Specifications

FORM FACTOR	115mm x 115mm
ONX 16G **ONX 8G**	• Ampere GPU + 8-core Arm Cortex-A78AE v8.2 64-bit CPU + 16 GB LPDDR5 • Ampere GPU + 6-core Arm Cortex-A78AE v8.2 64-bit CPU + 8 GB LPDDR5
AI Performance	• 16G: Up to 100 (Sparse) INT8 TOPs and 50 (Dense) INT8 TOPs • 8G: Up to 70 (Sparse) INT8 TOPs and 35 (Dense) INT8 TOPs
Ampere GPU	1024 NVIDIA® CUDA® cores | 32 Tensor cores | End-to-end lossless compression | Tile Caching | OpenGL® 4.6 | OpenGL ES 3.2 | Vulkan™ 1.10 | CUDA 10 | • ONX 16G: Maximum Operating Frequency: 918 MHZ • ONX 8G: Maximum Operating Frequency: 765 MHZ
VPU	• Video Decode:Standards supported: H.265 (HEVC), H.264, VP9, Av1 1x8K30 • Video Encode:Standards supported: H.265 (HEVC), H.264, Av1 1 x 4K60
HDMI	HDMI (8Kp30) connector
Ethernet	2 x GBE LANs
Expansion	• 1 x M.2 Key-M • 1 x M.2 Key-B • 1 x M.2 Key-E
USB	2 x USB 3.2 Type-A and 1 x USB Client mini-B
Camera	• 4x GMSL2 automotive cameras via FAKRA Z connectors
Other I/Os	1 x RS232/422/485, 1 x CAN, 2 x SPI, 2x I2C, 1 x nanoSIM
Power	• 12 VDC by Lockable DC Jack • Power Consumption: 10W ~ 20W (ONX 8GB), 10W ~25W (ONX 16GB)
Mechanical	• 115 mm x 115mm x 21mm • 0.3Kg
Operating System	• Ubuntu 22.04
Certification	• CE/FCC Class B
Environment	• Operational Temperature: 0 ~ 60 C (Commercial) / -40 ~ 85 C (Industrial) • Operating Humidity: 5% ~ 95% Relatively Humidity, non-condensing

Features

• NVIDIA Jetson Orin NX 8GB (70 TOPS) and 16GB (100 TOPS)

• M.2 E-Key x 1, M.2 B-Key x 1, M.2 M-Key x 1

• 2 x GBE LANs

• HDMI, 2 x USB 3.2, 1 x USB 2.0 OTG, 1 x nanoSIM card

• Support 4x GMSL2 automotive cameras via FAKRA Z connectors

• 1x CAN, 1x RS232/422/485, 1x Fan connector

• 12V DC Power Supply

Ordering Information

Part Number	Description
AI-NX3000-8G	NVIDIA Jetson Orin NX 8G SBC
AI-NX3000-16G	NVIDIA Jetson Orin NX 16G SBC

Packing List

Part Number	Description	Quantity
AI-NX3000	NVIDIA Jetson Orin NX SBC	1