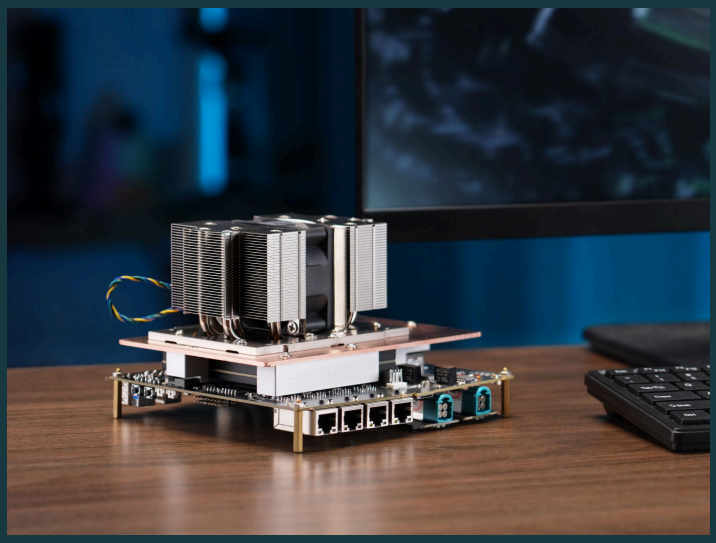
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INDUSTRIAL PRODUCT DATASHEET

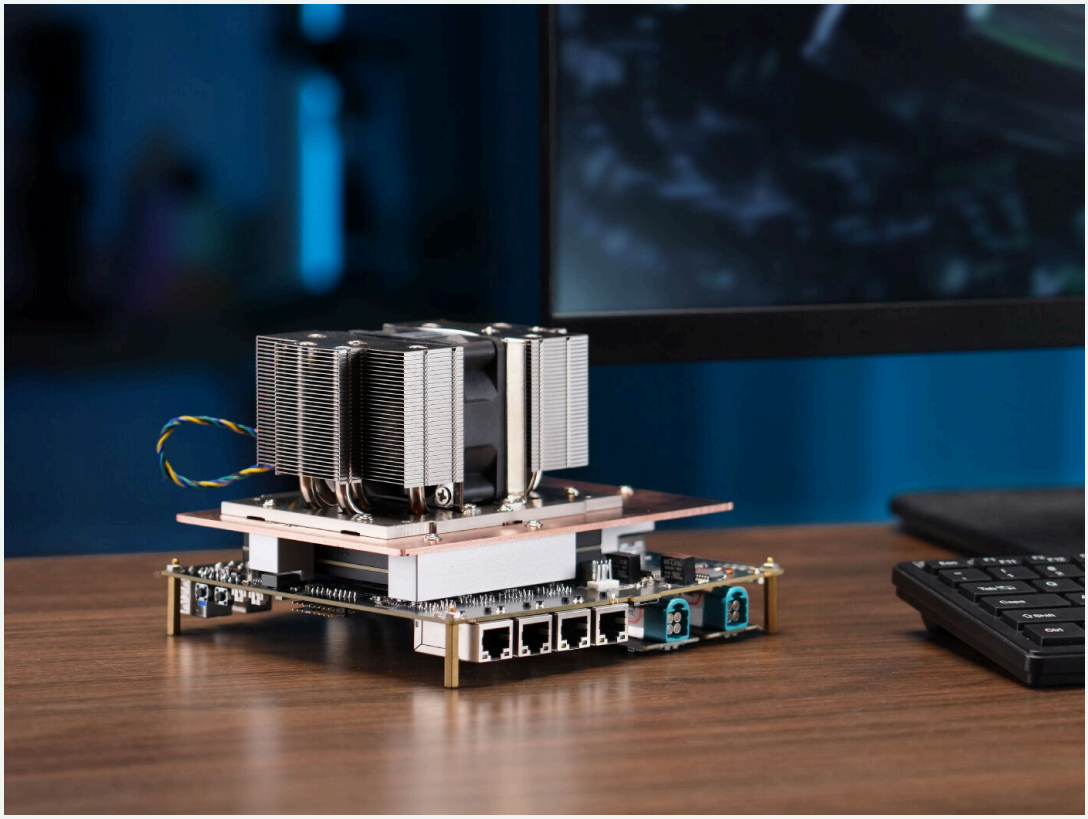
reComputer J601 Carrier Board Bundle with Jetson AGX Thor™ T5000 / T4000

A compact, high-performance edge AI platform powered by Jetson AGX Thor for humanoid robotics, VLA development, production AI, and agentic AI at the edge.

SKU	UPDATED	PRICE
E26073101	2026-09-15 03:55:22	$0.00(Excl. VAT)



Overview



The reComputer J601 Carrier Board Bundle with Jetson AGX Thor™ T5000 / T4000 is a compact embodied AI platform offering up to 2070 TFLOPS and a 168mm x 153mm footprint for robot prototyping, with support for 48V battery systems up to 54V input. It provides rich I/O including USB, 10G Ethernet, CAN, RS-485, I2S, and 4x 4-lane CSI supporting up to 8 GMSL2 cameras for vision AI applications.

Key Features

- **Powerful embodied AI Platform** Compatible with the Jetson AGX Thor module, offering up to 2070 TFLOPS. Perfect edge platform for embodied AI development.
- **Compact Footprint** 168mm x 153mm footprint, suitable for robot prototyping and development, especially robots that has tight footprint such as humanoids
- **Wide Voltage Input Range** Can be used in 48V battery power system (max 54V input)
- **Rich IO capabilities** Includes most common IOs used in robotics prototyping, such as USB, 10G Ethernet, CAN, RS-485 and I2S
- **Vision AI Support** Features 4x 4-lane CSI output, and can be connected up to 8x GMSL2 cameras, making it ideal for vision AI applications such as BEV, Occupancy Grid, SLAM etc

Product Gallery



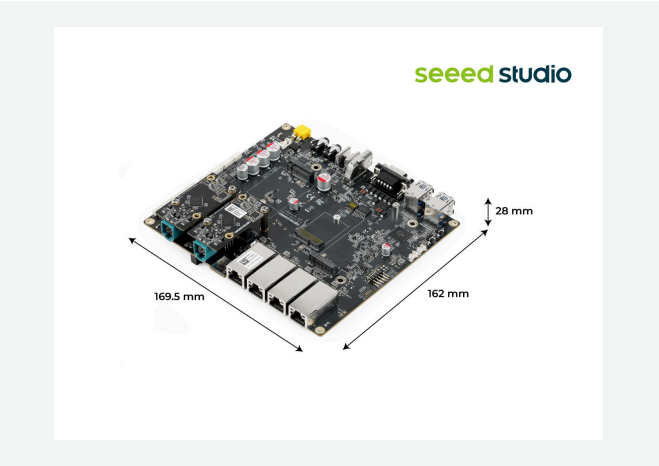












Specification

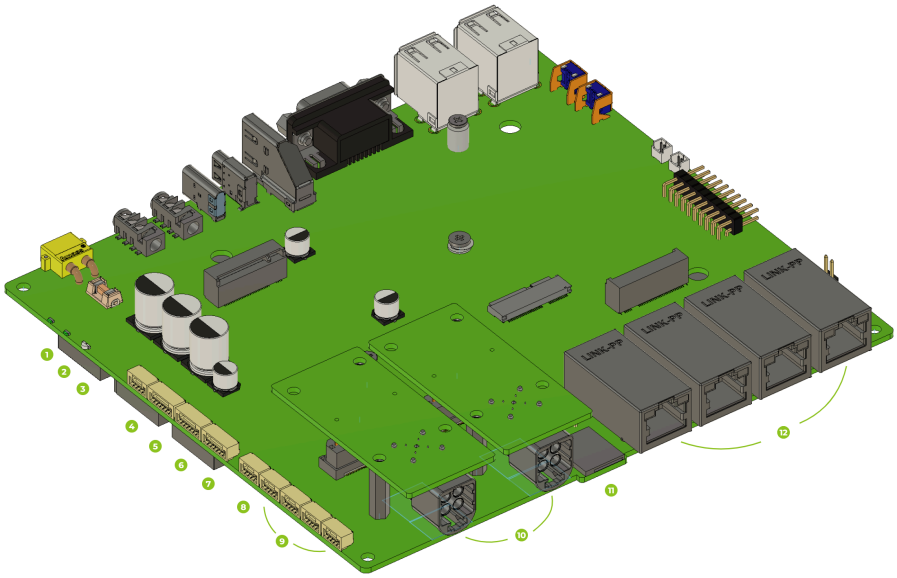
Product	reComputer J601 Carrier Board	
Storage	1x M.2 Key M slot	
Networking	1x M.2 Key E slot for WiFi/Bluetooth module 1x M.2 Key B slot for 4G/5G module	
I/O	USB	4x USB 3.2 Type-A (10Gbps); 1x USB 3.0 Type-C (Recovery); 1x USB 2.0 Type-C (Debug);
	RJ45	4x 10G Ethernet
	GMSL	8x GMSL2 (MAX96712 as deserializer)
	CAN	4x CAN (CAN-FD supported)
	RS485	1x RS-485
	RS232/422/485	1x RS-232/422/485
	I2S	1x I2S
	I2C	1x I2C
	Audio	1x MIC 1x Audio Output
	GPI/GPO	4x GPI 4x GPO
	Display	1x HDMI 2.1
	Fan	2x 4 pin Fan Connector (12V PWM)
	Button	1x Reset Button; 1x Recovery Button
	RTC	1x RTC 2-pin
Power	1 x XT30 Connector (19-48V DC)	
Mechanical	Dimensions (W x D)	168mm x 155mm
	Weight	312g
	Installation	Desk, wall-mounting
Operating Temperature	-10℃~60℃ (with thermal grease) -10℃~55℃ (with thermal pad)	
Warranty	2 Year	

Manufactuer	Model	Resolution

Sensing	SG3S-ISC031C-GMSL2F	1920H*1536V
	SG2-AR0233C-5200-G2A	1920H*1080V
	SG2-IMX390C-5200-G2A	1920H*1080V
	SG8S-AR0820C-5300-G2A	3840H*2160V
Orbbec	Orbbec Gemini 335Lg	3D

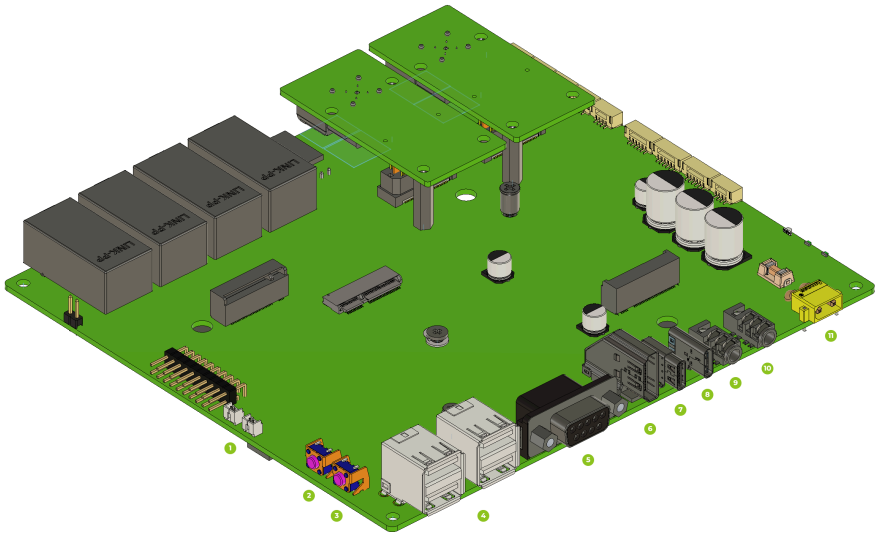
Hardware Overview

Side View 1



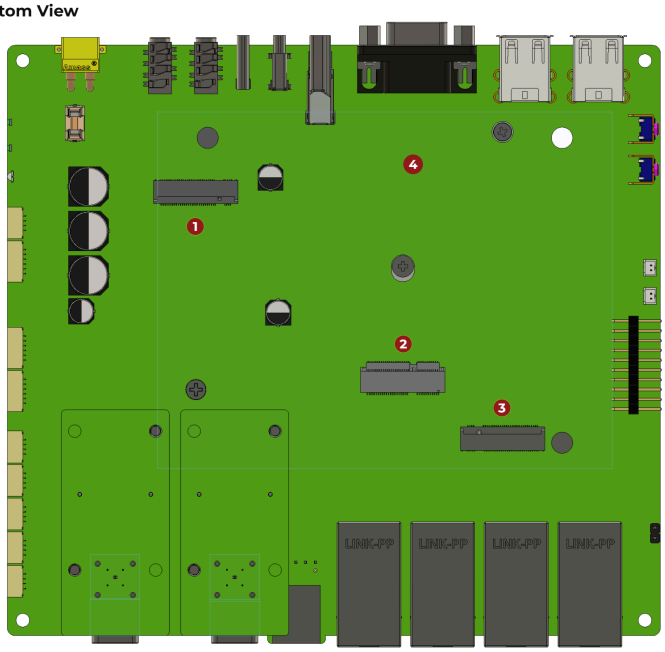
1. ACT LED x 1
2. Power LED x 1
3. SSD LED x 1
4. I2C x 1
5. I2S x 1
6. GPI x 4
7. GPO x 4
8. RS-485 x 1
9. CAN x 4
10. GMSL2 x 8
11. Nano SIM
12. 10 GbE x 4

Side View 2



1. RTC 2-pin Connector
2. Recovery Button
3. Reset Button
4. USB 3.2 x 4
5. RS-232/422/485 x 1
6. Display
7. USB Type-C Recovery
8. USB Type-C Debug
9. Audio Input
10. Audio Output
11. DC 19~ 48 V

Bottom View



1. M.2 Key B Slot
2. M.2 Key E Slot
3. M.2 Key M Slot
4. RS-232/422/485 Mode Switch

Applications

- **Humanoid Robotics:** reComputer J601 offers all necessary I/O's for humanoid development, such as CAN, 10Gb Ethernet, RS485, Audio etc. Along with NVIDIA Jetson AGX Thor modules, reComputer J601 serves as the onboard state-of-the-art "brain" for these machines, enabling them to perceive, reason, plan, and act in real-time.
- **VLA development:** Jetson Thor is the edge platform purpose-built for physical AI, transforms VLA models from research curiosities into production-ready intelligence. It eliminates the cost, complexity, and latency of external GPU dependency. It enables robots that understand natural language, perceive complex environments, and act with human-like fluidity. And it does all of this at the edge—secure, responsive, and scalable. NVIDIA provides a seamless end-to-end workflow for VLA development on Jetson Thor. The Isaac GR00T foundation model family—including GR00T N1.5, N1.6, and N1.7—offers cutting-edge VLA capabilities that bridge perception and execution. With JetPack 7.x, CUDA 13, and TensorRT acceleration, developers can fine-tune models on cloud infrastructure and deploy them directly to Thor with minimal friction.
- **Production AI and Automation:** Jetson AGX Thor brings server-class AI inference directly to the factory floor. It enables robots that visually inspect products, understand verbal instructions, and coordinate with other machines simultaneously—all without offloading processing to the cloud. Equipped with a rich array of I/O interfaces—including 10Gb Ethernet, GMSL, and RS-485—the reComputer J601 serves simultaneously as a sensor hub and a real-time processing platform, enabling rapid deployment and production-ready integration.
- **Agentic AI on edge:** Jetson AGX Thor brings server-class reasoning to the factory floor, the warehouse, and the inspection line. It enables AI agents that don't just answer questions, but also take action. Paired with NVIDIA Nemoclaw, NVIDIA provides a complete, production-grade agentic AI software stack. So reComputer J601 can be your AI agent on the edge without burning tokens. It can monitor, decide, coordinate, and execute. And it does it all at the edge—secure, responsive, and scalable.

Part List

Seeed Carrier Board (reComputer J601)	
GMSL Extension Board (GMSL x4)	
XT30 to DC power cable	
USB Type-C to Type-A cable	
GH-1.25 4-pin 100mm JST Cable	
GH-1.25 6-pin 100mm JST Cable	
M3*25 Stud	

Resource Links

- https://www.seeedstudio.com/reComputer-J601-Carrier-Board-for-Jetson-AGX-Thortm-T5000-T4000.html
- Datasheet
- Carrier Board Schematic
- 3D File
- Seeed Nvidia Jetson Product Catalog
- Seeed Nvidia Jetson Success Cases
- Seeed Jetson AGX One Pager

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com