



NVIDIA[®] Jetson[™] Reshape Edge Video Intelligence

Expert in Tailoring Diverse Intelligent Video Solutions

About YUAN

Your Trusted Tech Partner for Reliable VideoAI

At YUAN High-Tech, we believe that every frame in professional video technology carries vital value. True innovation comes not just from breakthroughs, but from reliable quality and attention to every detail.

We don't follow trends—we lead them. By combining video capture, recording, streaming, and AI, we create powerful, original products that move the industry forward. Our goal is not to imitate, but to innovate.

But technology alone is not enough. We believe technology is the foundation, and service brings it to life. We work closely with our customers, solving problems and strengthening their systems. Even the smallest issues matter to us, because in fields like healthcare, broadcasting, and automation stability is everything.

"Technology. Service. Reliability. Trust." This is our promise. We aim to be not just a product provider, but your most trusted partner in professional video solutions.

This is YUAN High-Tech. This is what we stand for.



Technology



Service



Reliability



Trust



Intelligent Video Processing Platform

Support Every Stage of Video AI Development



Platform Product Line

Capture Board



Carrier Board



Computer System

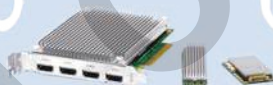


Completed Hardware & Software Integration

Platform

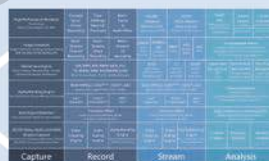


Capture



SmartVDO

SDK



NexVDO

VideoAI



We Can



Capture Card

HDMI / SDI / DVI / VGA / TVI



Camera

GMSL / MIPI / GigE / USB / PoE



Multi-Link

4G / 5G / WiFi / IMU



SDK Service

NexVDO SDK



BSP Service

JetPack SDK



OEM / ODM

Our 6 Core Systems



Near Series

Built on the NVIDIA® IGX Orin™ platform and expandable with high-end dGPUs such as the RTX 6000 Ada, the Near series delivers over 1705 TOPS of AI performance.

Designed for demanding edge computing applications such as LLMs, VLMs, and generative AI, it introduces external dGPU expansion to unlock maximum compute power in a compact form factor.



Edge Series

The Edge series is a robust and standardized AI computing platform tailored for industrial automation and smart city deployments.

Supporting Orin™ Nano, NX Super, and AGX modules, it offers scalable performance from 34 to 275 TOPS.

Built with industrial-grade reliability, it includes fanless and active-cooled variants, wide-voltage input, and wall-mount-ready enclosures for stable 24/7 operation.



Arc Series

A compact AI robotics core optimized for humanoids and motion-centric robots. Based on Jetson™ Orin NX Super, AGX and Jetson Thor™ (up to 2070 TOPS), ARC integrates multi-axis IMU sensors, supports modular I/O daughterboards, and maintains a footprint comparable to native Jetson modules—delivering real-time orientation, sensor fusion, and custom expansion in space-constrained systems.



Air Series

The Air series is our most popular and award-winning ultra-compact AI computing platform, featuring a modular dual-board design that supports GMSL, SDI, TVI, HDMI, and more.

Powered by Jetson Orin™ Nano or NX Super, it delivers up to 157 TOPS with JetPack 6.2 Super Mode.

Despite its palm-sized form, it meets industrial-grade standards with fanless thermal design, wide-voltage input, and stable performance up to 75°C.



Eye Series

The Eye series is a fully integrated AI smart camera that combines imaging, computing, and connectivity in an all-in-one design.

Powered by Orin™ Nano or NX Super, it delivers 34 to 157 TOPS with 4K60 H.26x encoding, ultra-low latency under 33ms, and HDR-capable ISP using Sony Starvis II sensors.

With built-in Wi-Fi, 4G, and 5G connectivity, it's ideal for smart surveillance, industrial inspection, and mobile AI vision.



Pixel Series

The Pixel series combines AI computing with a built-in touchscreen for an all-in-one edge solution.

Available with AGX Orin™ or Orin™ NX Super, it offers both high and mid-tier options for medical or industrial systems.

Modular SDI/HDMI input and output modules enable flexible video I/O customization based on application needs.



Application Scenario



Broadcasting



Education & Developer



Healthcare



Industrial and Automation



Primary Industry



Retail



Robot & Drone



Smart City



Transportation

System Recommendation by Application Scenario

Application Scenario	Key Requirements	Recommends
Broadcasting	1. SDI/HDMI 4:2:2 10-bit I/O for professional-grade video 2. Low-latency H.26X/AV1 encoding and streaming 3. Protocol support: NDI, Dante, SRT, RTSP, RTMP	Edge Air
Education & Developer	1. SDK support for capture, recording, streaming, and AI 2. Developer-friendly docs, APIs, and samples 3. Expandable via PCIe, USB, and peripheral I/O	Edge
Healthcare	1. IEC 60601-1 medical safety compliance 2. 100–1700 TOPS AI for diagnostics and training 3. HL7, DICOM, Worklist protocol integration 4. Modular video I/O: SDI, HDMI, SDVoE	Near Pixel Edge
Industrial Robotics	1. Fanless, wide-temp design for harsh environments 2. Real-time I/O: 1G/10G Ethernet, USB3 Vision, GMSL 3. Supports DI/DO, CANBus, EtherCAT protocols	Edge Eye Air
Primary Industry	1. IP6X-rated rugged build for outdoor deployment 2. -20°C to 75°C wide-temp operation 3. Multi-camera: GMSL, IP, TVI support	Edge Air
Retail	1. Ultra-compact for kiosks, signage, shelf displays 2. Super Mode AI for customer behavior analytics 3. ONVIF/IP camera integration	Edge
Robot & Drone	1. Lightweight for aerial and mobile platforms 2. Navigation stack: IMU, GNSS, RTK, SLAM, ROS, MAVLink 3. Multi-camera input: MIPI, GMSL, SDI, TVI	Arc Air
Smart City	1. Multi-channel IP/TVI hybrid camera input 2. RTSP low-latency streaming at the edge 3. AI inference: CNN, RNN, LLM, VLM	Near Edge Eye
Transportation	1. Wide-voltage input, stable in harsh conditions 2. Fanless, rugged design for vehicles 3. 8–16 channel PSE camera support	Edge

Feature / Technology

Professional HW/SW
Customization Services

Flexible Video Input Configurations



Various Camera Module Integration
(GMSL, MIPI, GigE, PoE, SDI, TVI,)



Efficient Cooling with Heatpipe Technology



Fan-based or Fanless for Performance
or Silent, Maintenance-Free Use



Broad Compatibility with Different NVIDIA Jetpack Versions



Advanced AV1 4:4:4 Codec Core



NVIDIA® GPUDirect® and
GPUDirect® RDMA Technology



Exclusive 5G Low-Latency Streaming Technology



Multi-Layers Security and Encryption

Algorithm	Capture	Record	Stream	Analysis
High Performance Network Monitoring	NetFlow sFlow IPFIX	NetFlow sFlow IPFIX	NetFlow sFlow IPFIX	NetFlow sFlow IPFIX
Image Classification	ImageNet VGG ResNet	ImageNet VGG ResNet	ImageNet VGG ResNet	ImageNet VGG ResNet
Deep Learning Engine	TensorFlow Keras PyTorch	TensorFlow Keras PyTorch	TensorFlow Keras PyTorch	TensorFlow Keras PyTorch
Machine Learning Engine	Scikit-Learn XGBoost LightGBM	Scikit-Learn XGBoost LightGBM	Scikit-Learn XGBoost LightGBM	Scikit-Learn XGBoost LightGBM
Audio Signal Processing	Librosa MEL MFCC	Librosa MEL MFCC	Librosa MEL MFCC	Librosa MEL MFCC
2D/3D Object Detection	YOLO Faster R-CNN Mask R-CNN	YOLO Faster R-CNN Mask R-CNN	YOLO Faster R-CNN Mask R-CNN	YOLO Faster R-CNN Mask R-CNN

Efficient Video Processing Capabilities



Pre-Trained Models : Traditional/Generative AI

Peripheral Module



Video Capture I/O



USB3.X



PSE



DI/DO



SATA



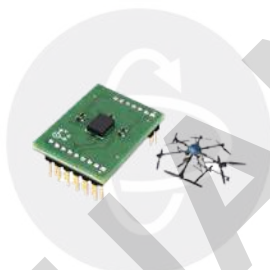
CAN Bus



4G/5G



Wi-Fi



IMU / GNSS



OOB



EtherCAT

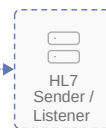
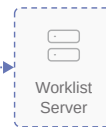
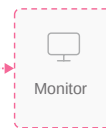
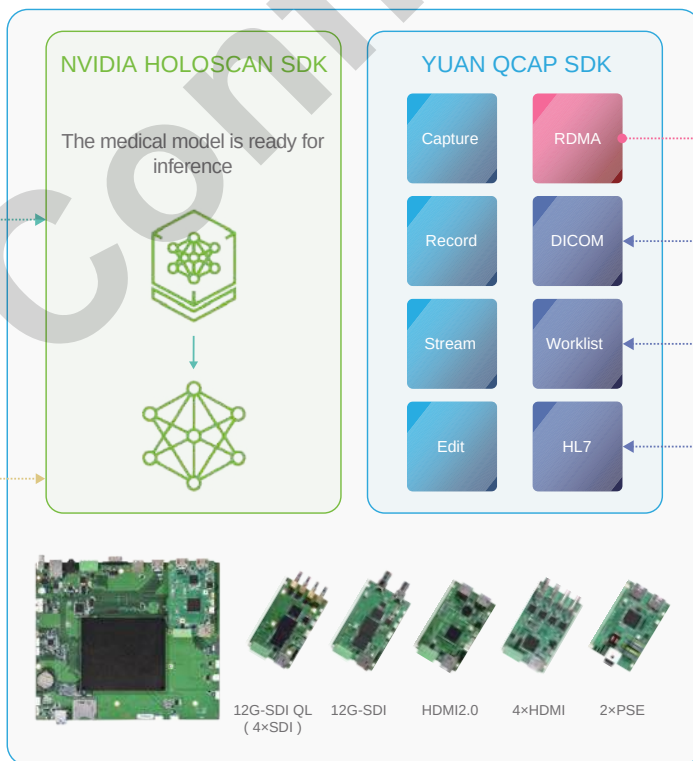
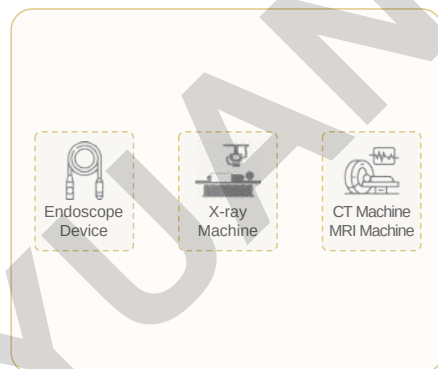
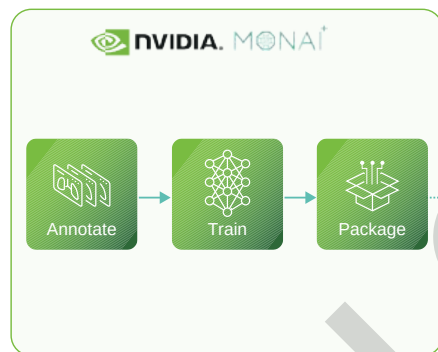
Professional Video SDK Function Block

C / C++ / Python / QT API											
High Performance Renderer Thumb Draw, Mirror, Clone, Region, 3D, HDR	Encrypt/Sync/ Clone/ Recording	Time-Shifting/ Rewind/ Pre-Event	Multi-Tracks & Audio Mixer	2D/3D Universal Stream Client Capture, Record, PTZ		2D/3D Multi-Streams Stream Server Delay Live, Encrypt, Mixer		Smart City Event & Counting, Lane Enforcement, Speed Miles	Smart Factory AOI Defect, AGV Gauge Reader, Safety Inspection	GenAI Technology Image Caption, Semantic Reasoning, Auto Segmentation	
Image Snapshot Single, Continuous, Cropping, Up/Down Scaling, BMP, JPG, PNG, TIF, DICOM/HL7/WL	Multi-Streams Channel Recording	Multi-Streams Share Recording	Multi-Streams 3D Recording	ONVIF Server, Client, Emulator	WEBRTC SIP Conference, Chat Room	Dante AV-H	NDI HB/3X	HLS HTTP	Image Special Effects Background Blurring, Virtual Background, Face Liquify, Face Animation, Beautifying Filter, EPTZ Auto Framing, Super Resolution		
Deinterlace Engine Motion Adapter, Blending, Filter Triangle, Advanced 3D Adapter, RGB Repack	AVI, MP4, ASF, WMV, MOV, FLV, TS, M3U8, WAV, DICOM/HL7/WL Misc. Formats, Repair, Thumb, Subtitle, Metadata			RTSP 4MS DELAY, UDP/TCP/RTTP/ MJPEG/RAW-UDP	TS SERIAL/ UDP/TCP/ HTTP/MJPEG	RTMP RTMPS/ Public/ CDN Server		Scene Text Recognition LPR, OCR, Barcode ID	Face & Expn. Recognition 10, Age, Gender, Expression, Mood	Pos. & Ges. Recognition Action Check, Gesture Control	
Alpha Blending Engine Text, Scrolling Text, Picture, Memory, Chroma Key	RAW, MPEG2, H264 ^{10/VC} , H265 ¹⁰ , AV1, AAC Baseline, Main, High Profile, CABAC			RAW, MPEG2, H264 ^{10/VC} , H265 ¹⁰ , AV1, AAC Baseline, Main, High Profile, CABAC			Feature Extraction Image Featureization, Face Features, Keypoints of Skeleton and Hand, Cross-Camera Tracking, Image Search				
	Intel® Media SDK	NVIDIA® CUDA/NVENC™	AMD® VCE™	Intel® Media SDK	NVIDIA® CUDA/NVENC™	AMD® VCE™					
Auto Signal Detection Plug, Unplug, No Signal, Format Changed	Transition Effect Action Script, Alpha Blending, Blinds, Transform, Scaling, Rotation			Transition Effect Action Script, Alpha Blending, Blinds, Transform, Scaling, Rotation			Object Detection and Recognition Detect, Segment, Recognize, Tracking, Event, and Counting				
2D/3D Video, Audio and VANC Streams Capture Sound Card, Virtual Desktop, USB Camera, IP Stream, GPU-DIRECT, Surround & Multiview Patent	Video Cropping Engine	Video Scaling Engine	Alpha Blending Engine Text, Scrolling Text, Picture, Memory, Chroma Key	Video Cropping Engine	Video Scaling Engine	Alpha Blending Engine Text, Scrolling Text, Picture, Memory, Chroma Key	Content Analysis	Biometric Analysis	Behavior Analysis		
Capture	Record			Stream			Analysis				
GPUDirect-RDMA	NVENC	NVDEC		NPP	CUDA		TensorRT	TensorRT-LLM			
NVIDIA® Jetson Orin™ Palform											

►NexVDO SDK

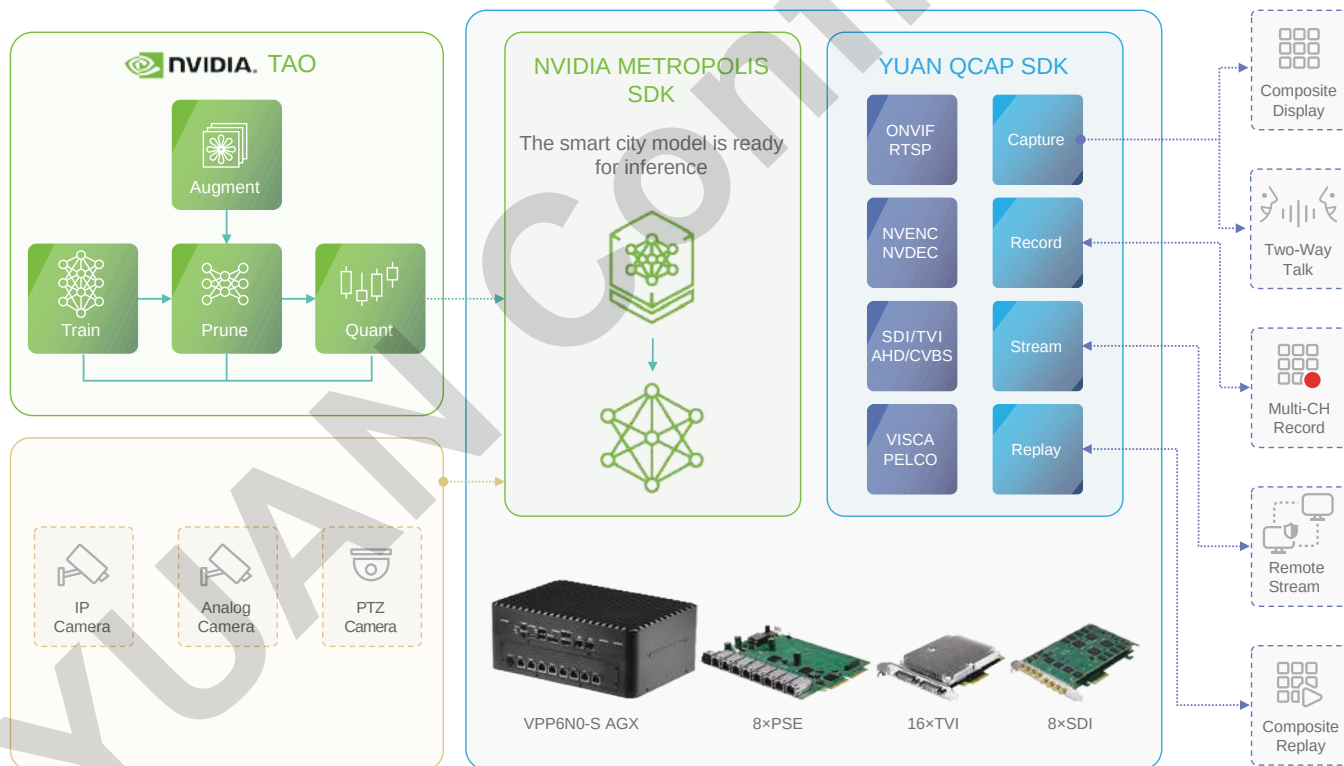
SDK Developer Kit

Healthcare Solution



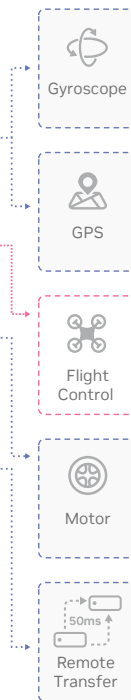
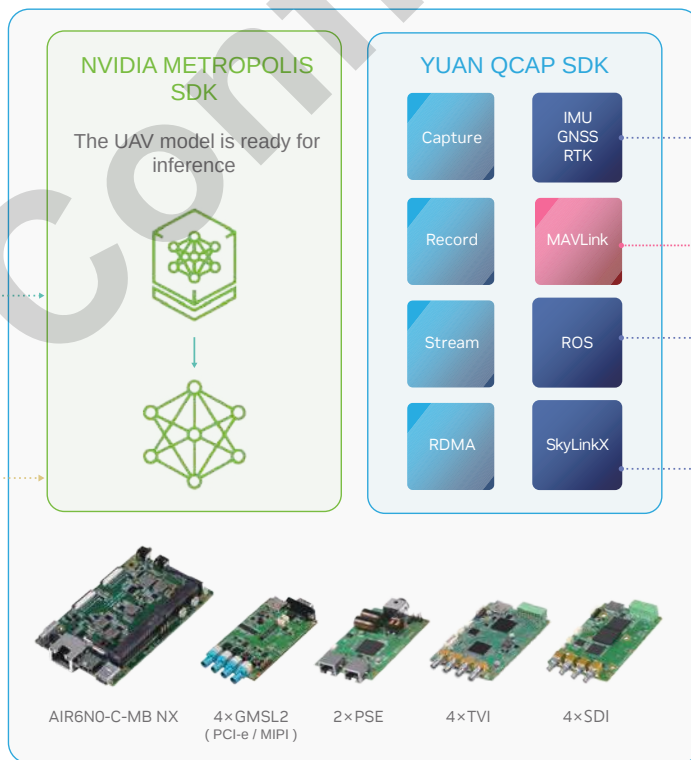
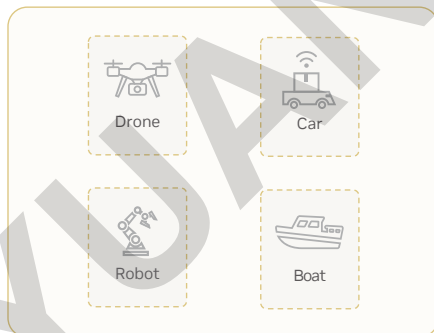
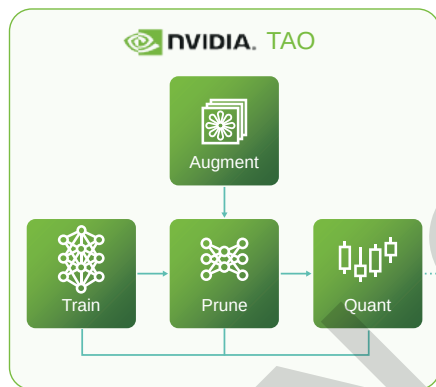
SDK Developer Kit

Smart City Solution



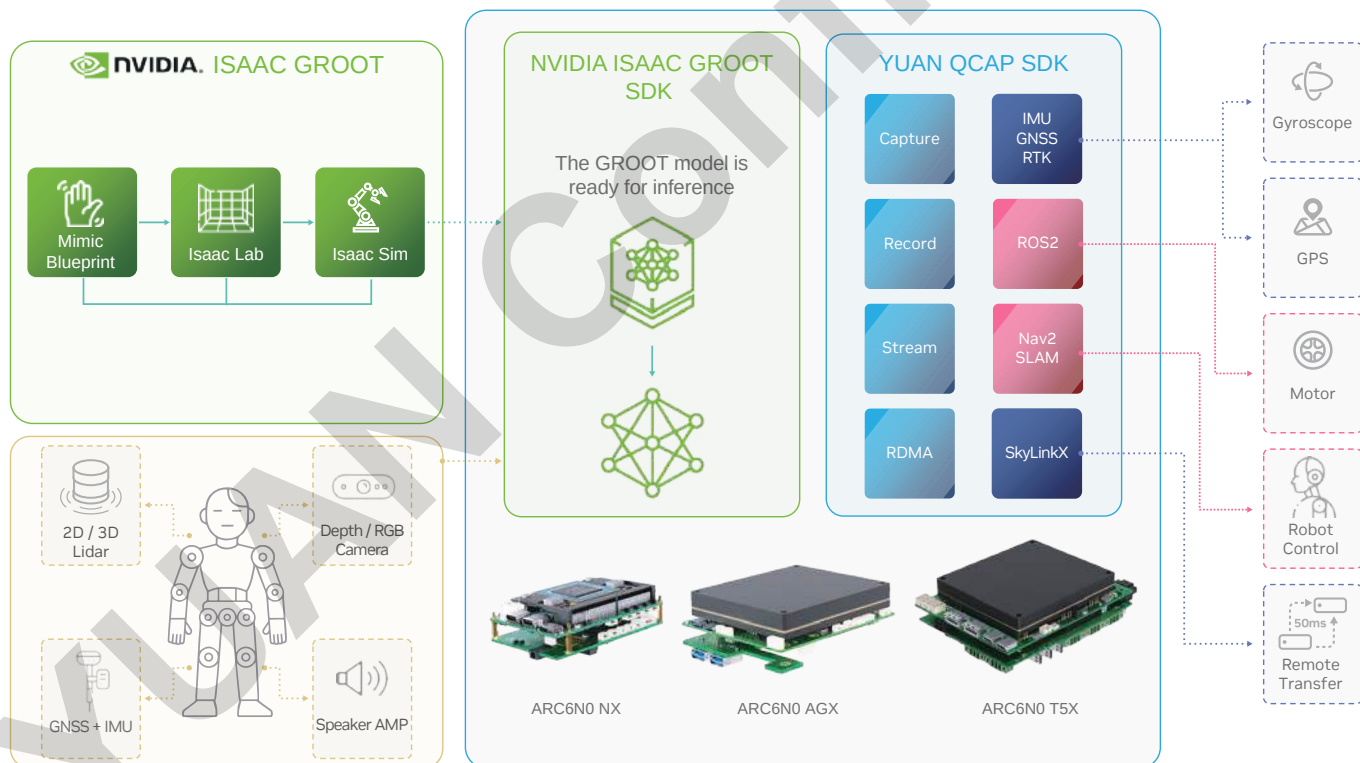
SDK Developer Kit

Industrial and UxV Solution



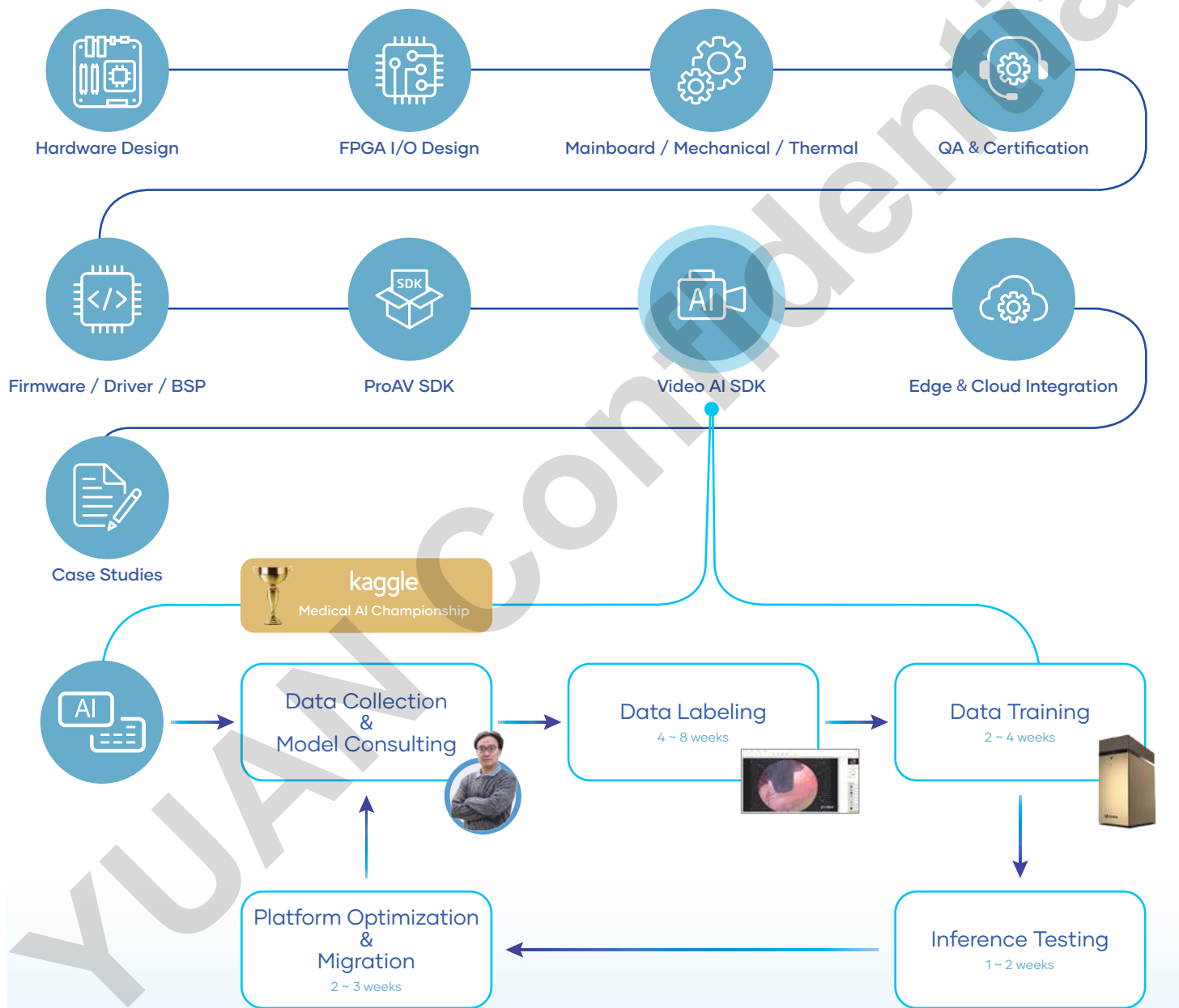
SDK Developer Kit

Humanoid Robot Solution



Why YUAN

End-to-End Embedded Video AI Expertise



Partner Integrations

The logo for aiixon, featuring the word "aiixon" in a blue, sans-serif font. The letter "i" is stylized with a small circle above it.

aiixon

The logo for e-con Systems, featuring a stylized green and blue graphic on the left and the text "e-con Systems™" in green, with the tagline "Think Camera. Think e-con." in smaller black text below it.

e-con Systems



FRAMOS



Leopard Imaging

The logo for oToBrite, featuring the word "oToBrite" in a blue, sans-serif font, with the tagline "driving easier and safer" in a smaller, italicized font below it.

oToBrite



FRORE

The logo for Sansei, featuring a stylized green and blue circular graphic on the left and the word "Sansei" in a sans-serif font.

Sansei

The logo for SENSING, featuring the word "SENSING" in a green, sans-serif font, with the Chinese characters "森云智能" (Sen Yun Zhi Neng) below it.

SENSING

The logo for StereoLabs*, featuring the text "StereoLabs*" in a bold, sans-serif font.

StereoLabs

The logo for TIER IV, featuring the text "TIER IV" in a bold, sans-serif font.

TIER IV



WebOccult



Computer System for NVIDIA[®] Jetson[™]

Various Edge AI Solutions Built with NVIDIA Advanced Embedded Systems

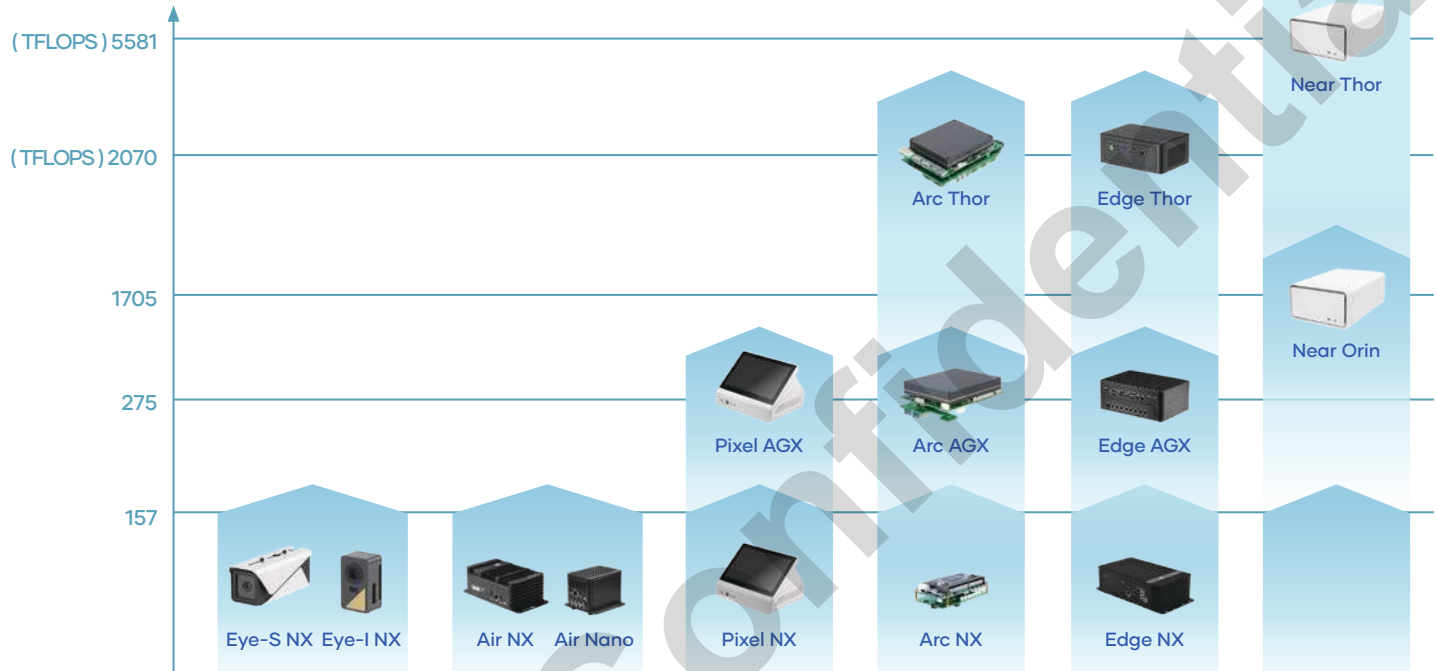
Same Dimension Carrier Board as Official Dev Kit

Near / Edge / Arc / Air / Eye / Pixel Series

Pre-Installed Jetpack

Product Selection Guide

AI Performance (TOPS)



Series	Eye	Air	Pixel	Arc	Edge	Near
Model	Eye-S / Eye-I	Air NX / Nano	Pixel AGX / NX	Arc Thor / AGX / NX	Edge Thor / AGX / NX	Near Thor / Orin
SoM	Orin NX Super Orin Nano Super	Orin NX Super Orin Nano Super	AGX Orin Orin NX Super	Jetson Thor AGX Orin Orin NX Super	Jetson Thor AGX Orin Orin NX Super	IGX Thor IGX Orin
Performance (INT8 TOPS)	NX : 157 / 117 Nano : 67 / 34	NX : 157 / 117 Nano : 67 / 34	AGX : 275 / 200 NX : 157 / 117	Thor : 2070 FP4 AGX : 275 / 200 NX : 157 / 117	Thor : 2070 FP4 / 1200 FP4 AGX : 275 / 200 NX : 157 / 117	IGX Thor : 5581 FP4 IGX Orin : 1705
Memory	NX : 16GB / 8GB Nano : 8GB / 4GB	NX : 16GB / 8GB Nano : 8GB / 4GB	AGX : 64GB / 32GB NX : 16GB / 8GB	Thor : 128 GB AGX : 64GB / 32GB NX : 16GB / 8GB	Thor : 128GB / 64GB AGX : 64GB / 32GB NX : 16GB / 8GB	IGX Thor : 128GB IGX Orin : 64GB
Key Features	IP66-Rated HDR ISP + Starvis 2 Sensor C/CS Mount Lens	Fanless or Fan-Cooled Modular DB for Video I/O	10" Touchscreen AIO Modular DB for Video I/O Medical-Grade	Humanoid Robot Embedded Multi Sensors Compact MB	Industrial / Rugged I/Os Expansion Scalable Edge AI Box	Holoscan Sensor Bridge GPU-Direct RDMA Medical-Grade

About Near



The Near series elevates edge AI capabilities, built upon the formidable NVIDIA® IGX Orin™/ IGX Thor™ platform and engineered for unparalleled performance. Designed for the most demanding edge computing applications, including advanced LLMs, VLMs, and generative AI, the Near series delivers an astounding 1705 TOPS / 5581 TFLOPS of AI performance. Its unique architecture allows for seamless expansion with high-end dGPUs - NVIDIA® RTX PRO 6000 Blackwell, unlocking maximum compute power in a complete desktop system. With the high-speed 100Gbps QSFP networking, the Near series is the ultimate solution for real-time surgical imaging, AI-powered diagnostics, and cutting-edge medical education, transforming 2D video into depth-rich 3D views with near-zero latency via GPUDirect RDMA.



Powered by NVIDIA® IGX Orin™



Seamless Expansion with High-End dGPUs
(NVIDIA® RTX 6000 Ada)



Designed for Medical-Grade IEC 60601-1



18 High-Speed 100Gbps QSFP Networking



Multi 4K60 Video I/O over 100Gbps Fiber
(Holoscan Sensor Bridge)



GPUDirect Remote Direct Memory Access
(RDMA)

Near Series



Feature

- Jetson IGX Orin™
- NVIDIA® RTX PRO 6000 Blackwell / RTX 6000 Ada Expansion
- Medical Grade IEC 60601-1
- Up to 5581 TFLOPS / 1705 TOPS AI Performance
- 2×100Gb QSFP, 2×1Gb RJ45



Model Name	Near T7X	VPP6N0 IGX 700
NVIDIA Platform	NVIDIA IGX Thor™ T7000 128GB and RTX PRO 6000 Blackwell	NVIDIA IGX Orin™ 64GB and RTX 6000 Ada
AI Performance	5581 TFLOPS (FP4-Sparse)	1705 TOPS
Display	4×DP2.1b (4K120)	4×DP1.4a (4K60)
Encode	6×4K60	1×8K30
Decode	4×8K30	2×8K60
Capture Interface	Support by PCI-e Capture Board www.yuan.com.tw/pcie 	Support by PCI-e Capture Board www.yuan.com.tw/pcie 
Expansion	PCIe 1×PCIe Gen5×16 Slot (with 8 PCIe Lanes) M2 1×M2 2280 M Key (G5×2) 1×M2 2230 E Key (G2×1)	PCIe 1×PCIe Gen5×16 Slot (with 8 PCIe Lanes) M2 1×M2 2280 M Key (G4×4) 1×M2 2230 E Key (G2×1)
Dimensions	422.5mm×280mm×165mm	422.5mm×280mm×165mm

Products Images



Near T7X



VPP6N0 IGX 700

About Edge (Thor / AGX / NX)



The Edge series stands as the robust and versatile backbone of industrial and urban intelligence, providing a scalable and highly reliable AI computing foundation for continuous operation. Designed for 24/7 deployment in diverse and often harsh environments, it offers a performance spectrum from entry-level (34 TOPS via Orin Nano) to high-end (2070 FP4 TFLOPs via AGX Thor), seamlessly adapting to specific needs.

With extensive external expandability via rich industrial-grade I/O (CAN Bus, UART, I2C, SPI), flexible connectivity options (4G / 5G / Wi-Fi), and support for diverse video capture cards, cameras, and video inputs, the Edge series empowers developers and system integrators. This ensures the deployment of intelligent vision solutions where stability, adaptability, and continuous uptime are critical.

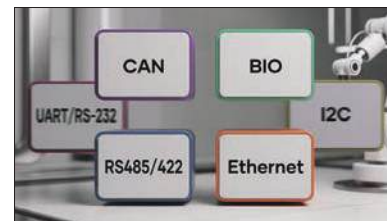
Whether for real-time robotic picking, generative AI-driven surveillance, smart traffic management, broadcasting, education, smart retail, or smart healthcare, the Edge series delivers reliable AI at the point of action, making it widely applicable across numerous advanced domains.



Scalable and Reliable AI Foundation



Wide Temperature, and Wide Voltage Support



Extensive Industrial-Grade I/O Support



Flexible Connectivity Options



Supports a Wide Range of Video Sources and Formats



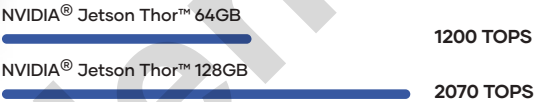
Ready for Multi-Scenario AI Applications

Edge (Thor) Series



Feature

- Jetson AGX Orin™
- Fanless / Fan Both Design
- 2×PCIe Gen3×4
- 3×M.2 M Key / 1×M.2 E Key / 1×M.2 B Key
- CAN Bus / UART / I2C / SPI
- Optional 10G Ethernet (Fiber / Copper) Support



Model Name	EDG6N0-S T5X	EDG6N0-S T5X GMSL2	EDG6N0-S T5X NVR
NVIDIA Platform	Jetson Thor™ 128GB / 64GB	Jetson Thor™ 128GB / 64GB	Jetson Thor™ 128GB / 64GB
AI Performance	2070 / 1200 FP4 TFLOPs	2070 / 1200 FP4 TFLOPs	2070 / 1200 FP4 TFLOPs
Display	1×HDMI2.0 (4K60) 1×DP (4K60)	1×HDMI2.0 (4K60) 1×DP (4K60)	1×HDMI2.0 (4K60) 1×DP (4K60)
Encode	6×4K60	6×4K60	6×4K60
Decode	4×8K30	4×8K30	4×8K30
Capture Interface	Support by PCI-e Capture Board www.yuan.com.tw/pcie	8×GMSL2	8×PSE (8×1 Gbps)
Expansion	PCIe 1×PCIe Gen5×4 Gold Finger M2 1×M2 2280 M Key (G4×2) 1×M2 2230 E Key (G4×1+U2) 1×M2 3042 B Key (U3.2)	PCIe 1×PCIe Gen5×4 Gold Finger M2 1×M2 2280 M Key (G4×2) 1×M2 2230 E Key (G4×1+U2) 1×M2 3042 B Key (U3.2)	M2 1×M2 2280 M Key (G4×2) 1×M2 2230 E Key (G4×1+U2) 1×M2 3042 B Key (U3.2)
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi	N/A
Dimensions	266.58mm×188.20mm×105.29mm	266.58mm×188.20mm×105.29mm	330mm×187.7mm×66.68mm

Products Images



EDG6N0-S T5X



EDG6N0-S T5X GMSL2



EDG6N0-S T5X NVR

Edge (AGX) Series



Feature

- Jetson AGX Orin™
- Fanless / Fan Both Design
- 2×PCIe Gen3×4
- 3×M.2 M Key / 1×M.2 E Key / 1×M.2 B Key
- CAN Bus / UART / I2C / SPI
- Optional 10G Ethernet (Fiber / Copper) Support

NVIDIA® Jetson AGX Orin™ 32GB	200 TOPS
NVIDIA® Jetson AGX Orin™ 64GB	275 TOPS

Model Name	VPP6N0-S AGX	VPP6N0-S AGX USB
NVIDIA Platform	Jetson AGX Orin™ 64GB / 32GB	Jetson AGX Orin™ 64GB / 32GB
AI Performance	275 / 200 TOPS	275 / 200 TOPS
Display	2×HDMI2.0 (4K60) 1×DP	2×HDMI2.0 (4K60) 1×DP (4K60)
Encode	2×4K60	2×4K60
Decode	1×8K30	1×8K30
Capture Interface	Support by PCI-e Capture Board www.yuan.com.tw/pcie 	8×USB
Expansion	PCIe 1×PCIe Gen3×4 Slot 1×PCIe Gen3×4 Slot M2 1×M2 2280 M Key (G4×4) 1×M2 2230 E Key (G4×1) 1×M2 3042 B Key (U3.2)	PCIe 1×PCIe Gen3×4 Slot M2 1×M2 2280 M Key (G4×4) 1×M2 2230 E Key (G4×1+U2) 1×M2 3042 B Key (U3.2)
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	266.58mm×188.20mm×105.29mm	266.58mm×188.20mm×105.29mm

Products Images



VPP6N0-S AGX



VPP6N0-S AGX USB

Edge (AGX) Series



Feature

- Jetson AGX Orin™
- Fanless / Fan Both Design
- 2×PCIe Gen3×4
- 3×M.2 M Key / 1×M.2 E Key / 1×M.2 B Key
- CAN Bus / UART / I2C / SPI
- Optional 10G Ethernet (Fiber / Copper) Support

NVIDIA® Jetson AGX Orin™ 32GB	200 TOPS
NVIDIA® Jetson AGX Orin™ 64GB	275 TOPS

Model Name	VPP6N0-S AGX GMSL	VPP6N0-S AGX PSE
NVIDIA Platform	Jetson AGX Orin™ 64GB / 32GB	Jetson AGX Orin™ 64GB / 32GB
AI Performance	275 / 200 TOPS	275 / 200 TOPS
Display	2×HDMI2.0 (4K60) 1×DP	2×HDMI2.0 (4K60) 1×DP
Encode	2×4K60	2×4K60
Decode	1×8K30	1×8K30
Capture Interface	8×GMSL2	8×PSE (8×1 Gbps)
Expansion	PCIe 1×PCIe Gen3×4 Slot M2 1×M2 2280 M Key (G4×4) 1×M2 2230 E Key (G4×1+U2) 1×M2 3042 B Key (U3.2)	PCIe 1×PCIe Gen3×4 Slot M2 1×M2 2280 M Key (G4×4) 1×M2 2230 E Key (G4×1+U2) 1×M2 3042 B Key (U3.2)
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	266.58mm×188.20mm×105.29mm	266.58mm×188.20mm×105.29mm

Products Images



VPP6N0-S AGX GMSL



VPP6N0-S AGX PSE

Add-On Capture Cards



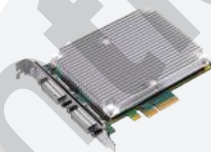
8CH USB3.0



4CH 4K60 HDMI2.0



4CH 4K60 12G-SDI



16CH HD30 TVI/AHD



8CH HD60 GMSL2



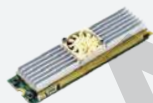
4CH 4K30 HDMI



4CH 4K30 6G-SDI



1CH 4K60 HDMI2.0



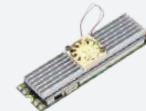
1CH 4K60 12G-SDI



4CH HD60 TVI/AHD



4CH HD60 HDMI



4CH HD60 SDI

Edge (NX) Series



Feature

- Jetson Orin™ NX Super (Orin™ Nano Super Compatible)
- Fanless Design
- 3×M.2 M Key
- 4×USB3.2
- CAN Bus / UART / I2C / SPI

NVIDIA® Jetson Orin™ NX Super 8GB	117 TOPS
NVIDIA® Jetson Orin™ NX Super 16GB	157 TOPS

Model Name	VPP6N0-S-W NX	VPP6N0-S-W NX GMSL	VPP6N0-S-W NX PSE
NVIDIA Platform	Jetson Orin™ NX Super 16GB / 8GB	Jetson Orin™ NX Super 16GB / 8GB	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	157 / 117 TOPS	157 / 117 TOPS	157 / 117 TOPS
Display	2×HDMI2.0 (4K60)	2×HDMI2.0 (4K60)	2×HDMI2.0 (4K60)
Encode	1×4K60	1×4K60	1×4K60
Decode	1×8K30	1×8K30	1×8K30
Capture Interface	Support by M.2 Capture Board www.yuan.com.tw/m2	8×GMSL2	4×PSE (4×1 Gbps)
Expansion	M2 1×M2 2280 / 3080 M Key (G4×4) 1×M2 2280 M Key (G4×2) 1×M2 2280 M Key (G4×1)	M2 1×M2 2280 M Key (G4×2) 1×M2 2280 M Key (G4×1)	M2 1×M2 2280 M Key (G4×2) 1×M2 2280 M Key (G4×1)
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	252.5mm×144mm×76.5mm	252.5mm×144mm×76.5mm	252.5mm×144mm×76.5mm

Products Images



VPP6N0-S-W NX



VPP6N0-S-W NX GMSL



VPP6N0-S-W NX PSE

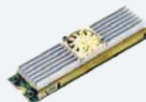
Add-On Capture Cards



1CH 8K60 HDMI2.1



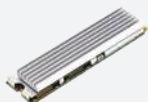
1CH 4K60 HDMI2.0



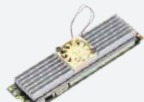
1CH 4K60 12G-SDI



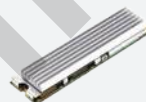
4CH HD60 TVI/AHD



4CH HD60 HDMI



4CH HD60 SDI



2CH HD60 SDI+HDMI



1CH HD60 HDMI/DVI/VGA

About Arc

The Arc series is a compact, high-performance edge AI platform purpose-built for robotics. Powered by NVIDIA® Jetson™ Orin NX, AGX and Thor™ modules, Arc integrates advanced AI computing with built-in multi-axis IMU sensors to provide real-time awareness of motion, orientation, and balance—critical for dynamic robotic movement.

Arc is uniquely optimized for humanoid robots, which require precise sensor fusion, low-latency control loops, and modular hardware integration within compact mechanical constraints. With support for LiDAR, depth cameras, and ultrasonic sensors, along with a customizable I/O daughterboard slot, Arc enables tight coupling of perception, decision-making, and actuation. Its minimal footprint—comparable to native Jetson modules—allows seamless integration into space- and weight-sensitive robotic frames.

While ideal for humanoids, Arc also supports mobile platforms such as AGVs, UAVs, and AMRs, delivering real-time intelligence across diverse robotic scenarios.



Compact Design, Uncompromised Performance



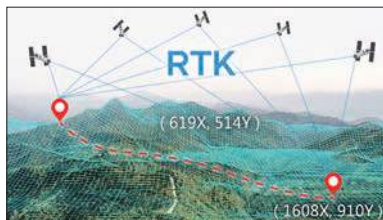
The Heart of Humanoid Edge Intelligence



Comprehensive Sensor Fusion Support



9-Axis Motion Intelligence for Dynamic Balance



Precise Positioning



Extremely Thin and Light

Arc Series



Feature

- Jetson THOR™ / Jetson AGX Orin™ / Jetson Orin™ NX Super
 - 9-Axis IMU
 - Various I/O Daughter Board
 - 1×1Gb RJ45 Port, 2×USB3.2 Gen2 Type-C
 - CAN Bus / I2C / GPIO / UART / SPI
- NVIDIA® Jetson Orin™ NX Super 16GB 157 TOPS
- NVIDIA® Jetson AGX Orin™ 64GB 275 TOPS
- NVIDIA® Jetson Thor™ 128GB 2070 TFLOPS

Model Name	ARC6N0 T5X	ARC6N0 OAX	ARC6N0 ONX
NVIDIA Platform	Jetson Thor™ 128GB / 64GB	Jetson AGX Orin™ 64GB / 32GB	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	2070 / 1200 FP4 TFLOPs	275 / 200 TOPS	157 / 117 TOPS
Display	1×HDMI2.0 (4K60)	1×HDMI2.0 (4K60)	1×mini HDMI2.0 (4K60)
Encode	6×4K60	1×4K60	1×4K60
Decode	4×8K30	1×8K30	1×8K30
Expansion	M2 1×M2 2280 M Key (G4×2) 1×M2 2230 E Key (G4×1+U2) 1×M2 3042 B Key (U3.2)	M2 M.2 2230 M Key PCIe (G4×4) M.2 2230 E Key PCIe (G4×1+U2)	M2 M.2 2230 M Key PCIe (G4×2) M.2 2230 E Key PCIe (G4×1+U2) M.2 2230 B Key PCIe (U3) M.2 2230 M Key PCIe (G4×4)
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	100mm×130mm	107mm×92mm	90mm×55mm

Products Images



ARC6N0 T5X



ARC6N0 OAX



ARC6N0 ONX

About Air

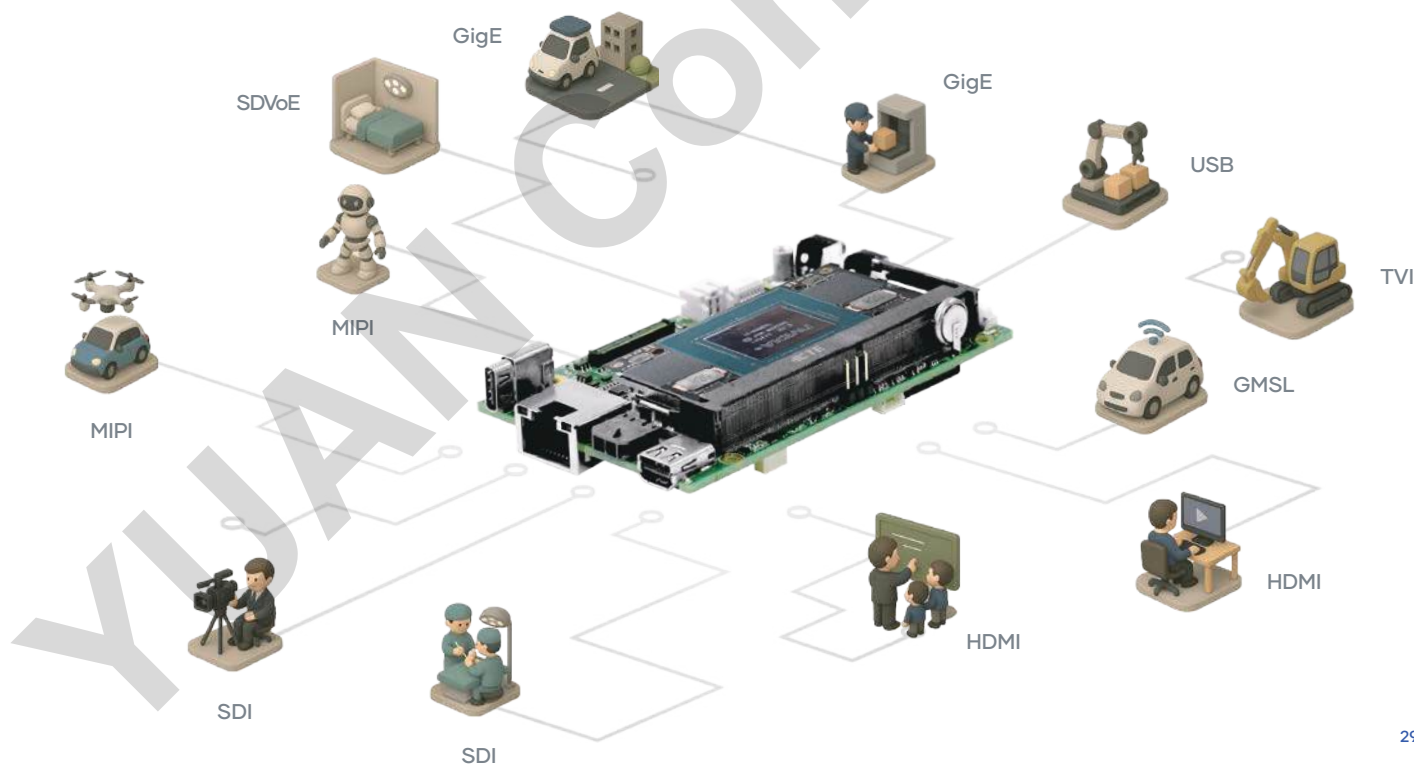


NVIDIA Air Products Launch Slim, Powerful, Visually Brilliant!

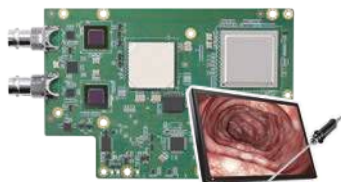


The Air series features the NVIDIA® Jetson Orin™ NX/Nano Super module, delivering up to 157/67 TOPS of AI video processing performance. Its dual-board design supports ultra-thin form factors and allows for flexible I/O expansion. YUAN's industrial capture cards pair perfectly with the Jetson Orin™ platform, making integration simple and efficient.

Compact, powerful, and adaptable, the Air series unlocks new possibilities in edge AI.



Air Series – I/O Daughter Boards



AIR6N0-C-DB NX TRX 750N101 12G-SDI
(Input & Output with Overlay)



AIR6N0-C-DB NX 12G-SDI



AIR6N0-C-DB NX 3G-SDI



AIR6N0-C-DB NX 12G-SDI QL



AIR6N0-C-DB NX HDMI2.1



AIR6N0-C-DB NX HDMI2.0



AIR6N0-C-DB NX 4xHDMI



AIR6N0-C-DB NX SDVoE-C



AIR6N0-C-DB NX SDVoE-FM



AIR6N0-C-DB NX 4xGMSL2
(PCI-e)



AIR6N0-C-DB NX 4xGMSL2
(MIPI)



AIR6N0-C-DB NX-440-8GMSL2
(MIPI)



AIR6N0-C-DB NX 4xTVI



AIR6N0-C-DB NX 8xTVI



AIR6N0-C-DB NX 4xUSB3.2



AIR6N0-C-DB NX 2xGIGE

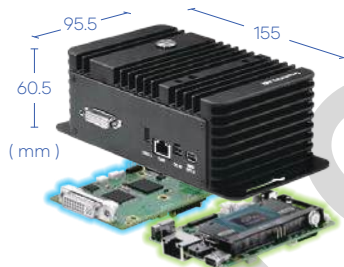
Air Series - One Core, Multiple Designs

The AIR series integrates NVIDIA AI computing with professional video capture modules, offering versatile form factors to address diverse installation and operational needs.



Vertical Stack : Compact Dual-Fan Cooling

A vertical stack design combines NVIDIA computing and video capture modules into an ultra-compact structure. Dual integrated fans efficiently cool both modules, ideal for limited spaces and low-dust environments.



Side-by-Side : Rugged Fanless Cooling

The rugged side-by-side design integrates NVIDIA computing and video capture modules, featuring copper heat pipes and extensive fanless heat sinks. It provides silent, reliable cooling for industrial and wide-temperature applications, with front LED indicators for easy system status checks.



1U Rackmount : Professional Video Streaming

Designed specifically for professional video streaming and encoding, this 1U rackmount chassis includes front-panel Tally indicators to clearly signal camera operation status. Optional 4K60 12G-SDI outputs enhance professional video production capabilities.

Air Series



Feature

- Jetson Orin™ NX Super (Orin™ Nano Super Compatible)
- Business Card Size Carrier Board
- Fanless / Fan Both Design
- Rich Combination of Video I/O DBs
- 1×M.2 M Key / 1×M.2 E Key
- Best Choice Golden Award on 2024 Computex

NVIDIA® Jetson Orin™ NX Super 8GB

117 TOPS

NVIDIA® Jetson Orin™ NX Super 16GB

157 TOPS

Model Name	AIR6N0-C NX	AIR6N0-C-W NX	AIR6N0-C TRX NX
NVIDIA Platform	Jetson Orin™ NX Super 16GB / 8GB	Jetson Orin™ NX Super 16GB / 8GB	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	157 / 117 TOPS	157 / 117 TOPS	157 / 117 TOPS
Display	1×Mini DP1.4 (4K60)	1×Mini DP1.4 (4K60)	1×HDMI2.0 (4K60) 1×12G-SDI (Optional)
Encode	1×4K60	1×4K60	1×4K60
Decode	1×8K30	1×8K30	1×8K30
Capture Interface	Support by I/O Daughter Board (Page.30) www.yuan.com.tw/air	Support by I/O Daughter Board (Page.30) www.yuan.com.tw/air	Support by I/O Daughter Board (Page.30) www.yuan.com.tw/air
Expansion Slot	M2 1×M2 2230 M Key (G4×2) 1×M2 2230 E Key (G4×1)	M2 1×M2 2230 M Key (G4×2) 1×M2 2230 E Key (G4×1)	M2 1×M2 2230 M Key (G4×2) 1×M2 2230 M Key (G4×1)
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	94.4 mm × 66 mm × 69.8mm	155mm × 95.5mm × 60.5mm	211.2mm × 153.7mm × 44.5mm

Products Images



AIR6N0-C NX



AIR6N0-C-W NX

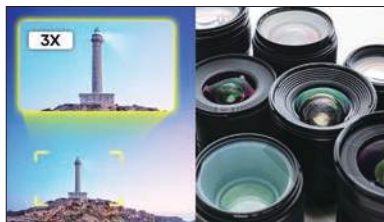


AIR6N0-C TRX NX

About Eye



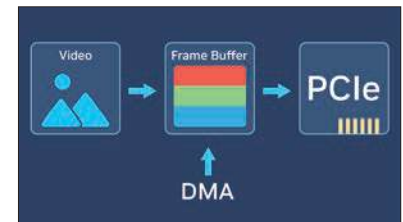
Powered by the 157 TOPS performance of the NVIDIA® Jetson Orin™ NX Super, the Eye Series delivers specialized edge AI solutions for two distinct frontiers. The Eye-S excels in smart city applications, featuring a rugged IP66 design with a Sony IMX678 sensor and 3x optical zoom to power 40+ built-in AI models for comprehensive traffic and behavior analysis. For industrial environments, the Eye-I offers a robust all-in-one architecture with flexible support for C/CS-Mount lenses and Sony STARVIS 2 sensors; it utilizes the QDEEP AI engine and 4K60 RGB444 PCIe output to ensure the precise color capture and real-time defect detection essential for advanced machine vision.



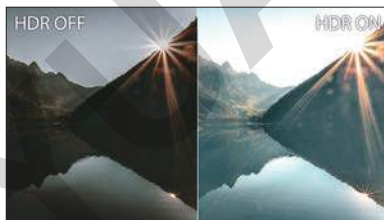
Auto Focus & Iris / C-Mount



Built-in Sony STARVIS-2 Sensor



High-Bandwidth DMA PCIe Design for RGB 4:4:4



Hardware ISP with HDR Support



Built-in ISP Tuning Tool



All-in-One Compact Design

Eye-S Series



Feature

- Jetson Orin™ NX Super
- Up to 157 TOPS AI performance, supports multiple AI models and Generative AI
- Hardware ISP Design without CPU/GPU Loading
- Lens support auto-focus and auto-IRIS
- DMA PCIe Design : High-Bandwidth for RGB 4:4:4 Quality Capture
- IP66 waterproof protection for reliable outdoor operation (-20°C to 50°C)

NVIDIA® Jetson Orin™ NX Super 8GB	117 TOPS
NVIDIA® Jetson Orin™ NX Super 16GB	157 TOPS

Model Name	EYE6N0-S678 ONX
NVIDIA Platform	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	157 / 117 TOPS
Video Encode	1×4K60 (Orin NX) + 1×4K60 (ISP)
Focal Length	10.2mm (W) ~ 29.5mm (T)
Sensor Model / Size	Sony IMX678 / CMOS 1/1.8"
Exposure Mode	Rolling Shutter
Storage	Supports External NVMe
Display Interface	1×HDMI2.0
Ethernet	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client
Wireless (Option)	4G / 5G / Wi-Fi
USB	1×USB3.2 Gen2 (Type-C)
Dimensions	305.1mm×124.5mm×115.5mm

Products Images



EYE6N0-S678 ONX

Eye-I Series



Feature

- Jetson Orin™ NX Super
- Adopting Sony STARVIS 2 Sensor
- Hardware ISP Design without CPU/GPU Loading
- HDR (High Dynamic Range) Support
- DMA PCIe Design : High-Bandwidth for RGB 4:4:4 Quality Capture
- C/CS-Mount design enables flexible lens selection for professional applications

NVIDIA® Jetson Orin™ NX Super 8GB	117 TOPS
NVIDIA® Jetson Orin™ NX Super 16GB	157 TOPS

Model Name	EYE6N0-I678 ONX
NVIDIA Platform	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	157 / 117 TOPS
Video Encode	1×4K60 (Orin NX) + 1×4K60 (ISP)
Focal Length	User Replaceable (Depending on Selected C/CS Mount Lens)
Sensor Model / Size	Sony IMX678 / CMOS 1/1.8"
Exposure Mode	Rolling Shutter
Storage	Supports External NVMe
Display Interface	1×HDMI2.0
Ethernet	M12 1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client
Wireless (Option)	Wi-Fi
USB	1×USB3.2 Gen2 (Type-C)
Dimensions	80.0mm×63.0mm×135.0mm

Products Images



EYE6N0-I678 ONX

About Pixel



Engineered for the demands of modern clinical care, the Pixel Series brings powerful edge AI right to the frontlines. Its compact, all-in-one form factor with a built-in 10-inch touchscreen streamlines setup by eliminating external displays and bulky compute units. From operating rooms to ICUs and procedure suites, Pixel fits effortlessly into space-constrained environments.

With support for multi-view display and real-time AI-assisted analysis, Pixel transforms vital signs monitoring, instrument tracking, and anomaly detection into intelligent, actionable insights. It equips healthcare teams with the clarity and speed needed to make life-critical decisions—exactly when and where it matters most.



Intuitive Built-In 10" Touchscreen



Space-Limited Clinical Environments Designed



Customized Carrier Board



36 Optional SDVoE Enables 4K60 AV over IP



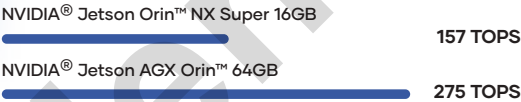
IEC 60601-1 Medical-Grade Compliance

Pixel Series



Feature

- Jetson AGX Orin™ / Jetson Orin™ NX Super
- 10" Touch Screen + 1×HDMI2.0
- Medical Grade IEC 60601-1
- Rich Combination of Video I/O DBs
- 2×USB3.2 / 1×USB2.0 / 1×SD Card



Model Name	Pixel AGX	Pixel NX
NVIDIA Platform	Jetson AGX Orin™ 64GB / 32GB	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	275 / 200 TOPS	157 / 117 TOPS
Display	10" Touch Screen 1×HDMI2.0 (4K60)	10" Touch Screen 1×HDMI2.0 (4K60)
Encode	2×4K60	1×4K60
Decode	1×8K30	1×8K30
Capture Interface	Support by I/O Daughter Board (Page.30) www.yuan.com.tw/air	Support by I/O Daughter Board (Page.30) www.yuan.com.tw/air
Expansion	M2 1×M.2 2280 M Key PCIe (G4×4) 1×M.2 2280 M Key PCIe (G4×4)	M2 1×M.2 2280 M Key PCIe (G4×2) 1×M.2 2280 M Key PCIe (G4×1)
Dimensions	256.4mm×200mm×178.37mm	256.4mm×200mm×178.37mm

Products Images



Pixel AGX



Pixel NX



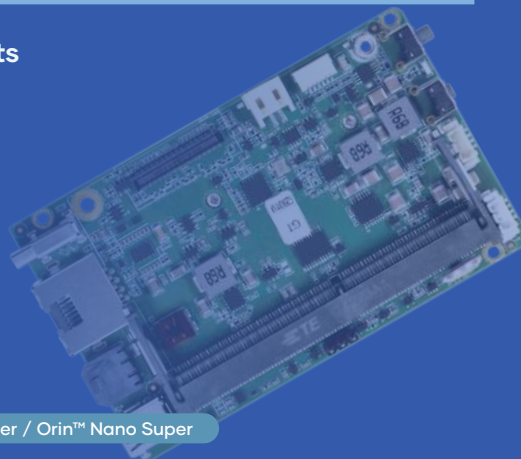
Carrier Boards for NVIDIA® Jetson™

Designed for Different Edge AI Deployments

Various Form Factors

Diverse I/O Connectivity Options

Compatible with Jetson IGX Orin™ / AGX Orin™ / Orin™ NX Super / Orin™ Nano Super



Carrier Boards - Near Series

NEAR6N0-MB T7X

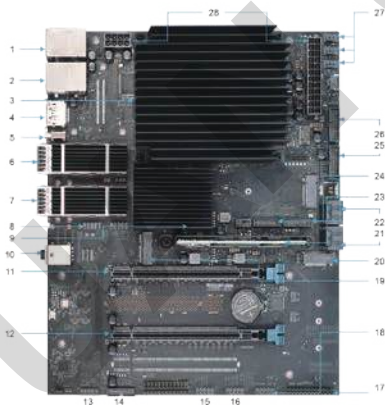
Provides 5581 TFLOPS (FP4-Sparse) of AI Computing

Feature

- Powered by NVIDIA® IGX Thor™ and NVIDIA® RTX PRO 6000 Blackwell
- Jetson T5000 Motherboard
- Medical Grade IEC 60601-1
- 2×100Gb QSFP28 Port, 2×1Gb RJ45 Port
- 1×PCIe Gen5×8, 4×USB3.2 Gen2 Type-A, 1×USB3.2 Gen2 Type-C



Product Name	NEAR6N0-MB T7X
CPU	NVIDIA IGX Thor™ 14-Core Arm® Neoverse V3AE 64-Bit CPU 1MB L2 Cache per core 16MB Shared System L3 Cache
GPU	NVIDIA IGX Thor™ 2560-Core NVIDIA Blackwell Architecture GPU with 5th GEN Tensor cores Multi Instance GPU with 10 TPCs NVIDIA RTX PRO 6000 Blackwell 96 GB GDDR7 Memory, 1.8 TB/s Memory Bandwidth 24064-Core NVIDIA Blackwell Architecture GPU with 5th GEN Tensor cores Multi Instance GPU with 10 TPCs
AI Performance	5581 TFLOPS (FP4-Sparse)
System Memory	128GB LPDDR5X
Dimensions	243.84mm×198.98mm



1. RJ45, 2×USB3.2 Gen2 Type-A
2. RJ45, 2×USB3.2 Gen2 Type-A
3. IGX Module Connector
4. DisplayPort Output
5. USB3.2 Gen2 Type-C
6. QSFP (200Gb)
7. QSFP (200Gb)
8. COMPort
9. COMPort
10. MIC In, Line Out
11. PCIe Gen5×16 Slot (With 8 PCIe Lanes)
12. PCIe Gen4×16 Slot (With 16 PCIe Lanes)
13. Audio Pin Header
14. GPIO Pin Header
15. COMPort
16. COMPort
17. LPT Port Pin Header
18. Front Panel, Power Button Pin Header
19. M2 2230 E Key (USB2.0/PCIe Gen2×1)
20. M2 2280 M Key (PCIe Gen4×4)
21. 2×SATA Port
22. 2×SATA Port
23. BMC Slot
24. CAN Bus Header
25. 2×USB3.2 Gen2
26. 2×USB3.2 Gen2
27. System Fan Connector
28. ATX Power Connector

Carrier Boards - Near Series

VPP6N0-MB IGX 700

Provide 1705 TOPS of AI Computing

Feature

- Powered by NVIDIA® IGX Orin™ and NVIDIA® RTX 6000 Ada
- NVIDIA® IGX Orin™ Motherboard
- Medical Grade IEC 60601-1
- 2×100Gb QSFP28 Port, 2×1Gb RJ45 Port
- 1×PCIe Gen5×8, 8×USB3.2 Gen2



Product Name **VPP6N0-MB IGX 700**

CPU NVIDIA IGX Orin™
12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3

GPU NVIDIA IGX Orin™
2048-Core NVIDIA Ampere Architecture
GPU with 64 Tensor Cores

NVIDIA RTX 6000Ada
48 GB GDDR6 Memory, 960 GB/s Memory Bandwidth
18176-Core NVIDIA Ampere Architecture
GPU with 568 Tensor Cores

AI Performance 1705 TOPS

System Memory 64GB LPDDR6

Dimensions 238.84mm×198.98mm



1. ATX Power Connector
2. ATX Power Connector
3. 16 Lane MIPI, 3×I2C, SPI
4. 2×RJ45, 4×USB3.2 Gen2 Type-A
5. DisplayPort Output
6. USB3.2 Gen2 Type-C
7. QSFP
8. COM Port
9. M.2 2230 E Key (USB2.0/PCIe Gen2×1)
10. MIC In, Line Out
11. PCIe Gen 5×16 Slot (With 8 PCIe Lanes)
12. Audio Pin Header
13. GPIO Pin Header
14. Com Port
15. Front Panel Power Button Pin Header
16. LPT Port Pin Header
17. BMC Slot
18. M.2 2280 M Key (PCIe Gen4×4)
19. 4×SATA Port
20. Can Bus Header
21. 4×USB3.2 Gen 2
22. System Fan Connector

Carrier Boards - Edge (Thor) Series

EDG6N0-MB T5X

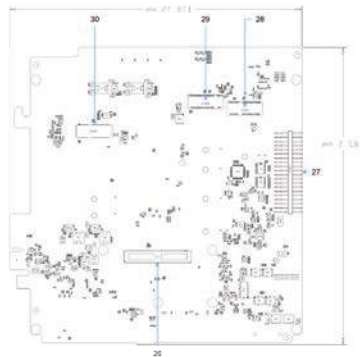
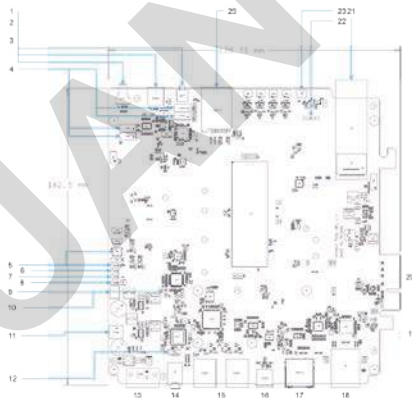
Highly Integrated AI Server, Provide 2070 TFLOPS (FP4-Sparse) and Expandability

Feature

- Powered by NVIDIA® Jetson T5000™ / Jetson T4000™, up to 2070/1200 FP4 TFLOPS
- 1×QSFP28
- 1×M.2 M Key / 1×M.2 E Key / 1×M.2 B Key
- 4×USB3.2 Gen2 Type-A, 2×USB3.2 Gen2 Type-C
- 1×HDMI2.0, 1×DP1.4
- UART / I2C / SPI, and CAN Bus (T5000 Only)



Product Name	EDG6N0-MB T5X
CPU	NVIDIA Jetson Thor™ T4000 64GB 12-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache NVIDIA Jetson Thor™ T5000 128GB 14-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache
GPU	NVIDIA Jetson Thor™ T4000 64GB 1536-Core NVIDIA Blackwell Architecture GPU with 64 Tensor Cores NVIDIA Jetson Thor™ T5000 128GB 2560-Core NVIDIA Blackwell Architecture GPU with 96 Tensor Cores
AI Performance	2070 / 1200 FP4 TFLOPS
System Memory	128 / 64GB LPDDR5X
Dimensions	179.75mm×181.5mm



1. Recovery Button
2. USB3.2 Gen2 (10G)
3. Power Button
4. CPU Fan, MCU Fan
5. OOB Reset
6. OOB SW
7. OOB Power On/Off Detection
8. OOB SW
9. Heater
10. Auto Power
11. DC Out
12. Line In/Out
13. DC In
14. 3.5mm Line In/Out audio Jack
15. 4 × USB3.2 Gen2 Type-A (10G)
16. USB3.2 Gen2 Type-C (10G)
17. HDMI2.0 / DP Out
18. Ethernet
19. MIPI Power Header
20. PCIe Gen5×4 (Gold Finger)
21. QSFP28
22. Battery
23. RTC Battery Connector
24. CAN1×4
25. Mini SIM Card Slot
26. MIPI Expansion Slot
27. CANBus / UART / I2C / GPIO / SPI
28. 2230 M2 E Key Slot
29. 2280 M2 M Key Slot
30. 2242/3042/3052 M2 B Key Slot

Carrier Boards - Edge (AGX) Series

VPP6N0-MB AGX

Highly Integrated AI Server, Provide 275 TOPS and Expandability

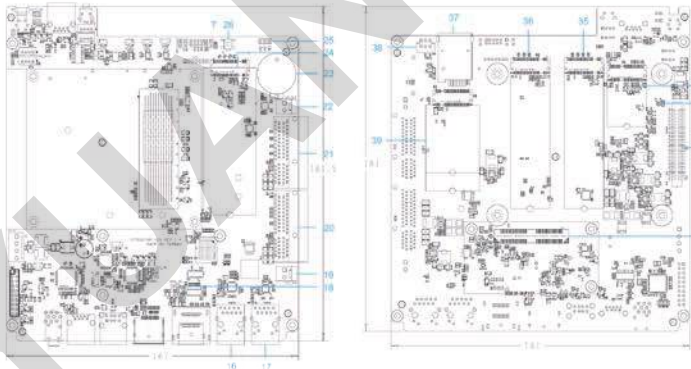
Feature

- Powered by NVIDIA® Jetson AGX Orin™
- 2×PCIe Gen3×4
- 3×M.2 M Key / 1×M.2 E Key / 1×M.2 B Key
- CAN Bus / UART / I2C / SPI
- Optional 10G Ethernet (Fiber / Copper) Support



Product Name **VPP6N0-MB AGX**

CPU	NVIDIA Jetson AGX Orin™ 32GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
	NVIDIA Jetson AGX Orin™ 64GB 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3
GPU	NVIDIA Jetson AGX Orin™ 32GB 1792-Core NVIDIA Ampere Architecture GPU with 56 Tensor Cores
	NVIDIA Jetson AGX Orin™ 64GB 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores
AI Performance	275 / 200 TOPS
System Memory	64 / 32GB LPDDR5
Dimensions	181.5mm×167mm



1. Recovery Key
2. USB3.2 Gen1 (5G)
3. Auto Power
4. Power Button
5. Reserved
6. CPU Fan
7. Module Connector
8. 4 Pin Wafer
9. MIPI Power Header
10. 2×USB3.2 Gen1
11. 3.5mm Line In/Out audio Jack
12. USB3.2 Gen1 (5G)
13. 2×USB2.0
14. DP1.4 Out
15. HDMI2.0 Out×2
16. Ethernet 2 (10G Fiber / Copper)
17. Ethernet 1
18. Video Switch
19. Power O/P 12V
20. PCIe Gen3×4 (P2)
21. PCIe Gen3×4 (P1)
22. Power O/P 12V
23. Battery
24. M.2 3080 M Key Slot (PCIe Gen4×4)
25. UART3 (Debug)
26. System Reset Button
27. OOB Reset
28. OOB 5V
29. OOB Power On/Off Detection
30. CAN0
31. CAN0
32. RS485
33. RS232
34. MCU Fan
35. M.2 2280 M Key (PCIe Gen4×4)
36. M.2 2280 M Key (PCIe Gen4×4)
37. Mini SIM Card Slot
38. UART3 (Debug)
39. M.2 2242/3042/3052 B Key (USB3.2 Gen1 (5G))
40. MIPI Expansion Slot
41. CANBus / UART / I2C / GPIO / SPI
42. Thermal Sensor
43. M.2 2230 E Key (PCIe Gen4×1 / USB2.0 / SDIO)

Carrier Boards - Edge (NX / Nano) Series

VPP6N0-S-MB NX / Nano

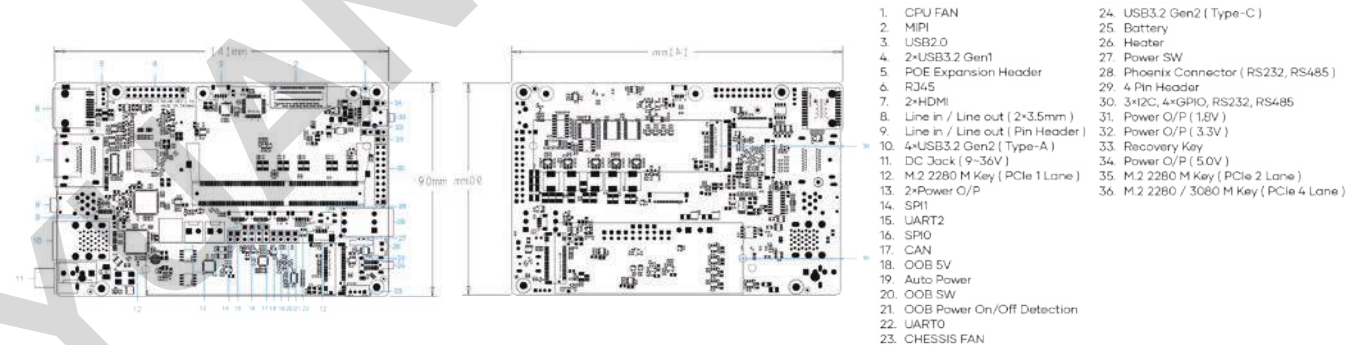
Compact Edge AI Platform

Feature

- Powered by NVIDIA® Jetson Orin™ NX Super / NVIDIA® Jetson Orin™ Nano Super
- 3×M2 M Key, Gen 4×4 / Gen 4×2 / Gen 4×1
- 4×USB3.2 Gen2 Type-A, 1×USB3.2 Gen2 Type-C (Device Mode Support)
- RS232 / RS485
- I2C / GPIO / UART



Product Name	VPP6N0-S-MB NX	VPP6N0-S-MB NANO
CPU	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	NVIDIA Jetson Orin™ Nano 4GB Super 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ Nano 8GB Super 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	NVIDIA® Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores NVIDIA® Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	NVIDIA Jetson Orin™ Nano 4GB Super 512-Core NVIDIA Ampere Architecture GPU with 16 Tensor Cores NVIDIA Jetson Orin™ Nano 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores
AI Performance	157 / 117 TOPS	67 / 34 TOPS
System Memory	16 / 8GB LPDDR5	8 / 4GB LPDDR5
Dimensions	140mm×90mm	140mm×90mm



Carrier Boards – Arc (Thor) Series

ARC6N0-MB T5X+ARC6N0-DB T5X

Highly Integrated AI Server, Up to 2070 TFLOPS (FP4-Sparse) and Expandability

Feature

- Powered by NVIDIA® Jetson T5000™ / Jetson T4000™, up to 2070 / 1200 FP4 TFLOPS
- 3-axis Accelerometer, 3-axis Gyroscope and 3-axis Magnetometer
- 1×M.2 M Key / 1×M.2 E Key / 1×M.2 B Key
- Up to 5× USB3.2 Gen2 Type-C
- 1× 5GbE, 2x Custom High-speed Connectors for Expansion via Custom Cables
- I2C/ SPI/ GPIO/ UART/ PWM, and CAN Bus (T5000 Only)



Product Name **ARC6N0-MB T5X+ARC6N0-DB T5X**

CPU
NVIDIA Jetson Thor™ T4000 64GB
12-Core Arm® Neoverse V3AE 64-Bit CPU
1 MB L2 Cache per core
16 MB Shared System L3 Cache

NVIDIA Jetson Thor™ T5000 128GB
14-Core Arm® Neoverse V3AE 64-Bit CPU
1 MB L2 Cache per core
16 MB Shared System L3 Cache

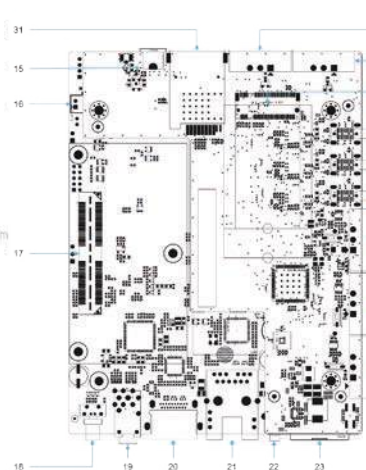
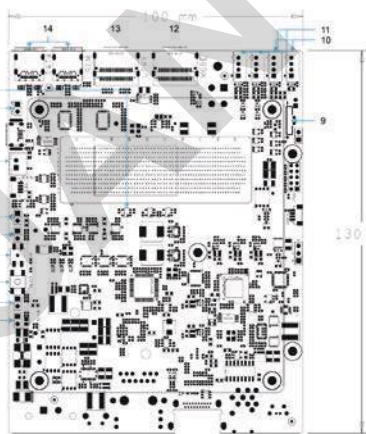
GPU
NVIDIA Jetson Thor™ T4000 64GB
1536-Core NVIDIA Blackwell Architecture
GPU with 64 Tensor Cores

NVIDIA Jetson Thor™ T5000 128GB
2560-Core NVIDIA Blackwell Architecture
GPU with 96 Tensor Cores

AI Performance 2070 / 1200 FP4 TFLOPS

System Memory 128 / 64GB LPDDR5X

Dimensions 100mm×130mm



1. Thermal Sensor
2. Auto Power
3. Heater
4. OOB 5V
5. OOB SW
6. DB Power
7. OOB Reset
8. OOB Power On/Off Detection
9. Battery
10. MCU Fan
11. CPU Fan
12. MCIO
13. MCIO
14. USB3.2 Gen2 (10G)
15. MCIO 12V
16. RTC Battery Connector
17. MIPI Expansion Slot
18. Power Button
19. 3.5mm Line In/Out audio Jack
20. HDMI
21. Ethernet
22. Recovery Button
23. DC In
24. CAN BUS3
25. CAN BUS2
26. CAN BUS1
27. 3×USB3.2 Gen2 Type C
28. M.2 3042/3052 B Key
29. RS485-1
30. RS485-2
31. SimCard Slot

Carrier Boards – Arc (AGX) Series

ARC6N0-MB OAX + ARC6N0-DB OAX

Highly Integrated AI Server, Provide 275 TOPS and Expandability

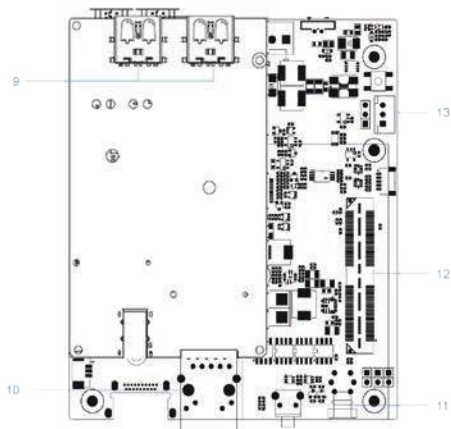
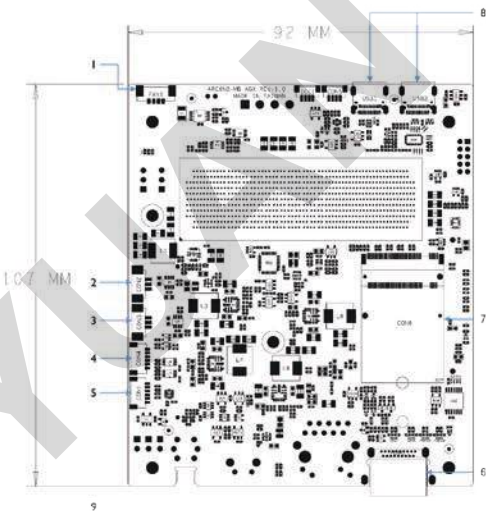
Feature

- Powered by NVIDIA® Jetson AGX Orin™ or NVIDIA® Jetson AGX Orin™ Industrial (NVIDIA® Jetson IGX Orin™ 500)
- 9-Axis IMU
- Various I/O Daughter Board
- 1x1Gb RJ45 Port, 2xUSB3.2 Gen2 Type-C, 2xUSB3.2 Gen2 Type-A
- CAN Bus / I2C / GPIO / UART / SPI



Product Name **ARC6N0-MB OAX + ARC6N0-DB OAX**

CPU	NVIDIA Jetson AGX Orin™ 32GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
	NVIDIA Jetson AGX Orin™ 64GB 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3
GPU	NVIDIA Jetson AGX Orin™ 32GB 1792-Core NVIDIA Ampere Architecture GPU with 56 Tensor Cores
	NVIDIA Jetson AGX Orin™ 64GB 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores
AI Performance	275 / 200 TOPS
System Memory	64 / 32GB LPDDR5
Dimensions	107mm×92mm



1. FAN
2. CAN BUS1
3. CAN BUS0
4. UART1
5. SPI1
6. HDMI2.0
7. M.2 2230 M Key
8. USB3.2 Gen2 Type C
9. 2xUSB3.2 Gen2 Type A
10. DCIn
11. RJ45
12. Recovery Button
13. Power Button

Carrier Boards – Arc (NX)Series

ARC6N0-MB ONX + ARC6N0-DB ONX

Business Card Size AI Edge, Provide 157 TOPS and Expandability

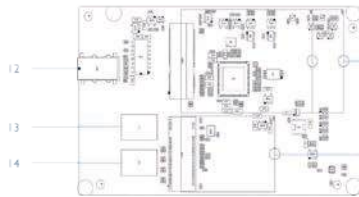
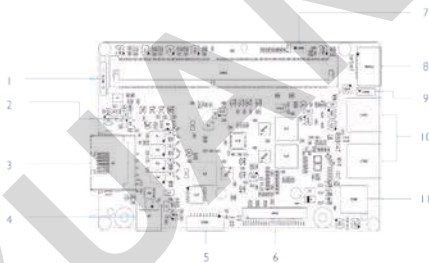
Feature

- Powered by NVIDIA® Jetson Orin™ NX Super
- 9-Axis IMU
- Business Card Size with Various I/O Daughter Board
- 1×1Gb RJ45 Port, 2×USB3.2 Gen2 Type-C
- CAN Bus / I2C / GPIO



Product Name **ARC6N0-MB ONX + ARC6N0-DB ONX**

CPU	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex® A78AE v8.2 64 Bit CPU 1.5MB L2 + 4MB L3
	NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex® A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	NNVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores
	NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores
AI Performance	157 / 117 TOPS
System Memory	16 / 8GB LPDDR5
Dimensions	90mm×55mm



1. Battery
2. Thermal Sensor
3. RJ45
4. Heater Connector
5. GPIO
6. MIPI
7. Force Recovery Header
8. Mini HDMI2.0
9. UART2 (Debug)
10. 2×USB3.2 Gen2 Type C
11. DC Pin Header
12. Line In
13. Left Speaker
14. Right Speaker
15. M.2 2230 M Key (PCIe Gen4×4)
16. M.2 3042 / 3052 B Key (USB3.0)

Carrier Boards - Air (NX / Nano) Series

AIR6N0-C-MB NX / Nano

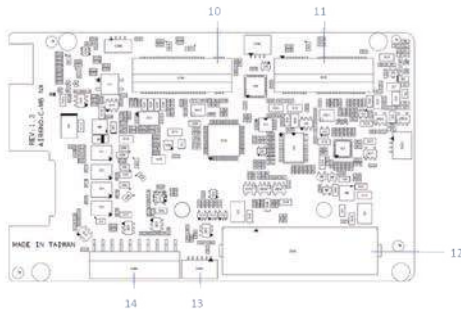
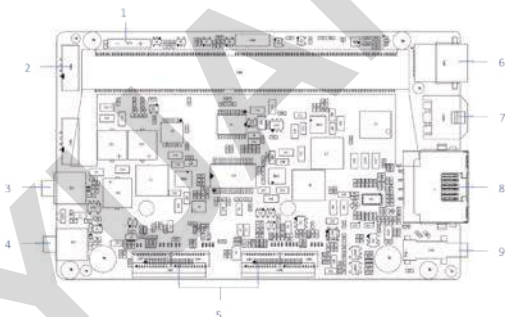
Business Card Size AI Edge Motherboard

Feature

- Powered by NVIDIA® Jetson Orin™ NX Super / NVIDIA® Jetson Orin™ Nano Super
- Business Card Size with Various I/O Daughter Board
- 2×M.2, Gen 4×2 M Key / Gen 4×1 E Key
- 1×USB3.2 Gen2 Type-C (Device Mode Support)
- 1×Mini DisplayPort Output



Product Name	AIR6N0-C-MB NX	AIR6N0-C-MB NANO
CPU	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex® A78AE v8.2 64 Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex® A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	NVIDIA Jetson Orin™ Nano 4GB Super 6-Core Arm® Cortex® A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ Nano 8GB Super 6-Core Arm® Cortex® A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3
GPU	NVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores	NVIDIA Jetson Orin™ Nano 4GB Super 512-Core NVIDIA Ampere Architecture GPU with 16 Tensor Cores NVIDIA Jetson Orin™ Nano 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores
AI Performance	157 / 117 TOPS	67 / 34 TOPS
System Memory	16 / 8GB LPDDR5	8 / 4GB LPDDR5
Dimensions	90mm×55mm	90mm×55mm



1. Battery
2. FAN
3. Recovery
4. Power
5. MIPI
6. Mini DisplayPort1.4
7. DC Pin Header (19V)
8. RJ45
9. USB3.2 Gen 2 Type-C
10. M.2 2230 M Key (PCIe Gen4×2)
11. M.2 2230 E Key (PCIe Gen4×1)
12. Custom Connector
13. 6 Pin Wafer
14. 10 Pin Header

Carrier Boards - Air (TRX) Series

AIR6N0-C-MB TRX NX

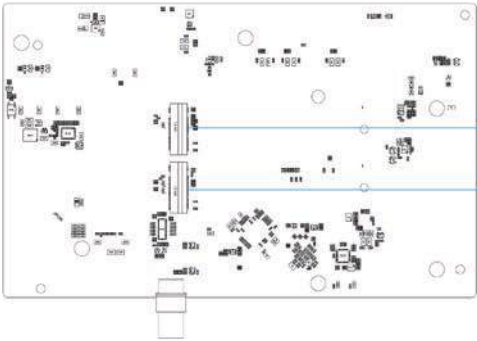
4K60 AV1 & NDI Transceiver with AI

Feature

- Powered by NVIDIA® Jetson Orin™ NX Super / NVIDIA® Jetson Orin™ Nano Super
- 4K60 Stream Transceiver
- Various I/O Daughter Board
- 2×M2 M Key, Gen 4×2 / Gen 4×1
- 1×12G-SDI Output



Product Name	AIR6N0-C-MB TRX NX
CPU	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3
GPU	NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 6MB L2 + 4MB L3
GPU	NVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores
AI Performance	157 / 117 TOPS
System Memory	16 / 8GB LPDDR5
Dimensions	203.6mmx126.1mm



1. DC In
2. CPU FAN
3. Power Switch Connector
4. MCU FAN
5. Reset to Default Button
6. USB3.2
7. Custom Connector
8. MCU FAN
9. UART2 (Debug 3.3V)
10. Power O/P (12V)
11. LED Connector
12. 4×GPIO, 3×I2C, 1×RS485, 1×RS232
13. HDMI2.0 Out
14. 12G-SDI Out
15. 2×USB2.0
16. Ethernet 1G (PoE++)
17. Force Recovery
18. Battery
19. LED Connector
20. M.2 2280 M Key (PCIe Gen4×2)
21. M.2 2280 M Key (PCIe Gen4×1)

Carrier Boards - Pixel (AGX) Series

PIX6N0-MB AGX

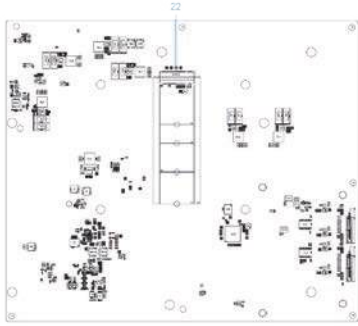
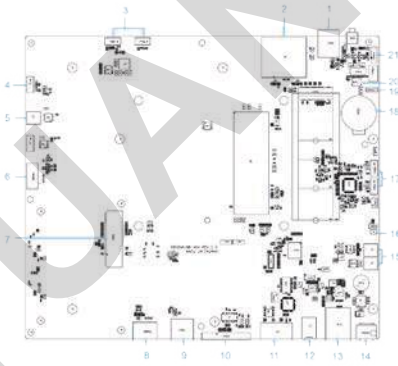
Medical-Grade AI Platform

Feature

- Powered by NVIDIA® Jetson AGX Orin™ or NVIDIA® Jetson AGX Orin™ Industrial (NVIDIA® Jetson IGX Orin™ 500)
- Medical Grade IEC 60601-1
- Various I/O Daughter Board
- 2×M2 M Key, Gen 4×4 / Gen 4×4
- 2×HDMI2.0 Output (1 Internal)



Product Name	PIX6N0-MB AGX
CPU	NVIDIA Jetson AGX Orin™ 32GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
	NVIDIA Jetson AGX Orin™ 64GB 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3
GPU	NVIDIA Jetson AGX Orin™ 32GB 1792-Core NVIDIA Ampere Architecture GPU with 56 Tensor Cores
	NVIDIA Jetson AGX Orin™ 64GB 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores
AI Performance	275 / 200 TOPS
System Memory	64 / 32GB LPDDR5
Dimensions	224.15mm×191.2mm



1. 2xUSB3.0
2. M.2 2280/3080 M Key (PCIe Gen4×4)
3. FAN
4. USB 2.0
5. Power O/P
6. HDMI
7. Custom Connector
8. HDMI2.0 Out
9. USB2.0
10. UART RS232
11. GPIO
12. LINE IN / LINE OUT
13. Ethernet 1G
14. DC IN
15. 2×Power O/P
16. Force Recovery
17. Fan
18. Battery CR2032
19. UART3 Debug (3.3V)
20. System Reset
21. Power button wafer
22. M.2 2280/3080 M Key (PCIe Gen4×4)

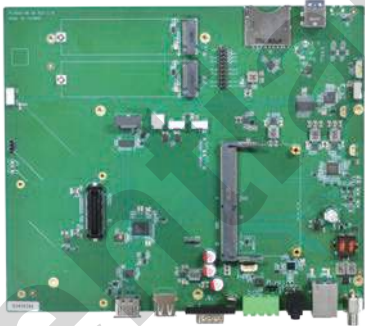
Carrier Boards - Pixel (NX) Series

PIX6N0-MB NX

Medical-Grade AI Platform

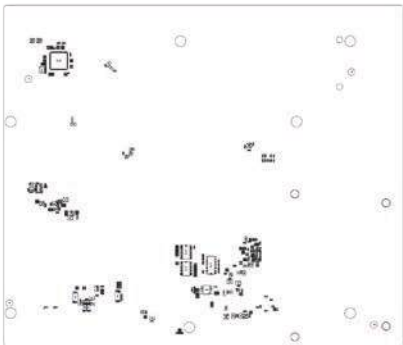
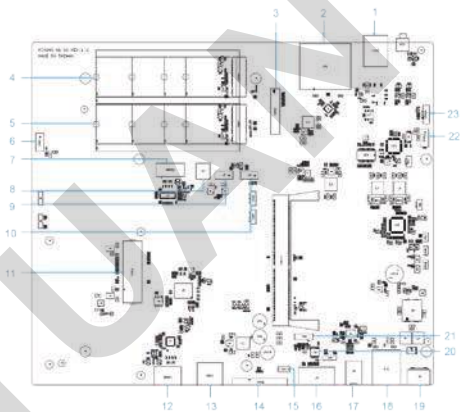
Feature

- Powered by NVIDIA® Jetson Orin™ NX Super
- Medical Grade IEC 60601-1
- Various I/O Daughter Board
- 2×M2 M Key, Gen 4×2 / Gen 4×1
- 2×HDMI2.0 Output (1 Internal)



Product Name **PIX6N0-MB NX**

CPU	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3
	NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	NVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores
	NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores
AI Performance	157 / 117 TOPS
System Memory	16 / 8GB LPDDR5
Dimensions	224.15mm×191.2mm



1. 2xUSB3.0
2. SD Card
3. GPIO, RS232, RS485, GPIO
4. M.2 2280 M Key (PCIe Gen4×1)
5. M.2 2280 M Key (PCIe Gen4×2)
6. FAN
7. Internal HDMI
8. Power O/P
9. DC Out
10. USB 2.0
11. Custom Connector
12. HDMI2.0 Out
13. USB2.0
14. UART RS232
15. Battery
16. GPIO
17. LINE IN / LINE OUT
18. Ethernet 1G
19. DC IN
20. UART2 (Debug)
21. FAN
22. FAN
23. Power Button Connector

Carrier Boards - Mini (NX / Nano) Series

MINI6N0-MB NX / Nano

Compact Edge AI Platform

Feature

- Powered by NVIDIA® Jetson Orin™ NX 16GB Super up to 157 TOPS
- Compact Size : 145mm×123mm×66mm
- 4×M.2, 8 Lanes MIPI CSI-2, and I2C / UART / GPIO / CAN Bus
- 2×USB3.2 Gen2, 2×USB2.0, 1×Nano SIM Card Slot
- 1×HDMI2.0



Product Name

MINI6N0-S-MB NX

MININ6N0-S-MB NANO

CPU

NVIDIA Jetson Orin™ NX 8GB Super
6-Core Arm® Cortex®-A78AE v8.2
64-Bit CPU 1.5MB L2 + 4MB L3

NVIDIA Jetson Orin™ Nano 4GB Super
6-Core Arm® Cortex®-A78AE v8.2
64-Bit CPU 1.5MB L2 + 4MB L3

GPU

NVIDIA Jetson Orin™ NX 16GB Super
8-Core Arm® Cortex®-A78AE v8.2
64-Bit CPU 2MB L2 + 4MB L3"

NVIDIA Jetson Orin™ Nano 8GB Super
6-Core Arm® Cortex®-A78AE v8.2
64-Bit CPU 2MB L2 + 4MB L3

NVIDIA Jetson Orin™ NX 8GB Super
1024-Core NVIDIA Ampere Architecture
GPU with 32 Tensor Cores

NVIDIA Jetson Orin™ Nano 4GB Super
512-Core NVIDIA Ampere Architecture
GPU with 16 Tensor Cores

NVIDIA Jetson Orin™ NX 16GB Super
1024-Core NVIDIA Ampere Architecture
GPU with 32 Tensor Cores

NVIDIA Jetson Orin™ Nano 8GB Super
1024-Core NVIDIA Ampere Architecture
GPU with 32 Tensor Cores

AI Performance

157 / 117 TOPS

67 / 34 TOPS

System Memory

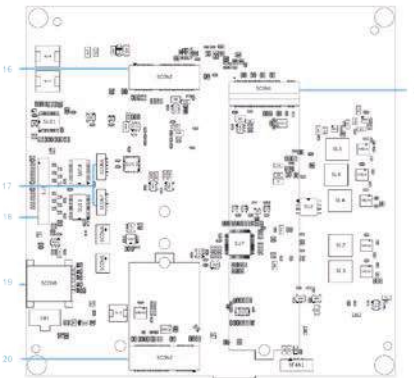
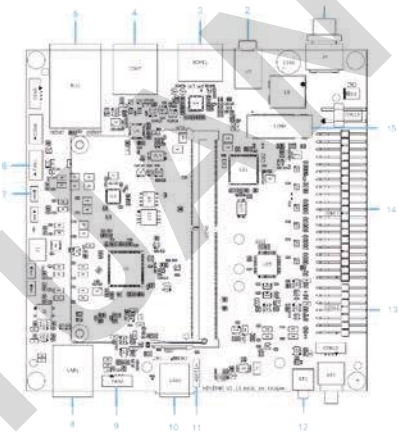
16 / 8GB LPDDR5

8 / 4GB LPDDR5

Dimensions

140mm×90mm

140mm×90mm



1. DC In
2. Line In/ Line Out
3. HDMI
4. 2x USB 2.0
5. 2x Ethernet 1G
6. CPU FAN
7. Power O/P
8. 2x USB 3.2 G2
9. Chassis FAN
10. USB 3.2 (OTG)
11. Battery CR2032
12. Recovery Button
13. CAN Bus/ UART
14. I2S/I2C/SPI/UART/GPIO
15. M.2 2280 M Key (PCIe G4×2)
16. M.2 3042/3052 B Key (USB 3.2 G2)
17. SPI
18. MIPI
19. Nano SIM Card Socket
20. M.2 2230 E Key (PCIe G4×1 + USB 2.0)
21. M.2 3080 M Key (PCIe G4×4)

Carrier Boards Comparison (I)

Model		
Product Name	NEAR6N0-MB T7X	VPP6N0-MB IGX 700
CPU	NVIDIA IGX Thor™ 14-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache	NVIDIA IGX Orin™ 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3
GPU	NVIDIA IGX Thor™ 2560-Core NVIDIA Blackwell Architecture GPU with 5th GEN Tensor cores Multi Instance GPU with 10 TPCs NVIDIA RTX PRO 6000 Blackwell 96 GB GDDR7 Memory, 1.8 TB/s Memory Bandwidth 24064-Core NVIDIA Blackwell Architecture GPU with 5th GEN Tensor cores Multi Instance GPU with 10 TPCs	NVIDIA IGX Orin™ 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores NVIDIA RTX 6000Ada 18176-Core NVIDIA Ampere Architecture GPU with 568 Tensor Cores 48 GB GDDR6 Memory 960 GB/s Memory Bandwidth
AI Performance	5581 TFLOPS (FP4-Sparse)	1705 TOPS
Display	4×DP1.4a (4K60)	4×DP1.4a (4K60)
System Memory	128GB LPDDR5X	64GB LPDDR6
Expansion	M.2 1×M.2 2230 E Key USB2.0/PCIe (G2×1) 1×M.2 2280 M Key PCIe (G5×2) PCIe 1×PCIe (G5×8)	M.2 1×M.2 2230 E Key USB2.0/PCIe (G2×1) 1×M.2 2280 M Key PCIe (G4×4) PCIe 1×PCIe (G5×8)
Dimensions	243.84mm×198.98mm	238.84mm×198.98mm

Carrier Boards Comparison (II)

Model			
Product Name	EDG6N0-MB T5X	VPP6N0-MB AGX	VPP6N0-S-MB NX
CPU	NVIDIA Jetson Thor™ T4000 64GB 12-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache NVIDIA Jetson Thor™ T5000 128GB 14-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache	NVIDIA Jetson AGX Orin™ 32GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3 NVIDIA Jetson AGX Orin™ 64GB 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3	NVIDIA Jetson Orin™ Nano 4GB Super 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ Nano 8GB Super 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	NVIDIA Jetson Thor™ T4000 64GB 1536-Core NVIDIA Blackwell Architecture GPU with 64 Tensor Cores NVIDIA Jetson Thor™ T5000 128GB 2560-Core NVIDIA Blackwell Architecture GPU with 96 Tensor Cores	NVIDIA Jetson AGX Orin™ 32GB 1792-Core NVIDIA Ampere Architecture GPU with 56 Tensor Cores NVIDIA Jetson AGX Orin™ 64GB 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores	NVIDIA® Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores NVIDIA® Jetson Orin™ NX 4GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores
AI Performance	2070 / 1200 FP4 TFLOPS	275 / 200 TOPS	157 / 117 TOPS
Display	1×HDMI2.0 (4K60) 1×DP1.4a (4K60)	2×HDMI2.0 (4K60) 1×DP (4K60)	2×HDMI2.0 (4K60)
System Memory	128 / 64GB LPDDR5X	64 / 32GB LPDDR5	16 / 8GB LPDDR5
Expansion	M.2 1×M.2 2230 E Key USB2.0/PCIe (G4×1) 1×M.2 2280 M Key PCIe (G5×2) 1×M.2 3042 B Key USB3.2 G2 (10G) PCIe 1×PCIe Gold Finger (G5×4)	M.2 1×M.2 2230 E Key PCIe (G4×1) 1×M.2 2280 M Key PCIe (G4×4) 1×M.2 3080 M Key PCIe (G4×4) 1×M.2 3042 B Key USB3.2 G2 (10G) PCIe 2×PCIe (G3×4)	M.2 1×M.2 2280 M Key PCIe (G4×1) 1×M.2 2280 M Key PCIe (G4×2) 1×M.2 2280/3080 M Key PCIe (G4×4)
Dimensions	179.75mm×181.5mm	181.5mm×167mm	140mm×90mm

Carrier Boards Comparison (III)

Model		
Product Name	ARC6N0 T5X-MB+ARC6N0 T5X-DB	ARC6N0-MB OAX + ARC6N0-DB OAX
CPU	NVIDIA Jetson T4000™ 64GB 12-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache NVIDIA Jetson T5000™ 128GB 14-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache	NVIDIA Jetson AGX Orin™ 32GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3 NVIDIA Jetson AGX Orin™ 64GB 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3
GPU	NVIDIA Jetson T4000™ 64GB 1536-Core NVIDIA Blackwell Architecture GPU with 64 Tensor Cores NVIDIA Jetson T5000™ 128GB 2560-Core NVIDIA Blackwell Architecture GPU with 96 Tensor Cores	NVIDIA Jetson AGX Orin™ 32GB 1792-Core NVIDIA Ampere Architecture GPU with 56 Tensor Cores NVIDIA Jetson AGX Orin™ 64GB 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores
AI Performance	2070 / 1200 FP4 TFLOPS	275 / 200 TOPS
Display	1×HDMI2.0 (4K60)	1×HDMI2.0 (4K60)
System Memory	128 / 64GB LPDDR5X	64 / 32GB LPDDR5
Expansion	Main Board 1×M.2 2230 E Key USB2.0/PCIe (G4×1) 1×M.2 2280 M Key PCIe (G5×2) 2x Custom High-speed connectors for external peripheral card (Up to PCIe Gen5x4 each) Daughter Board 1×M.2 2242/ 3042/ 3052 B Key USB3.2	M.2 M.2 2230 M Key PCIe (G4×4) M.2 2230 E Key PCIe (G4×1+U2)
Dimensions	100mm×130mm	107mm×92mm

Carrier Boards Comparison (IV)

Model			
Product Name	ARC6N0-MB ONX + ARC6N0-DB ONX	PIX6N0-MB AGX	PIX6N0-MB NX
CPU	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex® A78AE v8.2 64 Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex® A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	NVIDIA Jetson AGX Orin™ 32GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3 NVIDIA Jetson AGX Orin™ 64GB 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	NVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores	NVIDIA Jetson AGX Orin™ 32GB 1792-Core NVIDIA Ampere Architecture GPU with 56 Tensor Cores NVIDIA Jetson AGX Orin™ 64GB 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores	NVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores
AI Performance	157 / 117 TOPS	275 / 200 TOPS	157 / 117 TOPS
Display	1×Mini HDMI2.0 (4K60)	2×HDMI2.0 (4K60) 1×HDMI2.0 (Internal) (4K60)	2×HDMI2.0 (4K60) 1×HDMI2.0 (Internal) (4K60)
System Memory	16 / 8GB LPDDR5	64 / 32GB LPDDR5	16 / 8GB LPDDR5
Expansion	M.2 M.2 2230 M Key PCIe (G4×2) M.2 2230 E Key PCIe (G4×1+U2) M.2 3052/3042 B Key PCIe (U3) M.2 2230 M Key PCIe (G4×4)	M2 1×M.2 2280 M Key PCIe (G4×4) 1×M.2 2280 M Key PCIe (G4×4)	M2 1×M.2 2280 M Key PCIe (G4×1) 1×M.2 2280 M Key PCIe (G4×2)
Dimensions	90mm×55mm	224.15mm×191.2mm	224.15mm×191.2mm

Carrier Boards Comparison (V)

Model			
Product Name	MINI6N0-S-MB NX	AIR6N0-C-MB NX	AIR6N0-C-MB NX TRX
CPU	NVIDIA Jetson Orin™ Nano 4GB Super 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ Nano 8GB Super 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex® A78AE v8.2 64 Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex® A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex® A78AE v8.2 64 Bit CPU 1.5MB L2 + 4MB L3 NVIDIA Jetson Orin™ NX 16GB Super 8-Core Arm® Cortex® A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	NVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores NVIDIA Jetson Orin™ NX 4GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	NVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores	NNVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores
AI Performance	157 / 117 TOPS	157 / 117 TOPS	157 / 117 TOPS
Display	1×HDMI2.0 (4K60)	1×Mini DP1.4 (4K60)	1×HDMI2.0 (4K60) 1×12G-SDI (Optional)
System Memory	16 / 8GB LPDDR5	16 / 8GB LPDDR5	16 / 8GB LPDDR5
Expansion	M2 1×M.2 2280 M Key PCIe (G4×2) 1×M.2 2280/3080 M Key PCIe (G4×4) 1×M.2 2230 E Key PCIe (G4×1+USB2.0) 1×M.2 3042/3052 B Key USB3.2 G2 (10G)	M.2 1×M.2 2230 E Key PCIe (G4×1) 1×M.2 2230 M Key PCIe (G4×2)	M.2 1×M.2 2280 M Key PCIe (G4×1) 1×M.2 2280 M Key PCIe (G4×2)
Dimensions	115mm×115mm	90mm×55mm	203.6mm×126.1mm

NVIDIA Jetson Family

Jetson Orin™ Super Mode

Jetson Orin™ NX
16GB Super
157 TOPS



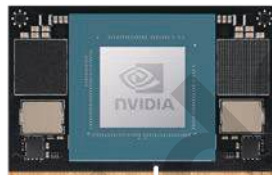
10W | 15W | 25W | 40W

Jetson Orin™ NX
8GB Super
117 TOPS



10W | 15W | 25W | 40W

Jetson Orin™ Nano
8GB Super
67 TOPS



7W | 15W | 25W

Jetson Orin™ Nano
4GB Super
34 TOPS



7W | 10W | 25W

IGX Thor™ T7000
128GB
5581 FP4 TFLOPS



Up to 430W

IGX Thor™ T5000
128GB
2070 FP4 TFLOPS



40W~130W

IGX Orin™ 700
64GB
1705 TOPS



Up to 400W

IGX Orin™ 500
64GB
248 TOPS



15W~75W

Jetson Thor T5000™
128GB
2070 FP4 TFLOPS



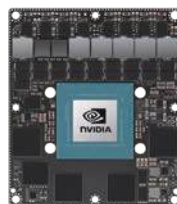
40W~130W

Jetson Thor T4000™
64GB
1200 FP4 TFLOPS



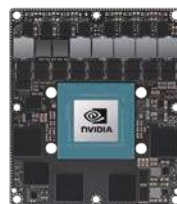
40W~90W

Jetson AGX Orin
Industrial
248 TOPS



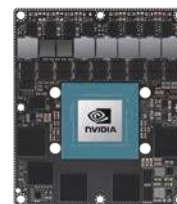
15W~75W

Jetson AGX Orin™
64GB
275 TOPS



15W | 30W | 50W | 60W

Jetson AGX Orin™
32GB
200 TOPS



15W | 30W | 40W

Module Specifications

IGX Thor™ T7000
128GB
5581 FP4 TFLOPS



Up to 430W

IGX Thor™ T5000
128GB
2070 FP4 TFLOPS



40W~130W

	IGX Thor™ T7000	IGX Thor™ T5000
Performance	5581 FP4 TFLOPS	2070 FP4 TFLOPS
GPU	2560-Core NVIDIA Blackwell Architecture GPU with 96 Tensor Cores	
CPU	14-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache	
Memory	128GB LPDDR5X	
Storage	N/A	
Power	up to 430W (with dGPU)	40W~130W
IO Throughput	2×100 GB/s	2×100 GB/s
Optional dGPU	Yes	No
Integrated Dual 100 GB/s ConnectX-7	Yes	No
Carrier Board Customization	No	Yes

Module Specifications



	IGX Orin™ 700	IGX Orin™ 500
Performance	1705 TOPS	248 TOPS
GPU	2048-Core NVIDIA Ampere Architecture with 64 Tensor Core	
CPU	12-Core Arm® Cortex® A78AE CPU	
Memory	64 GB LPDDR5 with ECC	
Storage	64 GB eMMC	
Power	Up to 125W (without dGPU)	15W~75W
	400W (with dGPU)	
IO Throughput	2×100 GB/s	Up to 10 GB/s
Optional dGPU	Yes	No
Integrated Dual 100 GB/s ConnectX-7	Yes	No
Carrier Board Customization	No	Yes

Module Specifications

Jetson Thor T5000™
128GB
2070 FP4 TFLOPS



40W~130W

Jetson Thor T4000™
64GB
1200 FP4 TFLOPS

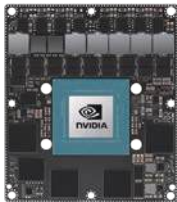


40W~90W

	Jetson Thor T5000™	Jetson Thor T4000™
Performance	2070 FP4 TFLOPS	
GPU	2560-Core NVIDIA Blackwell Architecture GPU with 96 Tensor Cores	1536-Core NVIDIA Blackwell Architecture GPU with 64 Tensor Cores
CPU	14-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache	12-Core Arm® Neoverse V3AE 64-Bit CPU 1 MB L2 Cache per core 16 MB Shared System L3 Cache
Memory	128GB LPDDR5X	64GB LPDDR5X
Storage	N/A	
Power	Up to 125W (without dGPU)	15W~75W
	400W (with dGPU)	
Encode	6×4Kp60 (H.265)	
Decode	4×8Kp30 (H.265)	
CSI Camera	Up to 6 Cameras (16 Via Virtual Channels) 16 Lanes MIPI CSI-2 D-PHY 2.1 (Up to 40Gbps) C-PHY 2.0 (Up to 164Gbps)	
Power	40W~130W	40W~90W

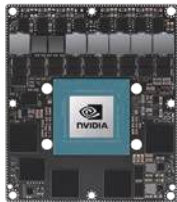
Module Specifications

Jetson AGX Orin Industrial
248 TOPS



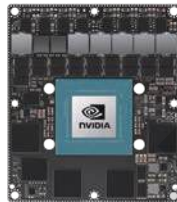
15W-75W

Jetson AGX Orin™
64GB
275 TOPS



15W | 30W | 50W | 60W

Jetson AGX Orin™
32GB
200 TOPS



15W | 30W | 40W

	Jetson AGX Orin Industrial	Jetson AGX Orin™ 64GB	Jetson AGX Orin™ 32GB
Performance	248 TOPS	275 TOPS	200 TOPS
GPU	2048-core NVIDIA Ampere Architecture GPU with 64 Tensor Cores	2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores	1792-Core NVIDIA Ampere Architecture GPU with 56 Tensor Cores
CPU	12-core Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3	12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3	8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
Memory	64GB 256-bit LPDDR5 (+ ECC) 204.8GB/s	64GB 256-Bit LPDDR5 204.8 GB/s	32GB 256-Bit LPDDR5 204.8 GB/s
Storage	64GB eMMC 5.1		
Encode	1 × 4K60 (H.265)	2×4K60 (H.265)	1×4K60 (H.265)
Decode	1 × 8K30 (H.265)		
CSI Camera	Up to 6 Cameras (16 Via Virtual Channels) 16 Lanes MIPI CSI-2 D-PHY 2.1 (Up to 40Gbps) C-PHY 2.0 (Up to 164Gbps)		
Power	15W~75W	15W~60W	15W~40W

Module Specifications

Jetson Orin™ NX
16GB Super
157 TOPS



10W | 15W | 25W | 40W

Jetson Orin™ NX
8GB Super
117 TOPS



10W | 15W | 25W | 40W

Jetson Orin™ Nano
8GB Super
67 TOPS



7W | 15W | 25W

Jetson Orin™ Nano
4GB Super
34 TOPS



7W | 10W | 25W

	Jetson Orin™ NX 16GB Super	Jetson Orin™ NX 8GB Super	Jetson Orin™ Nano 8GB Super	Jetson Orin™ Nano 4GB Super
Performance	157 TOPS	117 TOPS	67 TOPS	34 TOPS
GPU	1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores		1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	512-Core NVIDIA Ampere Architecture GPU with 16 Tensor Cores
CPU	8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU	6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU	6-core Arm® Cortex®-A78AE v8.2 64-Bit CPU	
	2MB L2 + 4MB L3	1.5MB L2 + 4MB L3	1.5MB L2 + 4MB L3	
Memory	16GB 128-Bit LPDDR5 102.4 GB/s	8GB 128-Bit LPDDR5 102.4 GB/s	8GB 128-Bit LPDDR5 102 GB/s	4GB 64-Bit LPDDR5 51 GB/s
Storage	Supports External NVMe			
Encode	1×4K60 (H.265)		1080p30 Supported by 1-2 CPU Cores	
Decode	1×8K30 (H.265)		1×4K60 (H.265)	
CSI Camera	Up to 4 Cameras 8 Lanes MIPI CSI-2 D-PHY 2.1 (Up to 20Gbps)			
Power	10W~15W~25W~40W		7W~15W~25W	7W~10W~25W

Let's Reshape Video Intelligence - Together.

YUAN[®]
Visualize Intelligent Planet

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