YUAN®

NVIDIA Preferred Partner

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

NVIDIA Preferred Partner

Platform Product Line

Capture Board

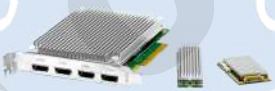
Carrier Board

Computer System

Completed Hardware & Software Integration

Platform

Capture

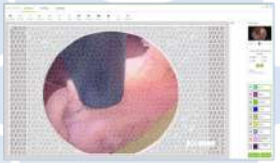


SmartVDO

SDK

NexVDO

VideoAI



We Can

Capture Card	Camera	Multi-Link	SDK Service	BSP Service	OEM / ODM
HDMI / SDI / DVI / VGA / TVI	GMSL / MIPI / GigE / USB / PoE	4G / 5G / WiFi / IMU	NexVDO SDK	JetPack SDK	

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 or AGX (up to 275 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

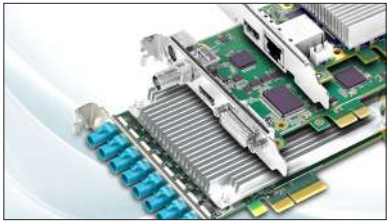
Transportation

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

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

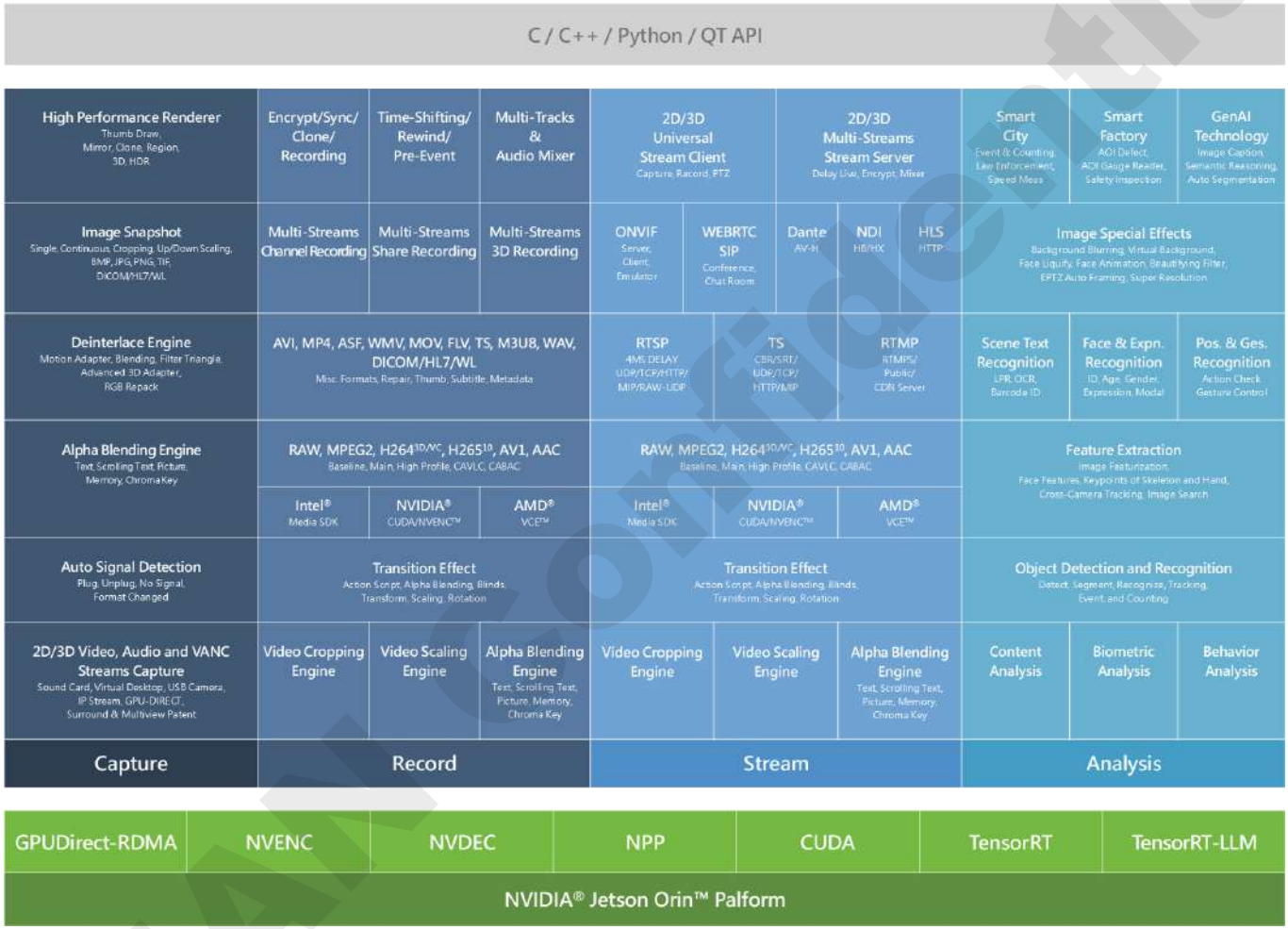
Wi-Fi

IMU / GNSS

OOB

EtherCAT

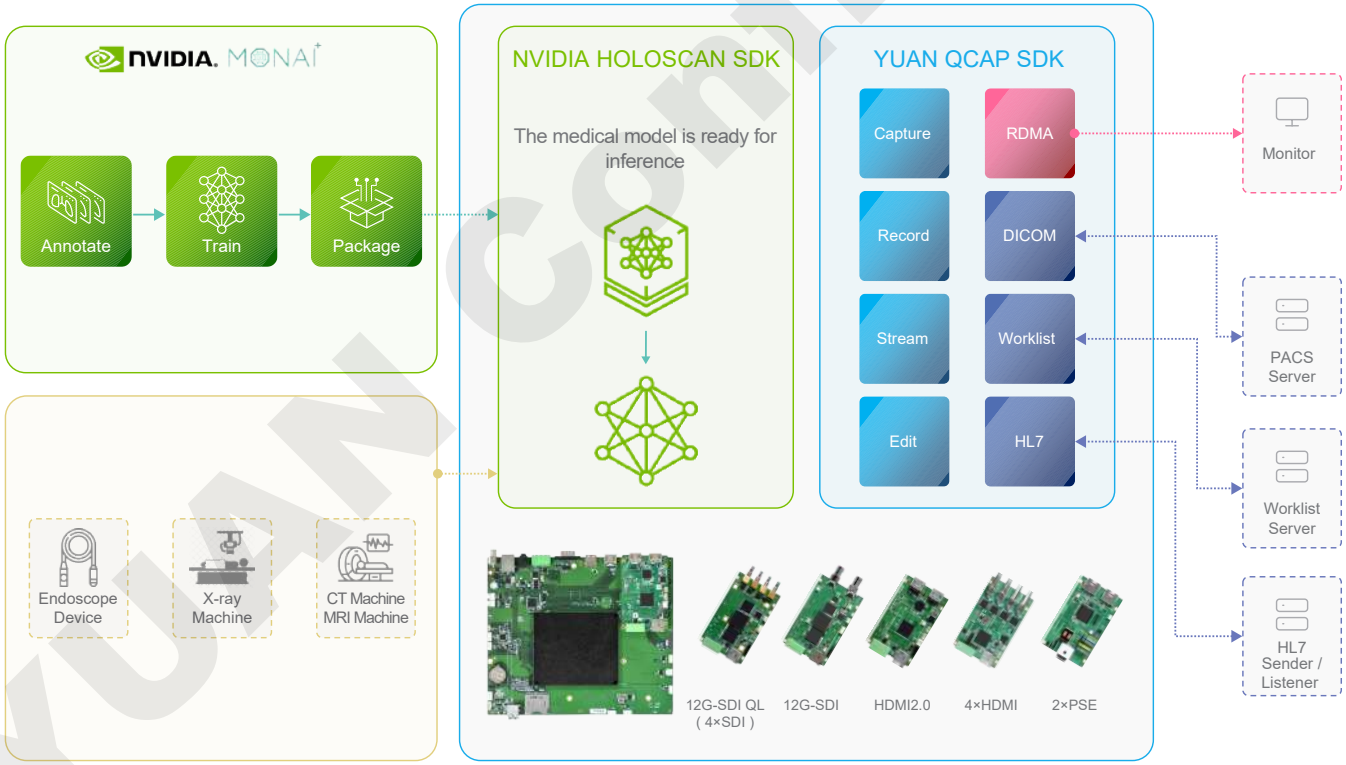
Professional Video SDK Function Block



NexVDO SDK

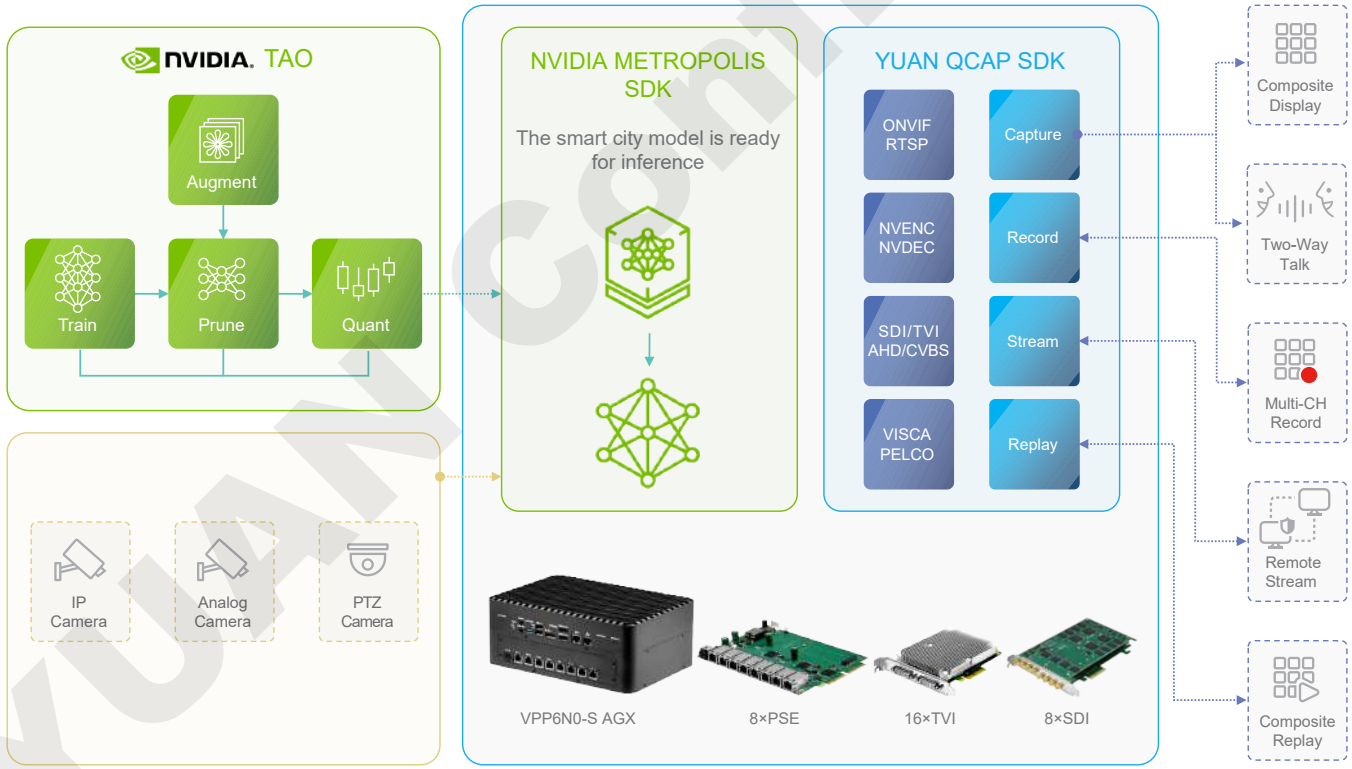
SDK Developer Kit

Healthcare Solution



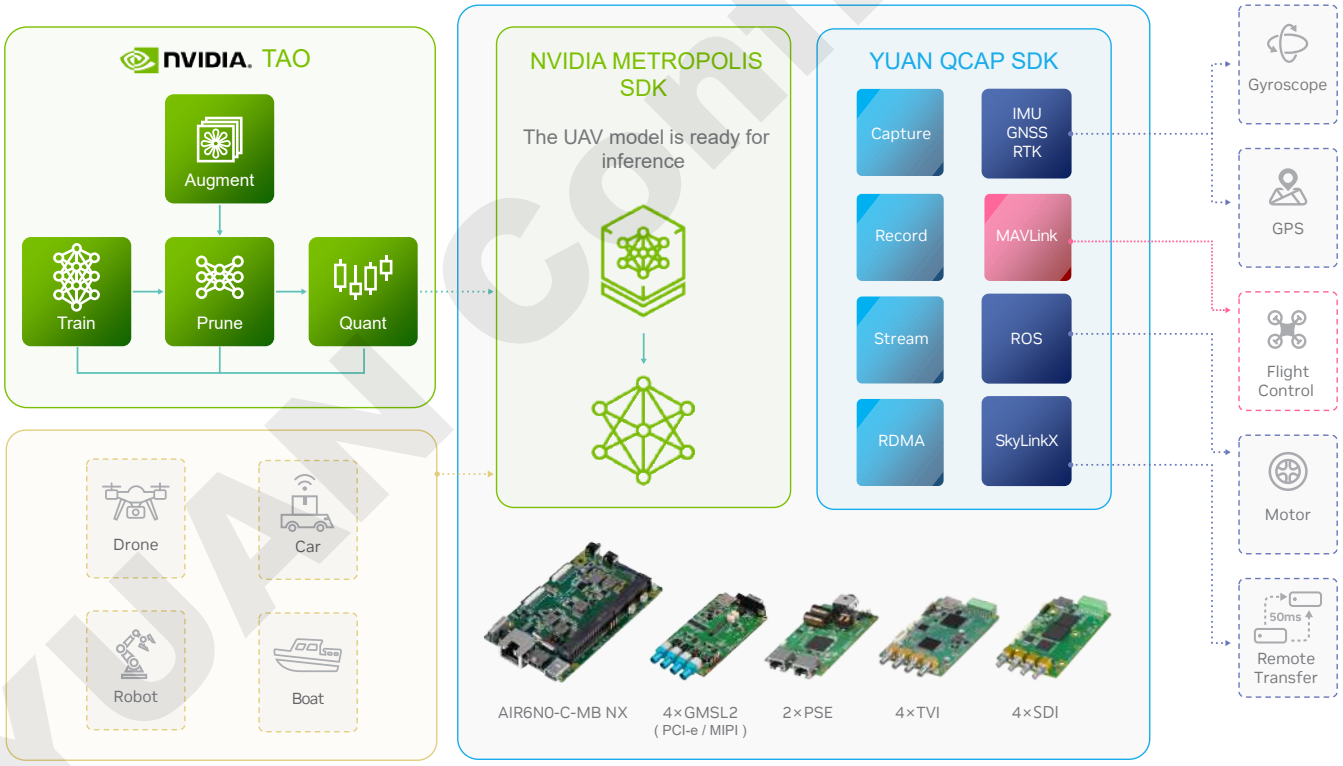
SDK Developer Kit

Smart City Solution



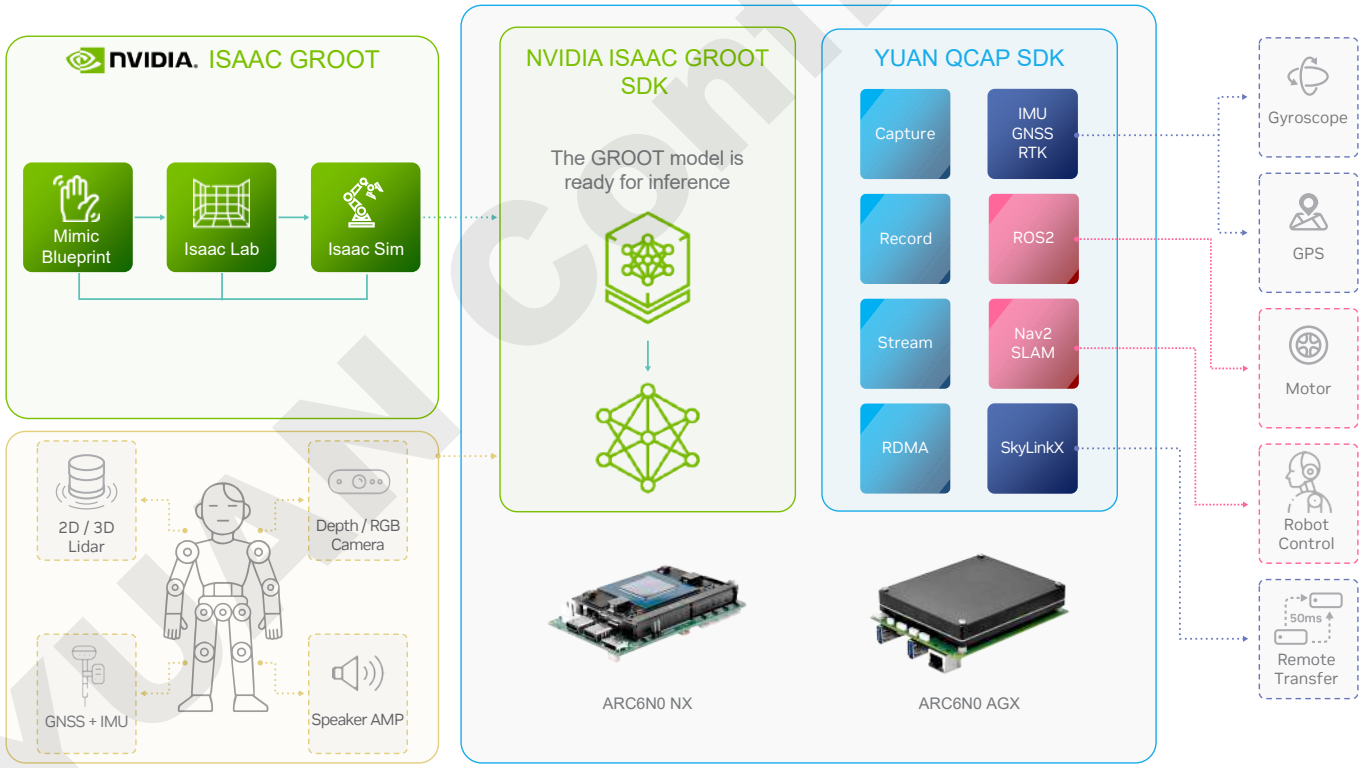
SDK Developer Kit

Industrial and U×V Solution



SDK Developer Kit

Humanoid Robot Solution



YUAN®

NVIDIA Preferred Partner

Computer System for NVIDIA® Jetson™

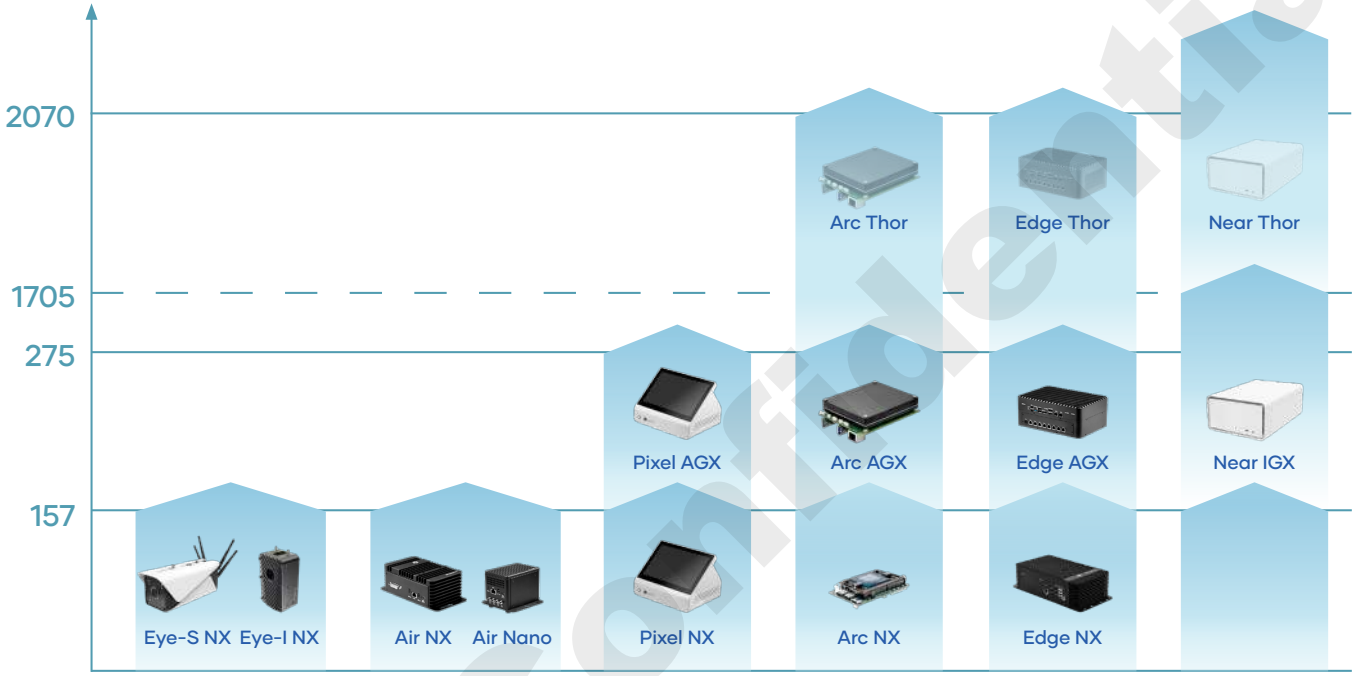
Various Edge AI Solutions Built with NVIDIA Advanced Embedded Systems

- Same Dimension Carrier Board as Official Dev Kit
- Near / Edge / Air / Eye / Pixel Series
- Pre-Installed Jetpack

Product Selection Guide

AI Performance (TOPS)

TOPS Comparison Table



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 / IGX
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 AGX : 275 / 200 NX : 157 / 117	Thor : 2070 FP4 IGX : 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 : 128 GB AGX : 64GB / 32GB NX : 16GB / 8GB	Thor : 128GB IGX : 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™ 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 of AI performance. Its unique architecture allows for seamless expansion with high-end dGPUs - NVIDIA® RTX 6000 Ada, 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

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 6000 Ada Expansion
- Medical Grade IEC 60601-1
- Up to 1705 TOPS AI Performance
- 2×100Gb QSFP, 2×1Gb RJ45

VPP6N0 IGX 700 NVIDIA® IGX Orin™ **1705 TOPS**

MIL6N0 IGX 700 NVIDIA® IGX Orin™ **1705 TOPS**

Model Name	VPP6N0 IGX 700	MIL6N0 IGX 700
NVIDIA Platform	NVIDIA IGX Orin™ 64GB and RTX 6000 Ada	NVIDIA IGX Orin™ 64GB and RTX 6000 Ada
AI Performance	1705 TOPS	1705 TOPS
Display	4×DP1.4a	4×DP1.4a
Encode	1×8K30	1×8K30
Decode	2×8K60	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 (G4×4) 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	238.84mm×198.98mm

Products Images

VPP6N0 IGX 700

MIL6N0 IGX 700

About Edge (AGX & NX)

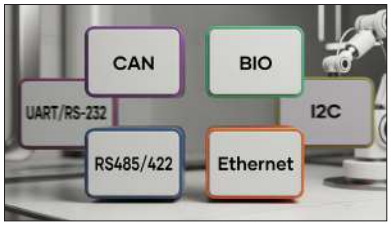
The Edge series stands as the robust and versatile backbone of industrial and urban intelligence, providing a scalable and highly reliable AI computing foundation for continuous operation. Designed for 24/7 deployment in diverse and often harsh environments, it offers a performance spectrum from entry-level (34 TOPS via Orin Nano) to high-end (275 TOPS via AGX Orin), 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 (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 GMSL	VPP6N0-S AGX PSE
NVIDIA Platform	Jetson AGX Orin™ 64GB / 32GB	Jetson AGX Orin™ 64GB / 32GB	Jetson AGX Orin™ 64GB / 32GB
AI Performance	275 / 200 TOPS	275 / 200 TOPS	275 / 200 TOPS
Display	2×HDMI2.0 1×DP	2×HDMI2.0 1×DP	2×HDMI2.0 1×DP
Encode	2×4K60	2×4K60	2×4K60
Decode	1×8K30	1×8K30	1×8K30
Capture Interface	Support by PCI-e Capture Board www.yuan.com.tw/pcie	8×GMSL2	8×PSE (8×1 Gbps)
Expansion	PCIe 1×PCIe 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) 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) 1×M2 3042 B Key (U3.2)
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	266.58mm×188.20mm×105.29mm	266.58mm×188.20mm×105.29mm	266.58mm×188.20mm×105.29mm

Products Images

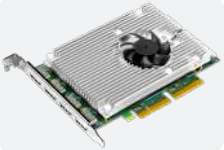
VPP6N0-S AGX

VPP6N0-S AGX GMSL

VPP6N0-S AGX PSE

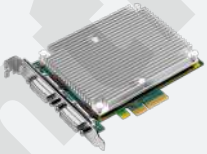
Add-On Capture Cards

8CH USB3.0

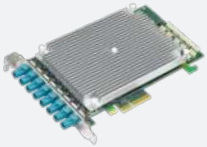


4CH 4K60 HDMI2.0

4CH 4K60 12G-SDI

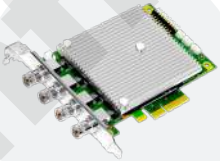


16CH HD30 TVI/AHD



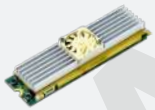
8CH HD60 GMSL2

4CH 4K30 HDMI



4CH 4K30 6G-SDI

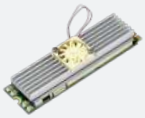
1CH 4K60 HDMI2.0



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	2×HDMI2.0	2×HDMI2.0
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 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×76.5mm×144mm	252.5mm×76.5mm×144mm	252.5mm×76.5mm×144mm

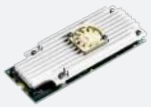
Products Images

VPP6N0-S-W NX

VPP6N0-S-W NX GMSL

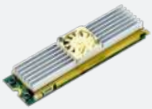
VPP6N0-S-W NX PSE

Add-On Capture Cards



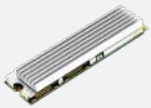
1CH 8K60 HDMI2.1

1CH 4K60 HDMI2.0

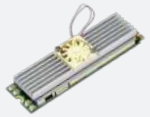


1CH 4K60 12G-SDI

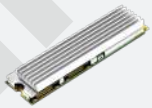
4CH HD60 TVI/AHD



4CH HD60 HDMI



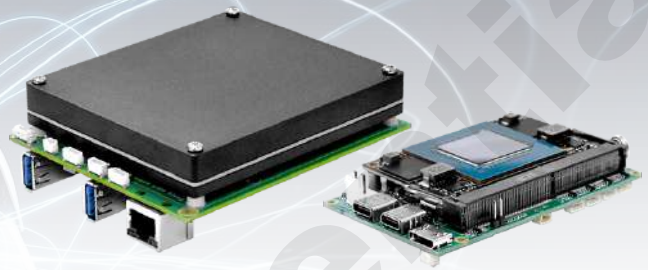
4CH HD60 SDI



2CH HD60 SDI+HDMI

1CH HD60 HDMI/DVI/VGA

About Arc

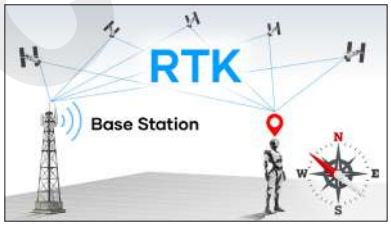


The Arc series is a compact, high-performance edge AI platform purpose-built for robotics. Powered by NVIDIA® Jetson™ Orin NX and AGX modules, Arc integrates advanced AI computing with built-in multi-axis IMU sensors to provide real-time awareness of motion, orientation, and balance—critical for dynamic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



Precise Positioning

Comprehensive Sensor Fusion Support

The Heart of Humanoid Edge Intelligence

9-Axis Motion Intelligence for Dynamic Balance

Arc Series

Feature

· 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 16GB — **157 TOPS**

NVIDIA® Jetson AGX Orin™ 64GB — **275 TOPS**

Model Name	ARC6N0 AGX	ARC6N0 NX
NVIDIA Platform	Jetson Orin™ NX 64GB / 32GB	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	275 / 200 TOPS	157 / 117 TOPS
Display	1×HDMI2.0	1×mini HDMI2.0
Encode	1×4K60	1×4K60
Decode	1×8K30	1×8K30
Expansion	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
Dimensions	107mm×92mm	90mm×55mm

Products Images

ARC6N0 AGX

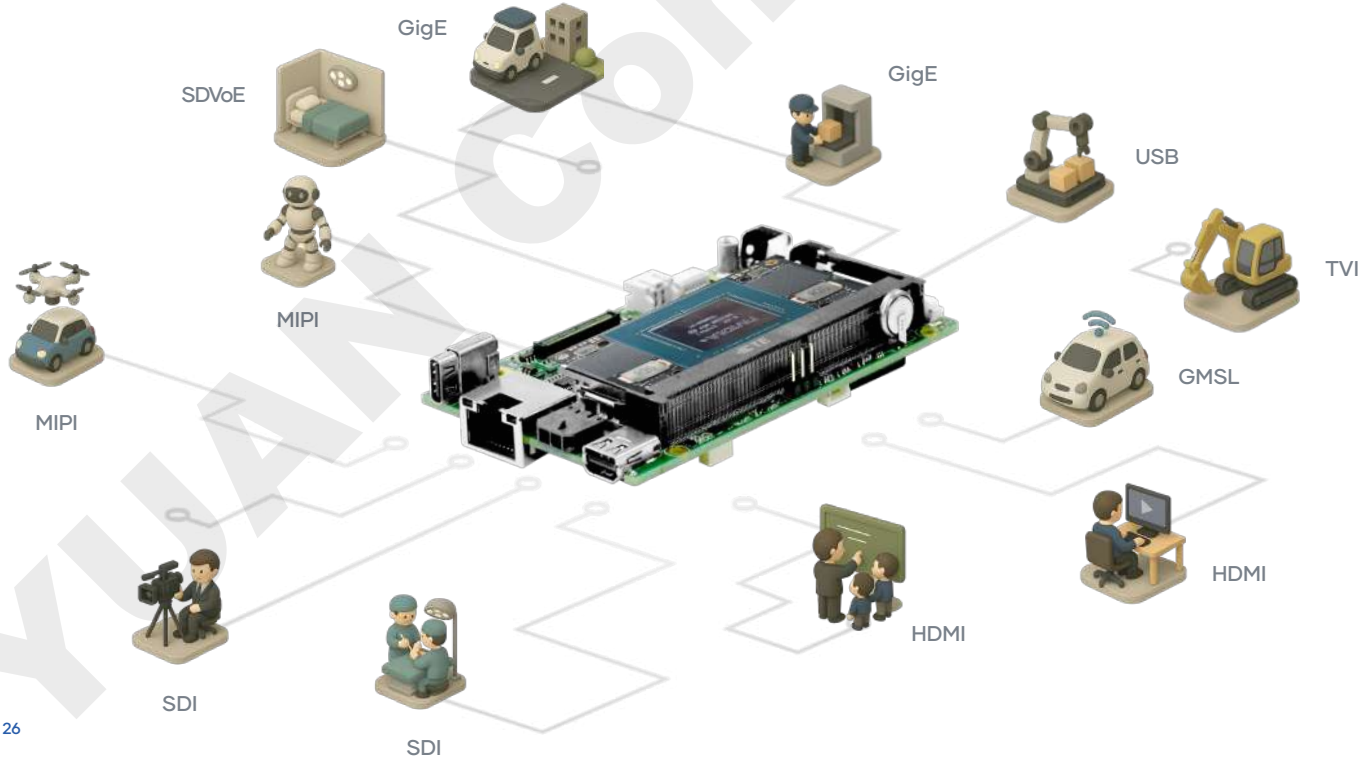
ARC6N0 NX

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 750N1O1 12G-SDI
(Input & Output with Overlay)

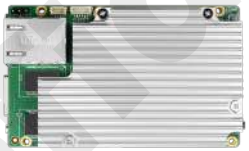
AIR6N0-C-DB NX 12G-SDI

AIR6N0-C-DB NX 12G-SDI QL

AIR6N0-C-DB NX HDMI2.1

AIR6N0-C-DB NX HDMI2.0

AIR6N0-C-DB NX 4×HDMI



AIR6N0-C-DB NX SDVoE-C

AIR6N0-C-DB NX 4×GMSL2
(PCI-e)

AIR6N0-C-DB NX 4×GMSL2
(MIPI)

AIR6N0-C-DB NX-440-8GMSL2

AIR6N0-C-DB NX 4×TVI

AIR6N0-C-DB NX 8×TVI

AIR6N0-C-DB NX 4×USB3.2

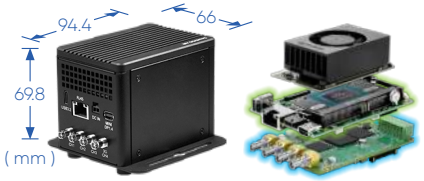
AIR6N0-C-DB NX 2×GIGE

AIR6N0-C-DB NX I/O

AIR6N0-C-DB NX OOB

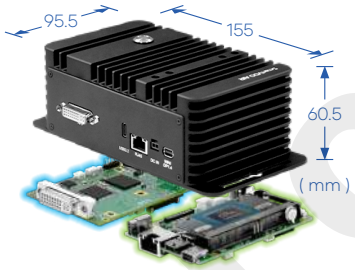
Air Series - One Core, Multiple Designs

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 DisplayPort	1×Mini DisplayPort	1×HDMI2.0 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.27) www.yuan.com.tw/air	Support by I/O Daughter Board (Page.27) www.yuan.com.tw/air	Support by I/O Daughter Board (Page.27) 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 x 153.7mm x 44.5mm

Products Images

AIR6N0-C NX

AIR6N0-C-W NX

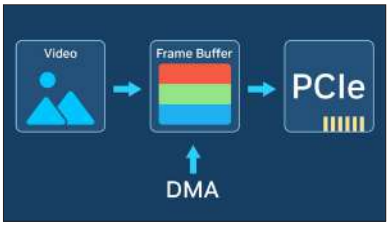
AIR6N0-C TRX NX

About Eye

Powered by NVIDIA® Jetson Orin™ NX Super with up to 157 TOPS AI performance. Dual-lens version design captures simultaneous zoom and wide views for flexible coverage. Sony IMX678 sensor with HDR, night vision, and up to 25x optical zoom. Supports 24 AI models: face recognition, behavior analysis, LPR, traffic monitoring. Built-in AI SDK with encrypted edge processing and IP66-rated outdoor reliability. offering solutions for smart city applications.

25X Optical 200m

Built-in Sony STARVIS-2 Sensor



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

Hardware ISP with HDR Support

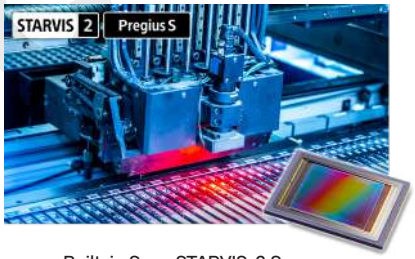
Built-in ISP Tuning Tool

All-in-One Compact Design

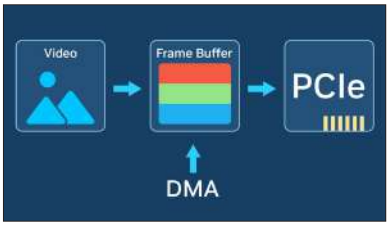
About Eye

Powered by NVIDIA® Jetson Orin™ NX Super and integrated Sony STARVIS 2 sensors. All-in-one architecture combines sensor, ISP, AI module, and I/O for robust deployment. Supports 4K60 RGB444 via PCIe for precise color capture and fast data transfer. QDEEP AI engine enables real-time inspection, classification, and defect detection. Ideal for industrial automation, machine vision, and quality assurance tasks. offering solutions for industrial inspection.

Flexible C-Mount with Zoom Lens



Built-in Sony STARVIS-2 Sensor



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

Support Wireless Transmission

Built-in ISP Tuning Tool

Eye Series

Feature

- Jetson Orin™ NX Super (Orin™ Nano Super Compatible)
- Sony Starvis 2 IMX Sensor
- Hardware ISP Design
- HDR (High Dynamic Range)
- DMA PCIe Design : High-Bandwidth for RGB 4:4:4 Quality Capture

NVIDIA® Jetson Orin™ NX Super 8GB — **117 TOPS**

NVIDIA® Jetson Orin™ NX Super 16GB — **157 TOPS**

Model Name	EYE6N0-S678	EYE6N0-D678
NVIDIA Platform	Jetson Orin™ NX Super 16GB / 8GB	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	157 / 117 TOPS	157 / 117 TOPS
Video Encode	1×4K60 (Orin NX) + 1×4K60 (ISP)	1×4K60 (Orin NX) + 1×4K60 (ISP)
Focal Length	Auto Focus 10.2mm (W) ~ 29.5mm (T)	Lens1 : Auto Focus 10.2mm(W) ~ 29.5mm(T) Lens2 : 4.53mm
Sensor Model / Size	Sony IMX678 / CMOS 1/1.8"	Sony IMX678 / CMOS 1/1.8"
Exposure Mode	Rolling Shutter	Rolling Shutter
Expansion Slot	M2 1×M.2 2230 M Key PCIe (G4×2) 1×M.2 2230 E Key PCIe (G4×1) 1×M.2 3052 B Key USB3.2 (G2×1)	M2 1xM.2 2230 M Key PCIe (G4x2) 1xM.2 2230 E Key PCIe (G4x1) 1xM.2 3052 B Key USB3.2 Gen 2
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	120mmx120mmx300mm	120mmx120mmx300mm

Products Images

EYE6N0-S678

EYE6N0-D678

Eye Series

Feature

- Jetson Orin™ NX Super (Orin™ Nano Super Compatible)
- Sony Starvis 2 IMX Sensor
- Hardware ISP Design
- HDR (High Dynamic Range)
- DMA PCIe Design : High-Bandwidth for RGB 4:4:4 Quality Capture

NVIDIA® Jetson Orin™ NX Super 8GB — **117 TOPS**

NVIDIA® Jetson Orin™ NX Super 16GB — **157 TOPS**

Model Name	EYE6N0-I08M678R	EYE6N0-I08M585R
NVIDIA Platform	Jetson Orin™ NX Super 16GB / 8GB	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	157 / 117 TOPS	157 / 117 TOPS
Video Encode	1×4K60 (Orin NX) + 1×4K60 (ISP)	1×4K60 (Orin NX) + 1×4K60 (ISP)
Focal Length	C/CS-Mount	C/CS-Mount
Sensor Model / Size	Sony IMX678 / CMOS 1/1.8"	Sony IMX585 / CMOS 1/1.1"
Exposure Mode	Rolling Shutter	Rolling Shutter
Expansion Slot	M2 1×M.2 2230 M Key PCIe (G4×2) 1×M.2 2230 E Key PCIe (G4×1)	M2 1×M.2 2230 M Key PCIe (G4×2) 1×M.2 2230 E Key PCIe (G4×1)
Wireless (Option)	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	63mm x 80mm x 135mm	63mm x 80mm x 135mm

Products Images

EYE6N0-I08M678R

EYE6N0-I08M585R

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

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

NVIDIA® Jetson Orin™ NX Super 16GB — **157 TOPS**

NVIDIA® Jetson AGX Orin™ 64GB — **275 TOPS**

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	10" Touch Screen 1×HDMI2.0
Encode	2×4K60	1×4K60
Decode	1×8K30	1×8K30
Capture Interface	Support by I/O Daughter Board (Page.27) www.yuan.com.tw/air	Support by I/O Daughter Board (Page.27) www.yuan.com.tw/air
Expansion	M2 1×M.2 2280 M Key PCIe (G4×2) 1×M.2 2280 M Key PCIe (G4×1)	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

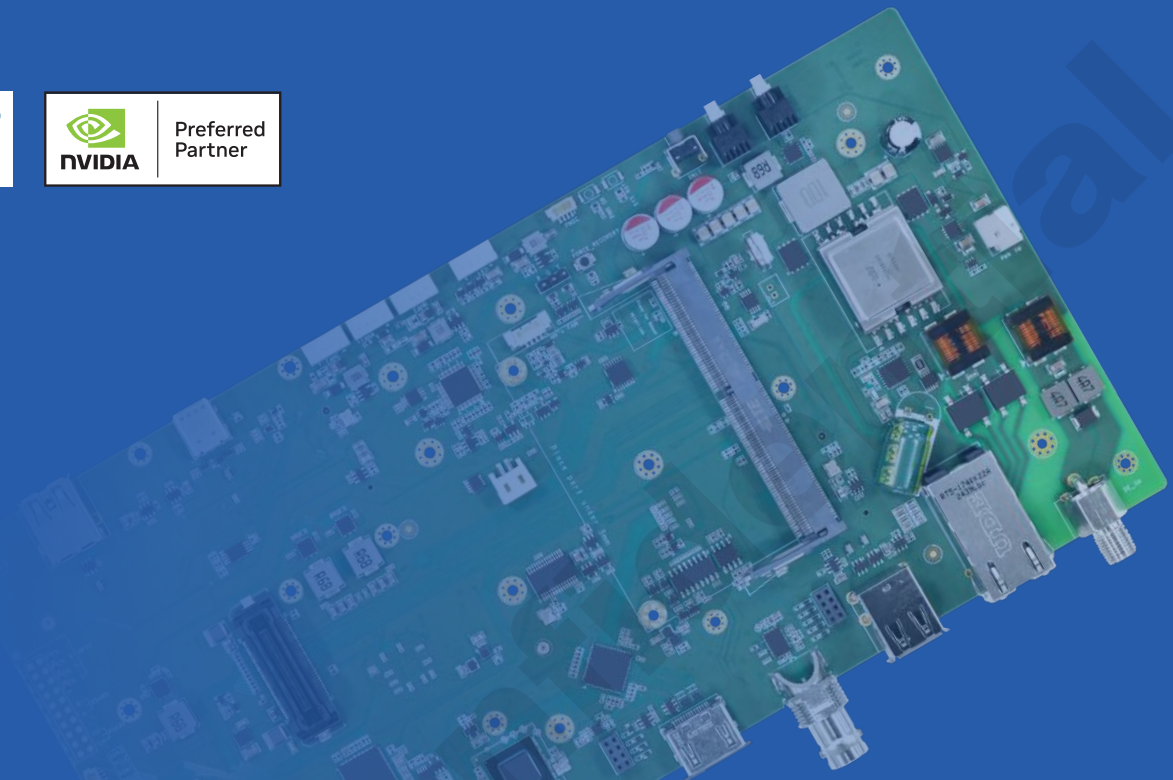
Products Images

Pixel AGX

Pixel NX

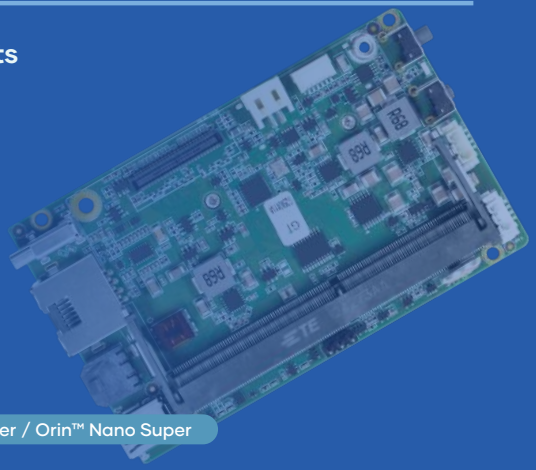
YUAN®

NVIDIA Preferred Partner



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

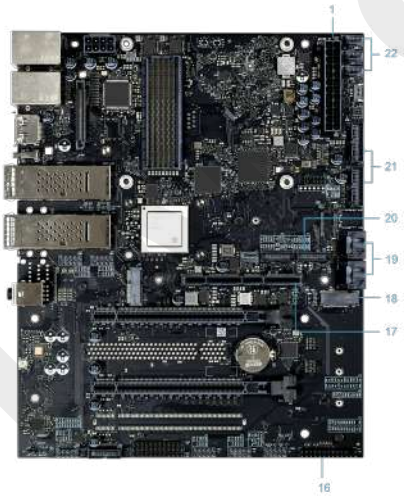
VPP6N0-MB IGX 700

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 (AGX) Series

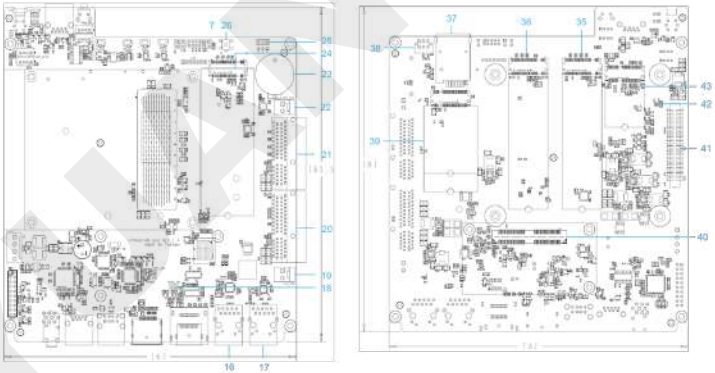
VPP6N0-MB AGX

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

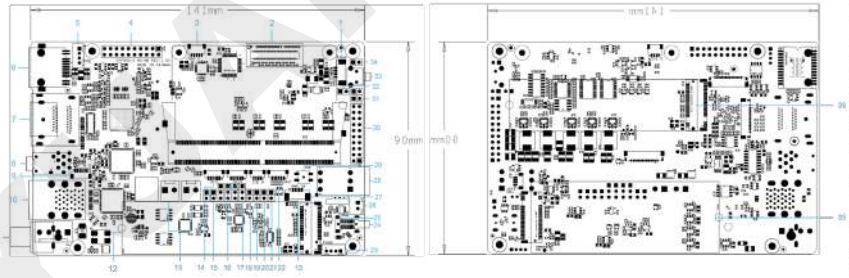
VPP6N0-S-MB NX / Nano

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 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



1. CPU FAN
2. MIPI
3. USB2.0
4. 2×USB3.2 Gen1
5. POE Expansion Header
6. RJ45
7. 2×HDMI
8. Line in / Line out (2×3.5mm)
9. Line in / Line out (Pin Header)
10. 4×USB3.2 Gen2 (Type-A)
11. DC Jack (9~36V)
12. M.2 2280 M Key (PCIe 1 Lane)
13. 2×Power O/P
14. SPI1
15. UART2
16. SPI0
17. CAN
18. OOB 5V
19. Auto Power
20. OOB SW
21. OOB Power On/Off Detection
22. UART0
23. CHESSIS FAN
24. USB3.2 Gen2 (Type-C)
25. Battery
26. Heater
27. Power SW
28. Phoenix Connector (RS232, RS485)
29. 4 Pin Header
30. 3×I2C, 4×GPIO, RS232, RS485
31. Power O/P (1.8V)
32. Power O/P (3.3V)
33. Recovery Key
34. Power O/P (5.0V)
35. M.2 2280 M Key (PCIe 2 Lane)
36. M.2 2280 / 3080 M Key (PCIe 4 Lane)

Carrier Boards – Arc Series

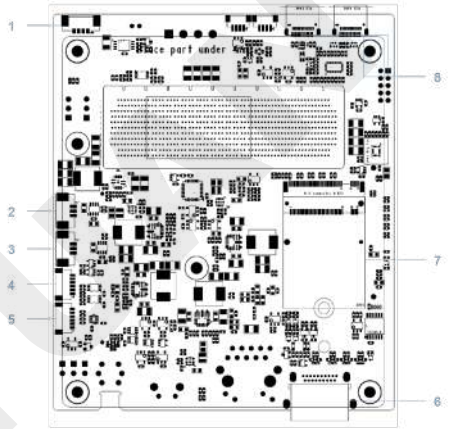
ARC6N0-MB AGX + ARC6N0-DB AGX

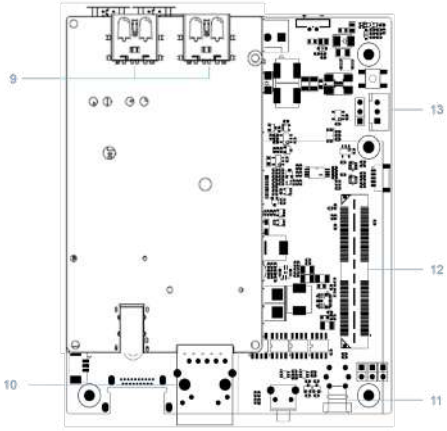
Highly Integrated AI Server, Provide 275 TOPS and Expandability

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
- 1×1Gb RJ45 Port, 2×USB3.2 Gen2 Type-C, Type-A
- CAN Bus / I2C / GPIO / UART / SPI

Product Name	ARC6N0-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	107mm×92mm





1. FAN
2. CAN Bus
3. CAN Bus
4. UART
5. SPI
6. HDMI2.0
7. M2 2230 M Key
8. 2×USB3.2 Gen2 Type-C
9. 2×USB3.2 Gen2 Type-A
10. RJ45
11. 3.5mm Audio Jack
12. MIPI
13. GPIO

Carrier Boards – Arc Series

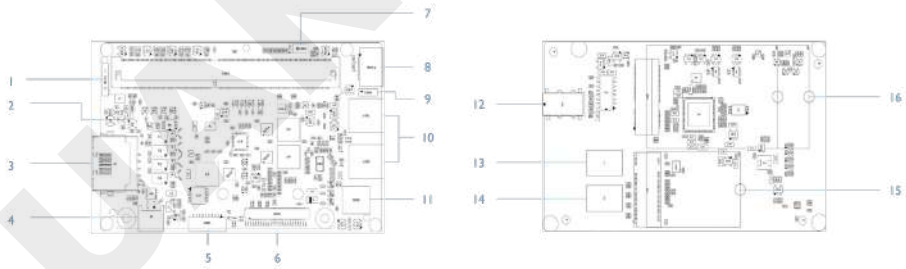
ARC6N0-MB NX + ARC6N0-DB NX

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 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	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

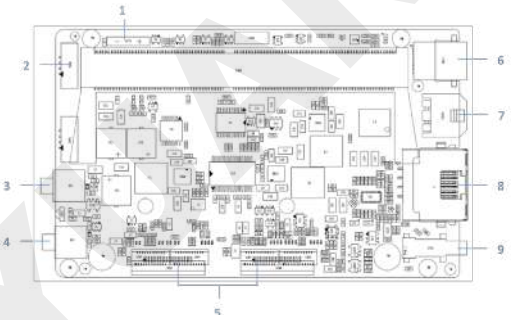
AIR6N0-C-MB NX / Nano

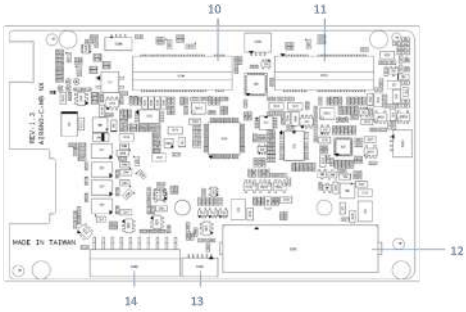
Business Card Size AI Edge Motherboard

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

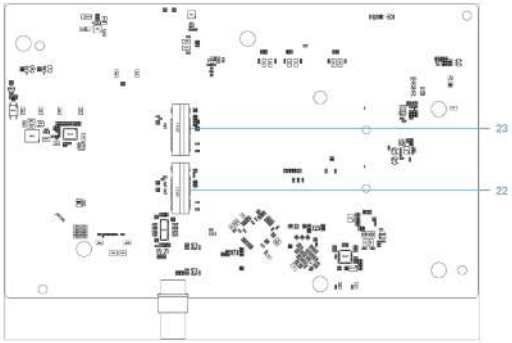
AIR6N0-C-MB TRX NX

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 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 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	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

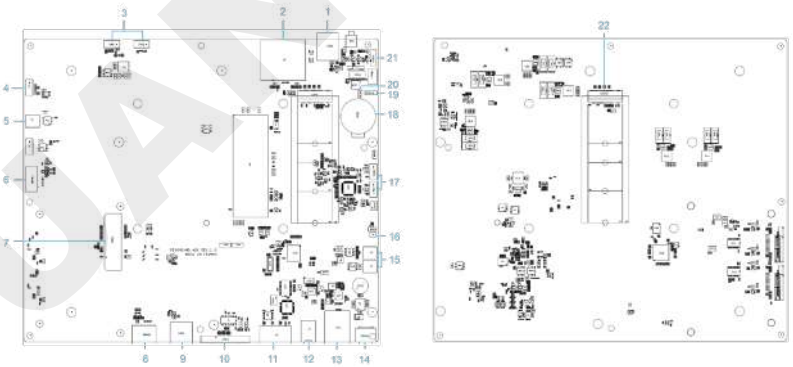
PIX6N0-MB AGX

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

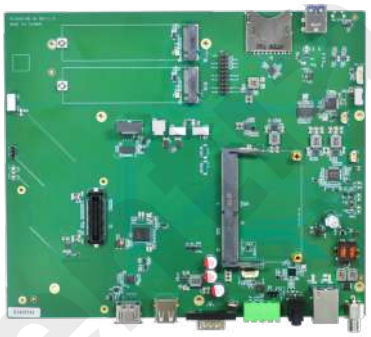


1. 2xUSB3.0
2. M.2 2280/3080 M Key (PCIe Gen4×4)
3. FAN
4. USB 2.0
5. Power O/P
6. HDMI
7. Custom Connector
8. HDMI2.0 Out
9. USB2.0
10. UART RS232
11. GPIO
12. LINE IN / LINE OUT
13. Ethernet 1G
14. DC IN
15. 2×Power O/P
16. Force Recovery
17. Fan
18. Battery CR2032
19. UART3 Debug (3.3V)
20. System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

Carrier Boards - Pixel (NX) Series

PIX6N0-MB NX

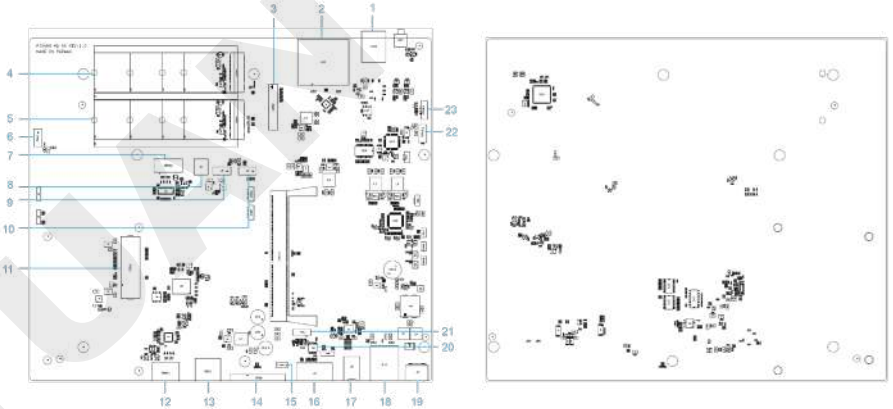
Medical-Grade AI Platform



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

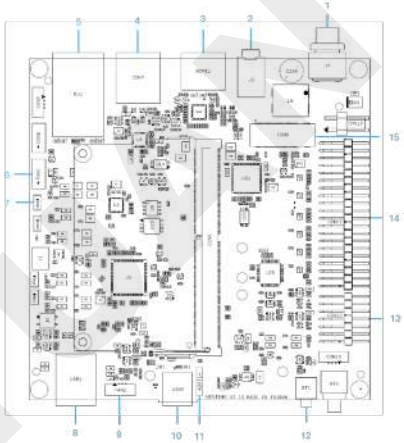
MINI6N0-MB NX / Nano

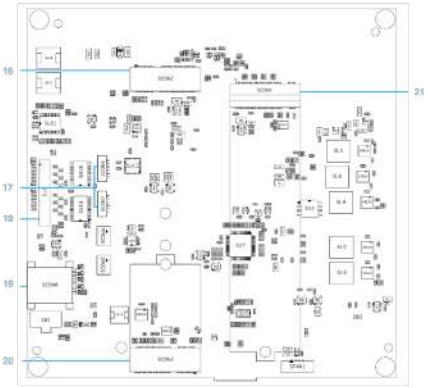
Compact Edge AI Platform

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™ 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





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	VPP6N0-MB IGX 700	VPP6N0-MB AGX	VPP6N0-S-MB NX
CPU	NVIDIA IGX Orin™ 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB 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™ 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 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	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	1705 TOPS	275 / 200 TOPS	157 / 117 TOPS
Display	4×DP1.4a	2×HDMI2.0 1×DP	2×HDMI2.0
System Memory	64GB LPDDR6	64 / 32GB LPDDR5	16 / 8GB LPDDR5
Expansion	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)	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	238.84mm×198.98mm	181.5mm×167mm	140mm×90mm

Carrier Boards Comparison (II)

Model				
Product Name	ARC6N0 MB AGX	ARC6N0 MB NX	PIX6N0-MB AGX	PIX6N0-MB NX
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	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 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	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	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	275 / 200 TOPS	157 / 117 TOPS	275 / 200 TOPS	157 / 117 TOPS
Display	1×HDMI2.0	1×Mini HDMI2.0	2×HDMI2.0 1×HDMI2.0 (Internal)	2×HDMI2.0 1×HDMI2.0 (Internal)
System Memory	64 / 32GB LPDDR5	16 / 8GB LPDDR5	64 / 32GB LPDDR5	16 / 8GB LPDDR5
Expansion	M.2 M.2 2230 M Key PCIe (G4×4) M.2 2230 E Key PCIe (G4×1+U2)	M.2 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)	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	107mm×92mm	90mm×55mm	224.15mm×191.2mm	224.15mm×191.2mm

Carrier Boards Comparison (III)

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	1×Mini DP1.4	1×HDMI2.0 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	203.6mmx126.1mm

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

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

IGX Orin™ 700
64GB
1705 TOPS

Up to 400W

IGX Orin™ 500
64GB
248 TOPS

15W~75W

Module Specifications

IGX Orin™ 700
64GB
1705 TOPS

Up to 400W

IGX Orin™ 500
64GB
248 TOPS

15W~75W

	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 AGX Orin Industrial 248 TOPS

20W~40W

Jetson AGX Orin™ 32GB 200 TOPS

15W | 30W | 40W

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

YUAN®

NVIDIA Preferred Partner

Application Scenarios

Retail : Trade Show Intelligence with Edge AI

Use Case : Real-Time Visitor Behavior Analytics for Event Optimization

Challenge

At major exhibitions and trade shows, companies often struggle to quantify booth traffic, visitor engagement, and product visibility. Most rely on manual reporting from sales staff, which is labor-intensive, subjective, and inconsistent. Sales teams are expected to both manage customer interaction and observe behavioral patterns—creating a bottleneck in insight gathering.

Our client needed a scalable, objective, and fully automated solution to monitor real-time visitor behavior across different exhibit zones, enabling immediate adjustments and maximizing return on event investment.

Solution

YUAN deployed the Edge : VPP6N0-S NX 16GB platform, equipped with 157 TOPS Super Mode AI processing, as the on-site edge analytics engine. The system supports multiple IP camera feeds via ONVIF and RTSP, and runs concurrent human detection, heatmap generation, and engagement zone analysis. This allows the client to distinguish between effective and non-effective foot traffic, quantify dwell times, and identify high- and low-performing display areas—all in real time.

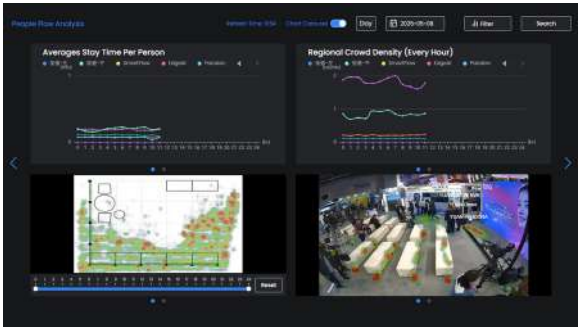
Beyond vision AI, the system leverages a locally hosted LLM (Large Language Model) to automatically generate daily summary reports, using collected behavioral data. These reports are distributed to stakeholders at the end of each show day—helping teams refine their strategy, reposition displays, and adjust messaging before the next morning's opening.

Why it Works

- Real-Time Multi-stream Decoding and Analysis on a Compact, Fanless Embedded System.
- Combines Vision AI with Natural Language Intelligence for Actionable Insights.
- Removes Dependency on Manual Data Collection and Human Observation.

Technologies Involved

- ONVIF / RTSP
- Human Detection
- Heatmap Analytics
- LLM-based Reporting



Robotic & Drone : Maritime Surveillance with Distributed Edge AI

Use Case : Autonomous USVs for Coastal Monitoring and Illegal Activity Detection

Challenge

For maritime enforcement agencies, patrolling vast oceanic areas with limited vessels presents a serious operational gap. Traditional patrol ships are expensive to build, costly to operate, and constrained by their coverage radius and processing capability. Human crews face intense workloads, and monitoring often relies on delayed or subjective visual assessments.

To modernize maritime intelligence, our client sought a scalable solution that could expand their monitoring range, lower energy and manpower costs, and enable real-time detection of suspicious activity across coastal zones.

Solution

YUAN partnered with the client to co-develop SentryBot, an autonomous unmanned surface vessel (USV) engineered for intelligent, distributed maritime surveillance. At the heart of each vessel is the AIR6N0-C-W NX 8GB TVI, built on the Jetson Orin NX platform with 117 TOPS of AI computing power at the edge.

Each SentryBot integrates up to four IP67-rated TVI cameras, providing 360-degree situational awareness with real-time ship detection and classification. With onboard AIS recognition, the system can cross-reference vessel identities to flag anomalies or unregistered targets.

Using real-time streaming, high-efficiency video and sensor data are transmitted over commercial wireless networks (e.g., advanced communication technologies such as 5G and 4G) to a central platform. This enables low-latency system monitoring and remote management for industrial fleets and smart mobility applications, enhancing operational efficiency while minimizing the need for on-site intervention.

This distributed AI architecture drastically extends the effective surveillance range while offloading compute and power demand from central patrol ships—making scalable maritime security both affordable and intelligent.

Why it Works

- Embedded AI Enables Decentralized Video Processing and Target Classification.
- P2P Streaming Over Resilient Wireless Links (4G LTE, StarLink) Ensures Real-Time Feedback.
- AIS + AI Integration Improves Vessel Recognition and Anomaly Detection.
- MAVLink Control Supports Autonomous Missions with Minimal Infrastructure.

Technologies Involved

- Ship Detection
- P2P Streaming
- AIS Recognition
- MAVLink Control

AgriSmart × YUAN

Robotic & Drone : Precision Agriculture with Generative AI

Use Case : Grape Quality Assessment Via Edge AI in Autonomous Vineyard Vehicles

Challenge

In modern viticulture, evaluating grape quality across expansive vineyards is a time-consuming, labor-intensive process. Most growers rely on visual inspection and manual reporting, which are inherently subjective and inconsistent. Our client—a large-scale grape farm—wanted to introduce AI into their operations but faced a familiar roadblock: the complexity of building large, labeled datasets using traditional object detection models such as YOLO.

As a non-technical agricultural company, they lacked the infrastructure and expertise to manage data pipelines or annotation workflows. They needed a solution that simplified AI adoption while remaining accurate, adaptable, and easy to use in the field.

Solution

YUAN partnered with the client to develop VinoBot, a fully integrated autonomous vehicle designed for real-time grape quality inspection. The system is built on the AIR6N0-C-W NX 16GB edge platform, powered by Jetson Orin NX with up to 157 TOPS of AI performance. VinoBot combines a stereo camera, LiDAR, and a 4K HDR imaging system, enabling it to capture rich visual and spatial data while navigating complex vineyard environments using onboard IMU/RTK positioning, SLAM/NAV, and MAVLink/ROS control.

What makes VinoBot truly distinct is its use of Anything Detection, a generative AI technique enhanced by RAG (Retrieval-Augmented Generation). Unlike traditional AI pipelines that require extensive manual annotation, this approach allows the system to identify, compare, and assess grape clusters automatically—even in variable lighting or environmental conditions. Data collected in the field is analyzed on the edge, enabling immediate feedback without relying on cloud connectivity.

The architecture is modular and extensible—designed to be easily adapted to other types of crops, helping agricultural teams transition into smart farming with minimal technical overhead.

Why it Works

- Generative AI with RAG Enables Few-Shot Learning and Flexible Model Deployment.
- In-Field Edge Inference Eliminates Latency and Network Dependency.
- Multi-Sensor Integration Ensures Accuracy Across Real-World Vineyard Scenarios.
- Scalable Platform Architecture Supports Future Crop Recognition Use Cases.

Technologies Involved

- Anything Detection / RAG
- IMU / RTK
- SLAM / NAV
- MAVLink / ROS

Rayvatek × YUAN

Robotic & Drone : Aerial Intelligence at the Edge

Use Case : Low-Latency UAV Video Processing with Onboard AI

Challenge

As the drone industry rapidly evolves, aerial platforms are becoming a central battlefield for innovation. In this space, real-time visual analysis is critical—yet most traditional UAV systems offload video streams to ground-based AI servers due to the lack of compute resources onboard.

This architecture introduces major bottlenecks: bandwidth constraints, resolution degradation, and latency that disrupt flight control and reduce inference accuracy. In dynamic environments like disaster zones or complex terrain, even minor delays can compromise navigation and mission success.

Solution

To overcome these limitations, our customer deployed the AIR6N0-C-MB NX 16GB carrier board—equipped with Jetson Orin NX—directly onboard their UAV. Paired with high-definition SDI, IP, or MIPI cameras, the platform ingests video directly into CUDA memory using GPUDirect RDMA for near-zero latency.

YUAN provided a broad selection of customized video I/O daughter boards and software drivers to match different UAV architectures, enabling broadcast-grade image acquisition to run natively on the drone itself. With 157 TOPS of compute performance and 16GB of RAM, the system effortlessly handles traditional CNN models like YOLO, and also supports locally hosted VLMs (Vision-Language Models) for advanced scene understanding.

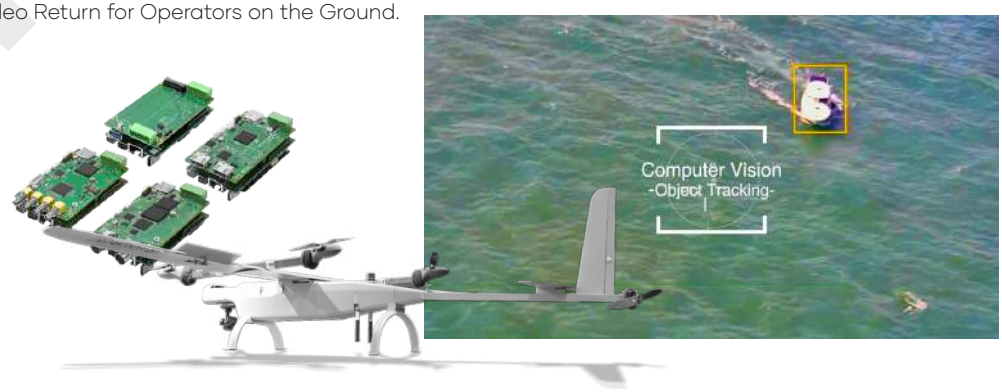
This onboard architecture allows real-time inference and direct control feedback via MAVLink, significantly improving flight reactivity and AI precision. For ground-level visualization, the system integrates YUAN's proprietary SkyLink X, which transmits target detection footage over ultra-low-latency P2P links—delivering mission-critical intelligence without the delay of cloud processing.

Why it Works

- GPUDirect RDMA Provides Near-Zero Latency frame Transfer to GPU Memory.
- AI is Computed on the Drone, Eliminating Bandwidth and Transmission Delay.
- VLM Deployment Enables Advanced Visual Context Awareness In-Air.
- SkyLink X Ensures High-Fidelity Video Return for Operators on the Ground.

Technologies Involved

- GPUDirect-RDMA
- ONVIF
- SkyLink X
- MAVLink
- VLM



中興保全科技 TAIWAN SECOM COMPANY LTD. × YUAN

Smart City : Generative AI-Powered NVR for Smart Surveillance

Use Case : Real-time Visual Search in Large-Scale City Security Systems

Challenge

Traditional AI-enabled NVRs rely on manually labeled object datasets and supervised training pipelines based on YOLO and similar models. While effective in controlled scenarios, these systems often struggle with the complexity of real-world city environments, where the diversity of objects, clothing styles, and human behavior makes predefined labeling impractical.

As the range of visual targets grows, developers fall into an endless cycle of data collection, annotation, and retraining. This results in delayed deployments, high costs, and increasing frustration for end users—many of whom begin to lose confidence in the promise of AI-enhanced surveillance.

Solution

To break free from these constraints, YUAN introduced a new generation of generative AI NVR systems powered by the VPP6N0-S PSE AGX 64GB, based on NVIDIA Jetson AGX Orin. With up to 275 TOPS of AI computing power and 64GB of unified memory, the system is capable of running large-scale multimodal models directly at the edge.

In collaboration with one of Taiwan's leading security service providers, YUAN integrated CLIP (Contrastive Language-Image Pretraining) into the client's surveillance infrastructure. Unlike conventional object classification pipelines, CLIP encodes both visual frames and natural language into a shared semantic feature space. This allows for zero-shot visual search—operators can simply type descriptions like "a person carrying a floral backpack"or "a man in a white hooded jacket" to retrieve matching footage, with no retraining or pre-labeling required.

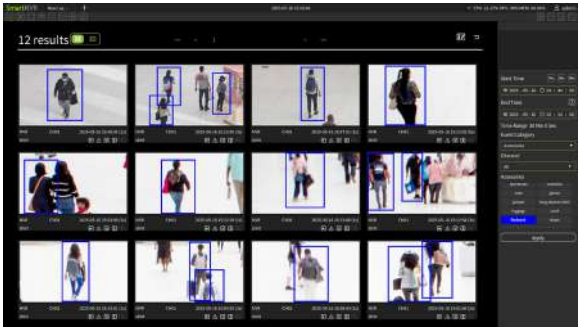
The system includes 8-channel IP camera input with PSE power delivery, reducing deployment complexity. Beyond AI analysis, the VPP6N0-S PSE AGX 64GB provides full NVR recording and VMS-based remote device management, forming a unified platform that bridges traditional surveillance systems and modern AI capabilities.

Why it Works

- CLIP-Based Generative AI Enables Zero-Shot, Language-Driven Object Search.
- Unified AI + NVR + VMS System Reduces Integration Time and Cost.
- Real-Time Edge Inference Avoids Bandwidth Strain and Cloud Dependency.
- Proven Scalability with Nationwide Security Service Provider.

Technologies Involved

- CLIP (Contrastive Language-Image Pretraining)
- Feature Vector Search
- NVR
- VMS



中興保全科技 TAIWAN SECOM COMPANY LTD. × YUAN

Smart City : Event-Aware Surveillance with Vision-Language AI

Use Case : Real-time Scene Understanding and Text-Based Incident Retrieval

Challenge

Traditional AI NVR systems have long relied on object detection models—such as YOLO—combined with rule-based logic to identify potential threats or unusual behaviors. This workflow depends heavily on large volumes of labeled training data and hand-tuned logic trees, making it difficult to scale or adapt to dynamic, real-world situations.

In complex urban environments involving natural disasters, infrastructure failures, or public disturbances, isolated object detection offers limited context. It may miss important semantic cues, leading to false negatives or irrelevant alerts. For operators, the cycle of data labeling, retraining, and rule adjustment becomes costly, slow, and ultimately unsustainable.

Solution

YUAN worked with a national security solutions provider to reimagine smart city surveillance using Vision-Language Models (VLMs) deployed on the VPP6N0-S PSE AGX 64GB—an edge AI NVR system built on Jetson AGX Orin, delivering up to 275 TOPS of compute and 64GB memory.

By integrating VLMs into the NVR software, the system no longer depends on labeled bounding boxes or manual logic trees. Instead, pre-prompted VLM pipelines convert each video frame into natural language descriptions—automatically identifying events such as landslides, scaffold collapses, tree falls, or public altercations.

These AI-generated scene summaries allow the NVR to trigger real-time alerts based on contextual understanding—not just object presence. In addition, post-prompt querying enables operators to search historical footage using free-form text, such as :
“Was there any sign of smoke in the north forest zone this morning?”
This approach vastly improves operator efficiency and expands system flexibility.

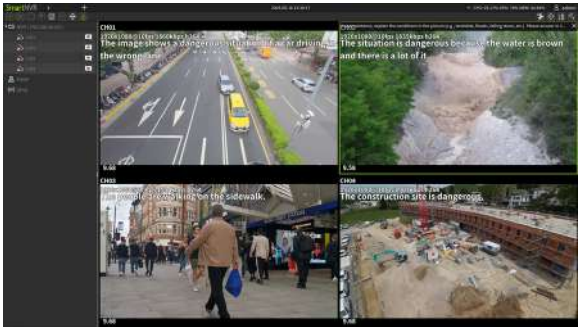
To support deployment, the VPP6N0-S PSE AGX 64GB integrates 8-channel IP camera input with PSE, plus full NVR recording and VMS-based remote control—forming a unified edge AI system that simplifies fragmented smart city surveillance architectures.

Why it Works

- VLMs Deliver Contextual Scene Understanding without Fixed Object Taxonomies.
- Natural Language Interface Supports both Live Alerting and Forensic Investigation.
- Edge Deployment Eliminates Bandwidth Delays and Cloud Dependency.
- All-in-One Platform (AI + NVR + VMS) Accelerates Integration and Scaling.
- AIS + AI Integration Improves Vessel Recognition and Anomaly Detection.
- MAVLink Control Supports Autonomous Missions with Minimal Infrastructure.

Technologies Involved

- Vision-Language Model (VLM)
- Pre-prompt & Post-prompt Inference
- NVR
- VMS



中興保全科技 TAIWAN SECOM COMPANY LTD. × YUAN

Smart City : Deep Search AI for Smart City VMS Systems

Use Case : Semantic Video Search Across Hundreds of Channels

Challenge

In modern control centers—whether in airports, transit hubs, or large commercial zones—video management systems (VMS) often aggregate feeds from dozens to hundreds of cameras. While tools like event dashboards, maps, and tagging interfaces enhance operator awareness, these systems remain largely passive and human-reliant.

As incident-driven demands increase, clients expect operators to quickly retrieve relevant video segments across multiple locations and timeframes. Manual review is time-consuming, prone to oversight, and scales poorly as camera counts grow. Traditional NVR systems are ill-equipped to handle proactive, semantic-level search over large video datasets.

Solution

To solve this, YUAN introduced Deep Search, an AI-powered semantic video indexing system built on the VPP6N0 IGX 700, a high-performance edge computing platform based on NVIDIA Jetson IGX Orin. With up to 1705 TOPS of AI compute and native 100 Gbps networking, the system enables efficient high-volume parallel search across hundreds of live and recorded channels.

At the core of the solution is the integration of Vision-Language Models (VLMs) into the VMS environment. These models convert visual content into semantic feature vectors, allowing operators to search using natural language queries—such as "a person carrying a blue duffel bag" or "a truck entering from the north gate"—without pre-defined object categories or manual tagging.

The Deep Search engine performs interval-based scanning across multi-day, multi-camera recordings stored in distributed NVRs. By semantically indexing keyframes, it enables cross-time, cross-location video analysis, transforming hours of footage into structured, searchable insights.

This architecture has already been deployed in international airport control rooms, enabling teams to trace specific persons or incidents within minutes, regardless of how many cameras are involved or where the footage is stored.

Why it Works

- VPP6N0 IGX 700 Delivers Unmatched Compute + Network Capacity for VMS-Scale AI.
- VLM-Based Indexing Enables Zero-Shot, Language-Driven Search.
- Deep Search Scans Across Time, Location, and Camera Feeds Simultaneously.
- Seamless Integration with Existing VMS / UIs Speeds Up Adoption and Deployment.

Technologies Involved

- Anything Detection / RAG
- IMU / RTK
- SLAM / NAV
- MAVLink / ROS

LEKUMA × hti × YUAN

Smart City : AI-Powered E-Cargo Bike for Smart Urban Mobility

Use Case : Real-Time Road Intelligence and Adaptive Rider Assistance

Challenge

Urban cargo bike adoption is growing rapidly, driven by green transport goals and last-mile delivery demands. However, e-cargo bikes face unique safety and usability challenges : heavier loads, denser traffic interactions, and limited smart automation. Riders must frequently adjust gears, power assist, and suspension based on real-time changes in terrain, cargo weight, and traffic—creating cognitive burden and raising accident risks.

Most current e-cargo solutions remain mechanically focused, lacking integration with AI-enhanced safety systems or automated control. There's a clear need for a platform that intelligently assists riders, reduces manual input, and improves situational awareness in complex city environments.

Solution

YUAN deployed the VPP6N0-S USB NX 16GB, a compact Jetson Orin NX-based edge AI platform, as the onboard compute core for an intelligent e-cargo bike. With support for multi-sensor input and high-throughput USB camera integration, the system enables real-time road perception and rider-assistance functions without cloud dependency.

By combining camera-based vision, IMU, wheel/torque sensors, and optional biometric inputs, the platform runs a suite of AI-enhanced modules that include :

- Forward Collision Warning + Auto Deceleration.
- Blind Spot & Rear Traffic Alerts.
- Lane Drift Detection.
- Fatigue Monitoring Via Motion Patterns.

ADAS Safety Features :

- Forward Collision Warning + Auto Deceleration
- Blind Spot & Rear Traffic Alerts
- Lane Drift Detection
- Fatigue Monitoring Via Motion Patterns

All inference is performed locally on the Orin NX, ensuring low-latency response for control and safety. The VPP6N0-S USB NX 16GB provides both the performance and I/O flexibility required to support these sensor and compute-intensive applications in a compact, rugged form factor.

Why it Works

- Local AI Inference Enables Real-Time Adaptation to Road and Rider Conditions.
- USB-Centric Design Supports wide Sensor Variety (Cameras, IMUs, Control Modules).
- Eliminates Need for Manual Configuration in Terrain, Load, or Safety Adjustments.
- Enhances Rider Confidence, Reduces Accidents, and Optimizes Energy Usage.

Technologies Involved

- Multi-Sensor Fusion
- ADAS for E-Mobility
- AI Pedal Assist
- 2D Vision + IMU Integration

Sansei × FANUC × YUAN

Industrial and Automated : Real-Time Robotic Picking with 3D Vision and Edge AI

Use Case : Multi-Arm Automation via Surface Normal Estimation and Dynamic Grasp Planning

Challenge

In flexible manufacturing environments, robotic systems must adapt to a constantly changing variety of items—often presented in unpredictable orientations or without predefined locations. Traditional automation relies on either manual teaching or AI models trained on static datasets, both of which are time-consuming and difficult to scale.

To support high-mix production and minimize system setup time, manufacturers required a real-time, dataset-free picking solution capable of integrating with existing PLC infrastructure while supporting multi-arm synchronization and variable product handling.

Solution

YUAN collaborated with SANSEI, a leading industrial automation integrator, to co-develop a next-generation robotic picking system powered by Jetson Orin NX 16GB, deployed through the VPP6N0-S-W PSE NX 16GB platform. With built-in DI/DO interfaces, the system integrates seamlessly with industrial PLCs and enables precise coordination across multiple robotic arms.

The vision module converts standard 2D camera feeds into real-time 3D workspace reconstructions. Using surface normal estimation, the system calculates grasp points dynamically—allowing robots to autonomously pick objects of varying shapes and orientations, all without pretraining or manual intervention.

This plug-and-play architecture transforms robotic work cells into adaptive automation units, capable of handling unstructured environments and diverse parts. Deterministic DI/DO signaling ensures tight timing control, while Orin NX delivers responsive, low-latency AI inference at the edge—eliminating the need for server-based processing.

Why it Works

- 2D-to-3D Modeling Enables Surface-Based, Real-Time Grasp Planning.
- No Pretraining Required—Supports on-the-Fly Deployment.
- DI/DO Interfaces Ensure Reliable PLC Synchronization Across Robotic Arms.
- Powered by Jetson Orin NX, Integrated into VPP6N0-S-W PSE NX 16GB for Edge-Ready Deployment.

Technologies Involved

- 3D Vision from 2D Inputs
- Surface Normal Estimation
- Real-Time Grasp Planning
- DI/DO PLC Synchronization

Healthcare : AI-Driven Patient Monitoring in Smart Healthcare

Use Case : VLM-Based Behavior Analysis for Aging and Understaffed Care Environments

Challenge

As aging populations rise and workforce shortages deepen, hospitals and long-term care facilities are under growing strain. A single nurse is increasingly responsible for more patients than ever before, creating imbalanced workloads and increased safety risks. Traditional AI approaches—such as pose-based CNNs—struggle to interpret the complex, subtle, and multi-modal behaviors that occur in real hospital rooms.

These algorithms often lack the context-awareness needed to understand unpredictable patient actions, post-surgical reactions, or irregular movement patterns—particularly in cluttered medical environments. This makes AI deployments difficult to scale and unreliable in real-world clinical settings.

Solution

YUAN developed a purpose-built edge AI platform for healthcare, combining the VPP6N0-S AIO NX 16GB edge system with the SC400N1 M.2 AIO capture card. This compact integration supports HDMI, VGA, and IP video input, enabling seamless acquisition of real-time footage from room-installed cameras as well as medical-grade monitoring equipment—such as ECG displays and pulse oximeters.

To overcome the limitations of conventional models, the system runs a locally hosted Vision-Language Model (VLM) with up to 8 billion parameters, leveraging the compute power of Jetson Orin NX 16GB. This allows the platform to interpret hospital room video streams in context—not only identifying motion, but understanding actions such as sudden patient collapse, abnormal postural changes, or unusual behavior at night.

By integrating multi-modal inputs from both video and medical devices, the system provides a semantic understanding of patient conditions and generates alerts that are context-rich and actionable. Edge deployment ensures that sensitive data remains on-premises, preserving patient privacy while minimizing cloud dependency.

Why it Works

- VLM Enables Semantic Understanding of Complex, Unstructured Patient Behavior.
- HDMI / VGA / IP Interfaces Support both Camera Feeds and Medical Equipment Input.
- Orin NX 16GB Provides Sufficient Compute for Running 8B-Parameter VLM Models Locally.
- Edge Deployment Ensures Real-Time Response and Medical Data Security.

Technologies Involved

- VPP6N0-S AIO NX16GB
- SC400N1 M.2 AIO
- Jetson Orin NX
- 8B Vision-Language Model (VLM)
- HDMI / VGA / IP Capture
- Patient Behavior Analysis
- Edge AI for Healthcare

Healthcare : Real-Time Surgical Imaging over 100Gbps+ Fiber with NVIDIA Holoscan Sensor Bridge

Use Case : Unified Video Acquisition and AI Inference in the Operating Room

Challenge

In modern operating rooms, surgeons must simultaneously monitor multiple high-resolution video sources—such as endoscopy, ultrasound, fluoroscopy, microscopy, and vital signs monitors. These devices often use different physical interfaces (HDMI, SDI, DP, DVI, proprietary protocols), and their outputs are routed through fragmented, latency-prone systems with limited AI integration.

Traditional signal routers and encoders introduce compression artifacts, latency, and synchronization issues—making them unsuitable for real-time AI analysis in critical medical scenarios. To achieve edge AI-assisted decision-making, hospitals need a solution that can ingest uncompressed video from any source and deliver it directly into the GPU memory—in real time, over fiber, with zero delay.

Solution

YUAN, in collaboration with NVIDIA, developed a high-performance optical video transport solution based on the Holoscan Sensor Bridge (HSB) standard. The system is optimized for surgical imaging applications requiring lossless, low-latency data delivery to edge AI devices.

Two fiber modules were introduced:

HDMI2.0 / 12G-SDI to HSB 4K : A converter that transmits uncompressed 4K60 video from medical-grade SDI or HDMI devices
Multi to HSB 4K : A versatile interface supporting DP, DVI, Dual-Link, HDMI, SDI, and CoreLink, aggregating multiple sources into unified fiber output

All video data is streamed directly to Jetson IGX-based VPP6N0 IGX 700 via dual 100Gbps+ optical interfaces, supporting multiple uncompressed 4K60 4:2:2 8-bit video streams.

Inside the IGX platform, GPUDirect RDMA enables direct transfer of video frames into GPU memory—bypassing system bottlenecks and enabling real-time inference for AI models focused on anomaly detection, instrument tracking, and surgical event classification.

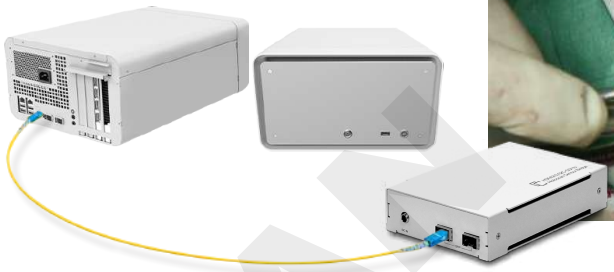
This architecture turns the IGX into a central surgical AI hub, consolidating visual data from across the OR into one low-latency pipeline, enhancing clinical accuracy while simplifying integration and reducing hardware overhead.

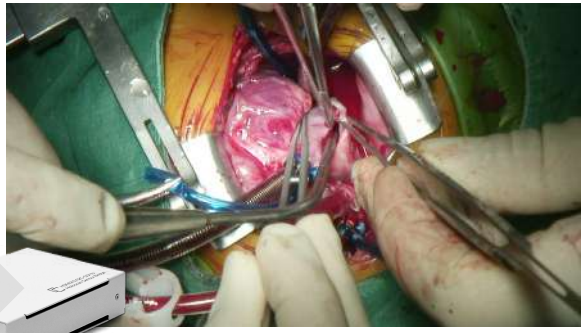
Why it Works

- Holoscan Sensor Bridge Unifies Diverse Video Inputs Via Fiber with Zero Compression.
- 100Gbps+ Optical Interfaces Deliver Multi-Channel 4K Video at Full Resolution.
- GPUDirect RDMA Enables Instant GPU access without Memory Copy Overhead.
- Designed for AI-Powered Surgical Guidance, Video Analytics, and Long-Term Data Archiving.
- MAVLink Control Supports Autonomous Missions with Minimal Infrastructure.

Technologies Involved

- Holoscan Sensor Bridge
- GPUDirect RDMA
- 100Gbps+ Optical Fiber





Application : AI-Enhanced SDVoE Imaging in the Operating Room

Use Case : Low-Latency 4K60 Video Ingest from SDVoE into Jetson Orin Platforms

Challenge

The SDVoE protocol has rapidly become the global standard for 4K60 medical video transport in modern surgical suites. Built on 10Gbps copper or fiber, SDVoE systems allow high-quality imaging devices to transmit video via encoders to remote decoders connected to displays—providing low-latency, visually lossless transmission.

However, SDVoE is architecturally closed and point-to-point, lacking native support for integration with AI inference systems. This limits its usefulness in environments where real-time video analysis, documentation, or intelligent routing is required. Without a way to bridge SDVoE and edge computing platforms, its role remains confined to image delivery, not interpretation.

Solution

To overcome this, YUAN introduced a powerful AI-compatible SDVoE capture framework built on Jetson Orin platforms, using two product lines :

- PIX6N0 SDVoE AGX 64GB for high-performance batch inference
- AIR6N0 SDVoE NX 16GB for lightweight, compact deployments

Both systems are equipped with YUAN's proprietary SDVoE DB capture module, which enables direct SDVoE signal ingestion into Jetson Orin devices. With GPUDirect RDMA, uncompressed 4K60 video can be ingested into CUDA memory with just 15µs latency—establishing a true sensor-to-inference pipeline.

Additionally, by leveraging SDVoE's native video processing capabilities, a single 10Gbps copper or fiber link can deliver up to 16 split-screen video channels in one multiplexed feed. These channels are decoded into a composite video frame and then processed using Jetson Orin's batch inference mode, allowing the AI system to process all 16 channels simultaneously.

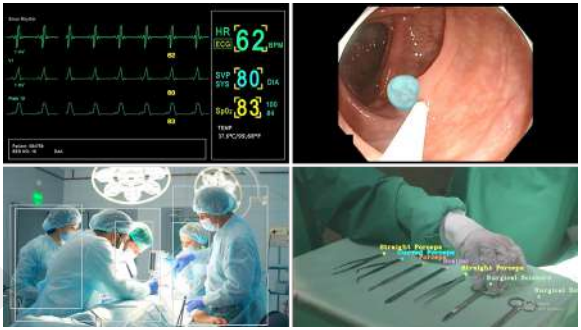
This batch-optimized architecture has demonstrated up to a 40% improvement in per-algorithm processing efficiency, by reducing GPU context-switching overhead and maximizing inference throughput—ideal for multi-view surgical monitoring, endoscope fleet analysis, or instrument usage tracking.

Why it Works

- Proprietary SDVoE Capture Module Brings SDVoE Video Into the AI Domain.
- 15µs Latency GPUDirect RDMA Enables Instant Access to CUDA Memory.
- 16-Channel SDVoE Multiplexing Supports Ultra-Efficient Batch Processing.
- Jetson Orin Platforms Deliver Compact, Deployable AI Capability in the OR.

Technologies Involved

- SDVoE
- GPUDirect RDMA
- Batch Inference Optimization



昭和医科大学 SHOWA Medical University × YUAN

Application : 2D-to-3D Surgical Training with Generative AI

Use Case : AI-Powered 3D Visualization for Medical Education

Challenge

In modern surgical procedures, 3D visualization has become indispensable—supporting precise spatial awareness, enhancing dexterity, and laying the groundwork for robot-assisted systems like the da Vinci surgical platform. For medical students, early exposure to 3D imaging is critical in building surgical intuition and readiness for next-generation tools.

However, professional-grade 3D medical systems—such as 3D endoscopes and stereoscopic microscopes—are expensive and limited in supply. Most medical schools and training hospitals cannot afford to equip multiple learning stations, depriving students of hands-on experience during their formative years.

Solution

With the rapid advancement of generative AI and monocular depth estimation, it is now possible to reconstruct real-time 3D spatial data from standard 2D surgical video—but only with significant compute power.

YUAN collaborated with Professor Sato of Showa University (Japan) to deploy a GPU-accelerated edge AI solution using the VPP6N0 IGX 700, powered by RTX 6000 Ada and delivering up to 1705 TOPS of edge compute capability.

This performance headroom allowed the entire 2D-to-3D depth reconstruction pipeline to operate at under 15 milliseconds, resulting in only a single-frame delay—critical for applications in surgical simulation and live instruction.

By feeding 2D endoscopic or microscopic video into a real-time 2D-to-3D AI model, the system reconstructs depth-aware 3D video, allowing students to view enhanced 3D surgical scenes on conventional displays, without the need for costly native 3D imaging hardware.

This approach dramatically reduces the barrier for 3D training adoption, enabling medical schools to upgrade their educational infrastructure with minimal cost, while equipping future surgeons with the spatial skills needed for advanced robotic and minimally invasive surgery.

Why it Works

- Generative AI Converts Live 2D Video Into Depth-Rich 3D Views in Real-Time.
- 1705 TOPS Compute Ensures Full Pipeline Latency is Kept Under 15ms.
- Enables Cost-Effective 3D Training Using Existing 2D Medical Devices.
- Already Deployed in Clinical Training at Showa University, Japan.

Technologies Involved

- 2D-to-3D Depth Estimation
- Generative AI
- Monocular Spatial Reconstruction
- RTX 6000 Ada
- Jetson IGX
- VPP6N0 IGX 700
- Medical Education AI
- Low-Latency Surgical Simulation

Let's Reshape Video Intelligence - Together.

指定代理店

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