPS of AI performance. Designed for demanding AI applications such as AMR, smart retail, industrial automation, and video surveillance, it offers multiple robotics interfaces including dual RJ45, M.2 slots for 5G/Wi-Fi/BT modules, 6x USB 3.2, 2x CAN, GMSL2, I2C, and UART, and supports JetPack 6.2 and Linux BSP for seamless deployment.

Key Features

Price Increase Announcement
Date: February 28, 2026

Due to surging demand for modules and SSDs, prices for reComputer and reServer Jetson devices will increase by approximately $50 to $400 in the coming weeks. Please confirm your requirements and place your orders promptly to secure your stock.

- **Robust Hardware Design**: A compact, high-performance edge AI computer compatible with NVIDIA Jetson Orin Nano/NX modules in Super/MAXN mode, providing up to 157 TOPS of AI performance.
- **Multiple Interfaces for robotics**: Including dual RJ45, M.2 slots for 5G/Wi-Fi/BT modules, 6x USB 3.2, 2x CAN, GMSL2(additional purchase), I2C, and UART, functioning as a powerful robotic brain.
- **Software Setup**: Supported JetPack 6.2 and Linux BSP for seamless deployment.
- **Application and Benefit**: Ideal for rapid development of autonomous robots, accelerating time-to-market with ready-to-use interfaces and optimized AI frameworks.
- **Wide Operating Range**: Operates reliably across a temperature range of -20°C to 60°C at 25W mode and -20°C to 55°C at 40W mode.

Note: To use carrier board in super mode, users would need to design thier own heat dissipation solutions (Thermal Design Guide Provided in Documents section).

Jetson Modules Performance with Super Mode

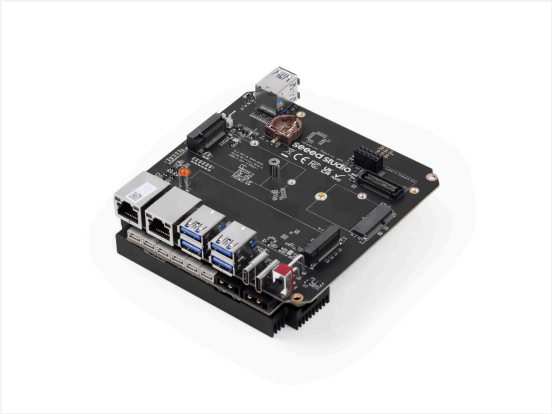
- Enhanced power management
- Improved higher frame rate processing
- Reduced inference time

Product Gallery





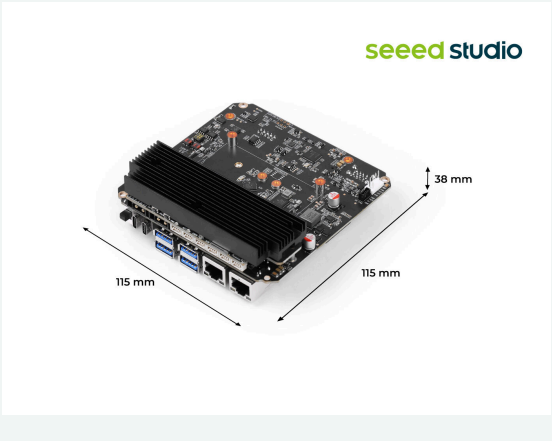












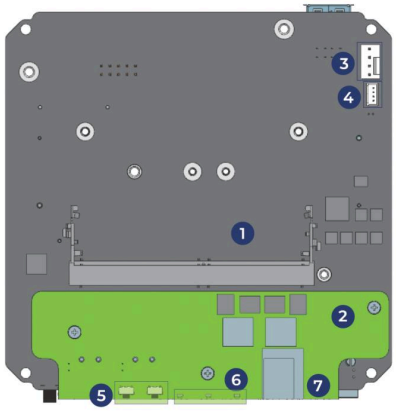
Specification

Carrier Board		
Supported Jetson Module	Jetson Orin Nano/Orin NX	
Supported Module Power	7W | 10W | 15W | 20W | 25W | 40W	
Storage	1x M.2 KEY M PCIe	
Networking	M.2 KEY E	1x M.2 Key E for WiFi/Bluetooth module
	M.2 KEY B	1x M.2 Key B for 5G module
	Ethernet	2x RJ45 Gigabit Ethernet
I/O	USB	6x USB 3.2 Type-A (5Gbps); 1x USB 3.0 Type-C (Host/DP 1.4) 1x USB 2.0 Type-C (Device Mode/Debug);
	Camera	1x 4 in 1 GMSL2(mini fakra)(optional board)
	CAN	2x CAN0(XT30(2+2)) 3x CAN1(4-Pin GH-1.25 Header)
	Display	1x DP1.4(Type C Host)
	UART	1 x UART 4-Pin GH-1.25 Header
	I2C	2x I2C 4-Pin GH-1.25 Header
	Fan	1x 4-Pin Fan Connector (5V PWM) 1x 4-Pin Fan Connector (12V PWM)
	Extension Port	1x Camera Expansion Header(for GMSL2 board)
	RTC	1x RTC 2-pin 1x RTC Socket
	LED	3x LED(PWR, ACT and User LED)
	Pinhole Button	1x PWR 1x RESET
	DIP Switch	1x REC
	Antenna Hole	5x Antenna Hole
Power	19-54V XT30(2+2) (XT30 to 5525 DC Jack Cable included)	
Jetpack Version	Supported Jetpack 6.2	
Mechanical	Dimensions (W x D x H)	115mm x 115mm x 38mm
	Weight	200g
	Installation	Desk, Wall-mounting
Operating Temperature	-20℃~60℃(25W Mode) -20℃~55℃(MAXN Mode) (with reComputer Robotics heat sink with fan)	
Warranty	2 Years	

Certification	RoHS, REACH, CE, FCC, UKCA, KC

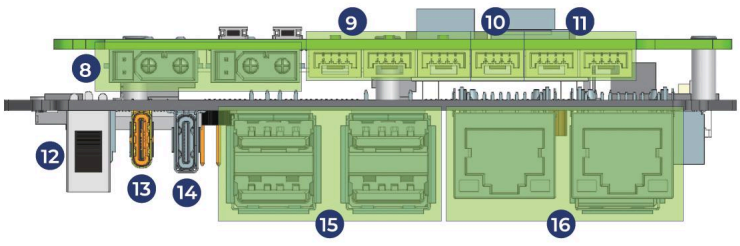
Hardware Overview

reComputer Robotics J401 Carrier Board Placement-Top View



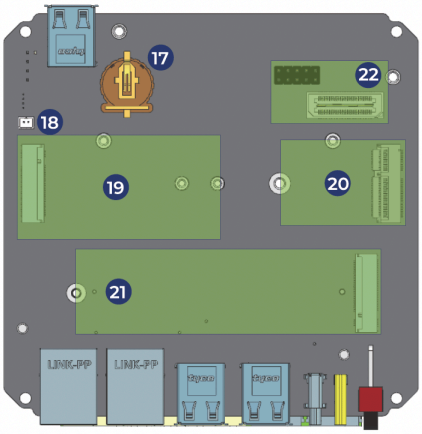
1. Nvidia Jetson Orin Module
2. Power Supply and JST Expansion Board
3. 4-Pin Fan Connector (12V PWM)
4. 4-Pin Fan Connector (5V PWM)
5. 2x Pinhole Button
6. 3x LED Indicator
7. SIM Card Slot

reComputer Robotics J401 Carrier Board Placement-Front View



8. 2x XT30(2+2)
9. 3x CAN1 JST 4-Pin
10. UART JST 4-Pin
11. 2x IIC JST 4-Pin
12. DIP Switch
13. Type C USB 2.0
14. USB3.0/DP1.4
15. 6x Type A USB 3.2
16. 2x RJ45 Ethernet Port

reComputer Robotics J401 Carrier Board Placement-Bottom View



17 RTC Battery Socket
18 RTC 2-Pin Header
19 M.2 Key B Slot
20 M.2 Key E Slot
21 M.2 Key M Slot
22 Camera Expansion Header

Applications

- **The NVIDIA AI software stack:** is designed for accelerate AI application and deployment
- **Designed for Edge AI Computer Vision Applications:** Jetson Platform Services provide a platform to simplify development, deployment and management of Edge AI applications on NVIDIA Jetson like BEV sensing demo with 4 USB cameras.
- **Designed for demanding AI applications:** Such as AMR, smart retail, industrial automation, and video surveillance, smart video analysis scenario
- **Jetson-example:** We have Jetson-example prepared for you! It offers one-line deploy projects edge AI applications of generative AI including Ollama, Llama3; computer vision including YOLOv8, and others. We have configured all environment for you to provides single command deployment of projects.

Part List

reComputer Robotics J401 Carrier Board x 1	x1
Power Supply and JST expansion board x 1	x1
XT30 to DC cable x 1	x1
USB Cable, Type A to Type C x 1	x1
Heat Sink for expansion board	x 1
Stud(M3*30)	x 5
M3 Hexagon nut	x 5
Screw(CM2.5*L.4) for Jetson Module and M.2 Key M	x 3
Screw(CM2*3.0) for M.2 Key E	x 1
Stud(M2*2.0) for M.2 Key B	x 1
Screw(CM3*4.0) for M.2 Key B	x 1
User Manual	x 1

Compliance & Logistics

HSCODE	8543909000
USHSCODE	8517180050
UPC	
EUHSCODE	8543709099
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-Robotics-Carrier-board-p-6442.html
- User Manual&Datasheet
- Carrier Board Schematic
- Power Board Schematic
- 3D File
- Mechanical Document-reComputer Robotics PCBA
- Seeed Nvidia Jetson Product Catalog
- Seeed Nvidia Jetson Success Cases
- Seeed Jetson One Pager
- reComputer_Robotics_J401_Thermal_Design_Guide
- Flash BSP for Jetson

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