

A608 Carrier Board for NVIDIA[®] Jetson Orin™ NX/Orin™ Nano Module

A608 carrier board is a powerful high-performance extension board compatible with NVIDIA Jetson Orin™ NX/Orin™ Nano modules. Offering versatile interfaces, flexible storage and wireless capability expansion, even for more peripherals, it can be your perfect choice to develop robotics, drone, and AI video analytics solutions across diverse industries. It's especially compatible with JST-GH ports to seamlessly integrate on drones/robots through rich Function CON interfaces, in order to get stable connection in dynamic and collision environments.

Hardware Feature

The A608 carrier board is designed with rich sets of IOs, featuring networking capability that equipped with 2 Gigabit Ethernet ports for fast networking, also coming with 4 USB 3.2 Type-A (integrated USB 2.0) ports, 1 USB 2.0+3.2 Type-C port and 1 CAN connector for versatile interface options.

This extension board has been mounted with 1 M.2 Key M, 1 M.2 KEY E and 1 M.2 Key B slots with ample space for flexible storage and wireless connectivity expansion. In addition, there are multiple peripherals supported on the board, enabling users to capture and display high-quality video content with 2 4-lane CSI camera connectors and the DP port. There also includes a FAN connector for cooling purposes, and 1 RTC socket for reliable timekeeping.

Software Compatibility

With the NVIDIA Jetson module assembled, it could support NVIDIA JetPack, which includes a board support package (BSP), Linux OS, NVIDIA CUDA®, cuDNN, and TensorRT™ software libraries for deep learning, computer vision, GPU computing, multimedia processing, and much more. With its multiple camera connectors, it is suitable for running multiple neural networks in parallel for applications like image classification, object detection, segmentation, and speech processing. Combined with NVIDIA Issac™ SDK and ROS2 framework, you can easily empower real-time AI processing on your robotics and drone developing projects, allowing machines to make decisions autonomously based on sensor data without relying on external computing resources.





Hardware Partlist

- A608 Carrier Board for Jetson Orin™ NX/Orin™ Nano x1
- 19V/4.74A(Barrel Jack 5.5/2.5mm)
 Power Adapter (Power cord not included) x1
- 2 Pin Dupont Female Cable x4
- 4 Pin Dupont Female Cable x4
- 9 Pin Dupont Female Cable x2

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Specifications	A608 Carrier Board
SKU	105110001
Module Compatibility	NVIDIA Jetson Orin™ NX/Orin™ Nano
Networking	2x Gigabit Ethernet (10/100/1000)
USB	4x USB 3.2 Type A (Integrated USB 2.0) 1x USB 2.0+3.2 Type C
Display	1x DP
M.2 KEY M	1x M.2 KEY M(SSD Interface 1x M.2 KEY E(WIFI) Interface 1x M.2 KEY B(4G/5G) Interface
Camera	2x 4 CSI Camera
FAN	1x FAN(5V PWM)
RTC CON	1x 3.0V RTC
CAN	1x CAN (FD)
Audio	1x 3.5 Audio Jack 2x MIC 2x SPEAKER 1x SPEAKER FEEDBACK
Function CON	2x IIC 1x SPI 7x IO 3.3V 2x UART 1x DEBUG 1x POWER 1x RESET 1x RECOVERY
Power Requirements	9-20V(MAX 60W) DC Input
Load capacity	Above 60W
Operating Temperature	-25 °C to +65 °C
Storage Temperature & Humidity	-25 °C to +65 °C 10% -90% Non condensation environment
Mechanical	101.5mm x 95mm
Weight	0.999Kg

Ready to Get Started?

As an NVIDIA NPN Elite partner, Seeed offers one-stop experience to simplify edge AI deployment including custom image flashing service, fleet management, and hardware customization.

- Check out our Latest NVIDIA Jetson Catalog
- Explore more about Seeed's NVIDIA Jetson ecosystem at <u>seeedstudio.com/tag/nvidia.html</u>
- Take the first step to send us an email at edgeai@seeed.cc to become a part of the amazing ecosystem!