



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

Expert in Tailoring Diverse Intelligent Video Solutions

[www.yuan.com.tw / platform](http://www.yuan.com.tw/platform)

About YUAN

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

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

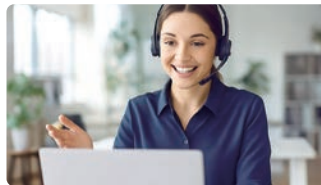
But technology alone is not enough. We believe technology is the foundation, and service brings it to life. We work closely with our customers, solving problems and strengthening their systems. Even the smallest issues matter to us, because in fields like healthcare, broadcasting, and automation stability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

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

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



Technology



Service



Reliability



Trust

Intelligent Video Processing Platform

Support Every Stage of Video AI Development



Platform Product Line

Capture Board



Carrier Board



Computer System



Completed Hardware & Software Integration



We Can



Capture Card

HDMI / SDI / DVI / VGA / TVI



Camera

GMSL / MIPI / GigE / USB / PoE



Multi-Link

4G / 5G / WiFi / IMU



SDK Service

NexVDO SDK



BSP Service



OEM / ODM

Our 5 Core Systems



Near Series

Built on the NVIDIA® AGX 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.



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.



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.



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.

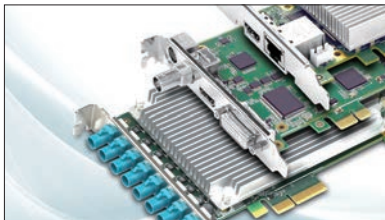
With built-in Wi-Fi, 4G, and 5G connectivity, it's ideal for smart surveillance, industrial inspection, and mobile AI vision.



Feature / Technology



Professional HW/SW Customization Services



Flexible Video Input Configurations



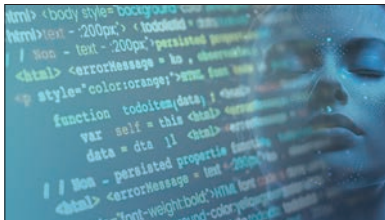
Various Camera Module Integration
(GMSL, MIPI, GigE, PoE, SDI, TVI, ...)



Broad Compatibility with Different NVIDIA Jetpack Versions

High-Performance Streaming	Image Processing	Deep Learning	Video Processing	Audio Processing	Display Processing	Network Processing	Storage Processing	Security Processing	System Management
High-Performance Streaming	Image Processing	Deep Learning	Video Processing	Audio Processing	Display Processing	Network Processing	Storage Processing	Security Processing	System Management
Capture	Record	Stream	Analysis						

Efficient Video Processing Capabilities



Pre-Trained Models : Traditional/Generative AI



Advanced AV1 4:4:4 Codec Core



NVIDIA® GPUDirect® and GPUDirect® RDMA Technology



Exclusive 5G Low-Latency Streaming Technology



Multi-Layers Security and Encryption

Peripheral Module



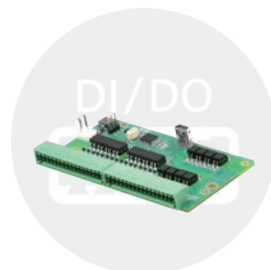
Video Capture I/O



USB3.X



PSE



DI/DO



SATA



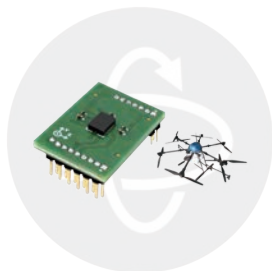
CAN Bus



4G/5G



Wi-Fi



IMU / GNSS



OOB



EtherCAT

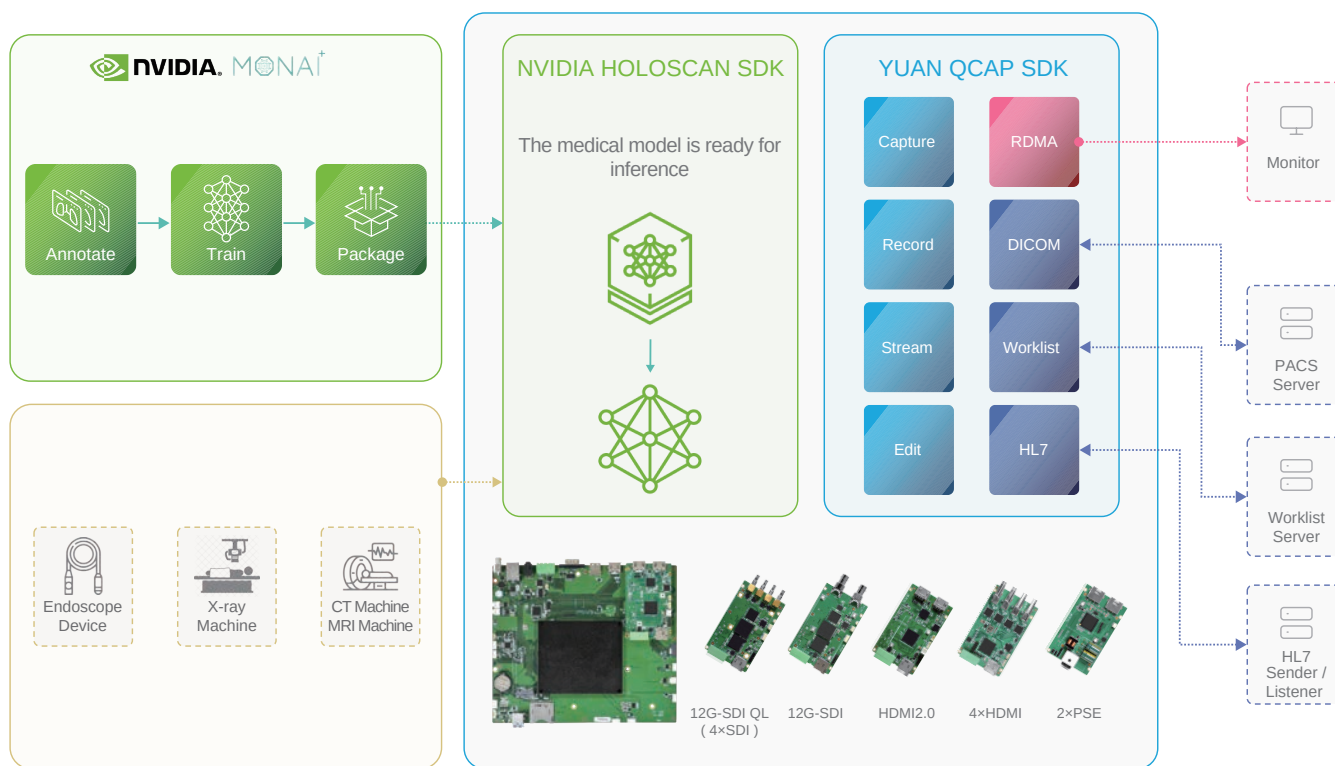
Professional Video SDK Function Block

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

▷NexVDO SDK

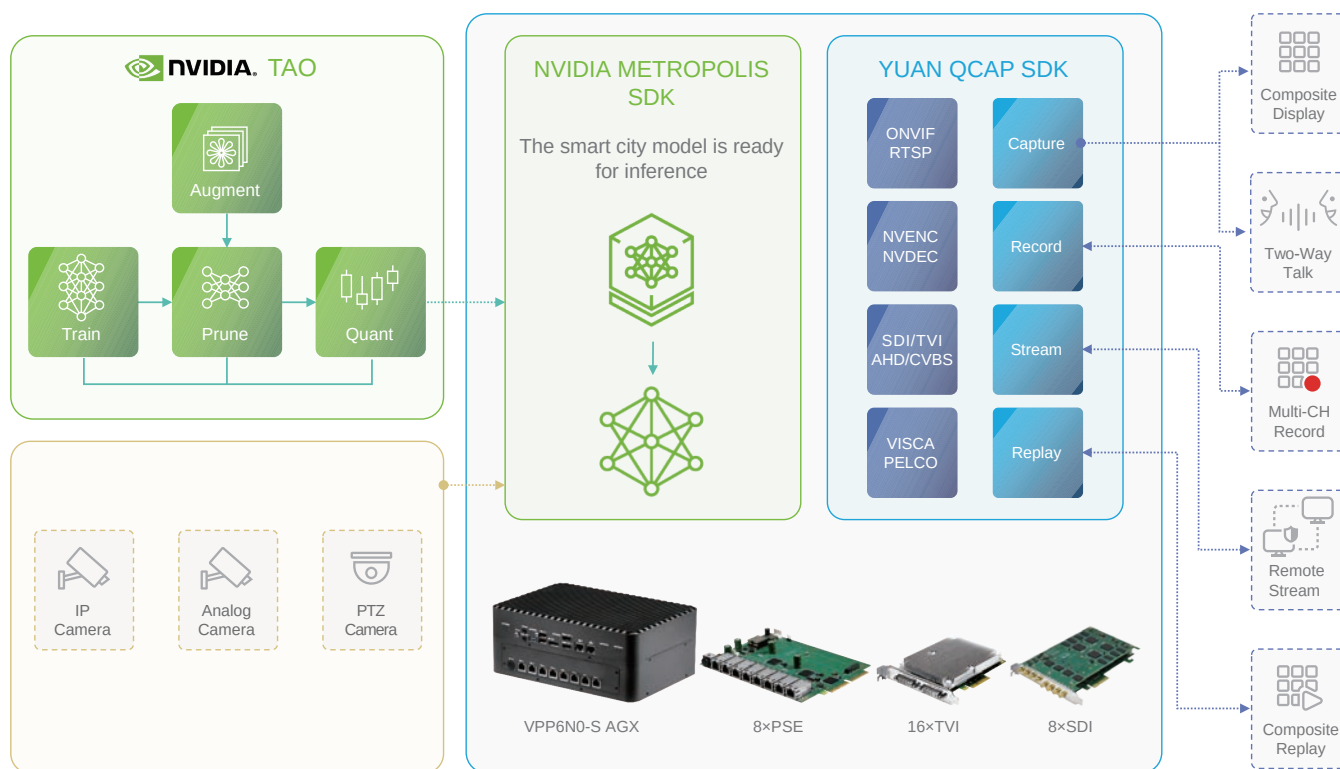
SDK Developer Kit

Healthcare Solution



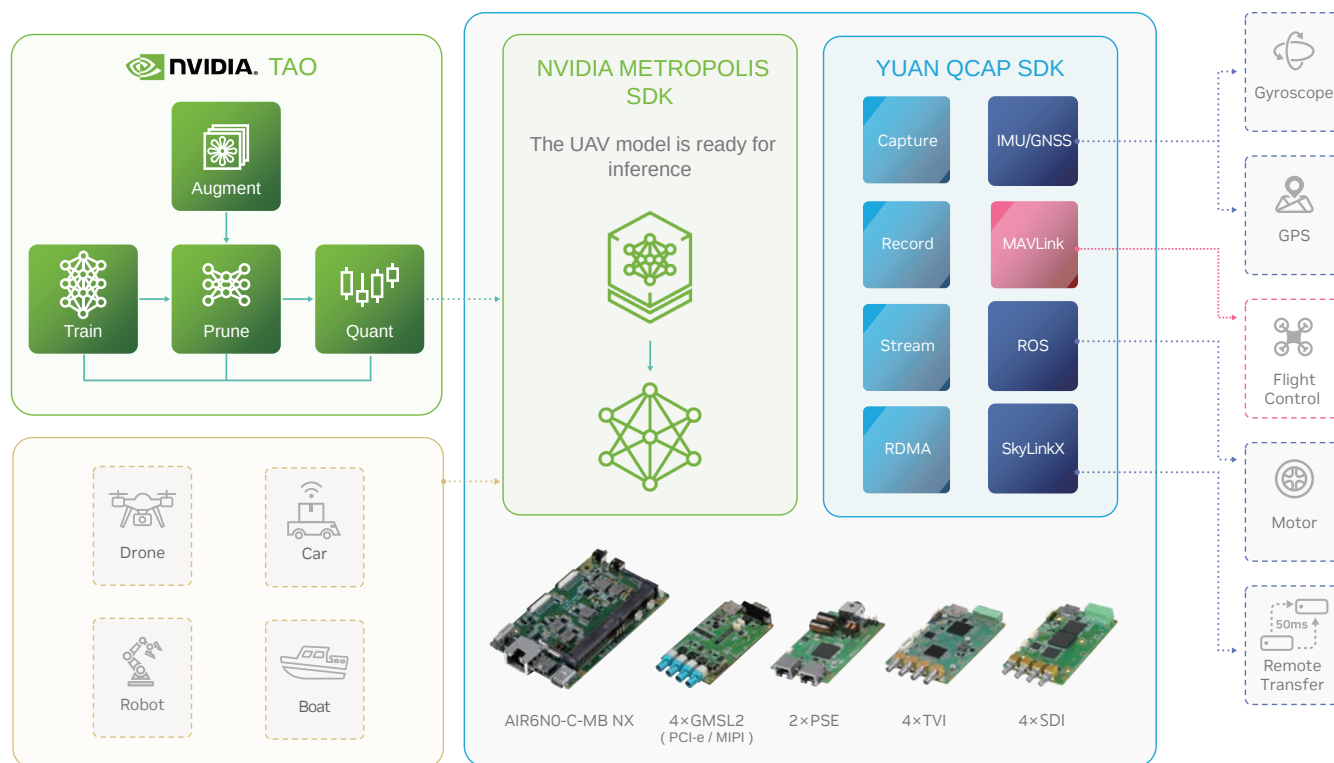
SDK Developer Kit

Smart City Solution



SDK Developer Kit

Industrial and Automation Solution



Application Scenario



Broadcasting



Education & Developer



Healthcare



Industrial and Automation



Primary Industry



Retail



Robot & Drone



Smart City



Transportation



Computer System for NVIDIA® Jetson™

Different Edge AI Built with NVIDIA Advanced Embedded Systems

Same Dimension Carrier Board as Official Dev Kit

Near / Edge / Air / Eye / Pixel Series

Pre-Installed Jetpack

Products Overview

Near Series

- 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

Edge (AGX) Series

- 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

Edge (NX) Series

- Jetson Orin™ NX Super
- Fanless / Fan Both Design
- 3×M.2 M Key
- 4×USB3.2
- CAN Bus / UART / I2C / SPI

Air Series

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

Eye Series

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

Pixel Series

- 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



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



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
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

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

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	8×GMSL2	8×PSE (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	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



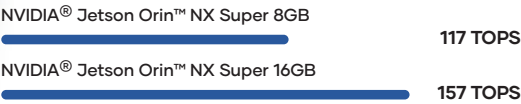
VPP6N0-S AGX PSE

Edge (NX) Series



Feature

- Jetson Orin™ NX Super
- Fanless / Fan Both Design
- 3×M.2 M Key
- 4×USB3.2
- CAN Bus / UART / I2C / SPI



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	8×GMSL2	4×PSE (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	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



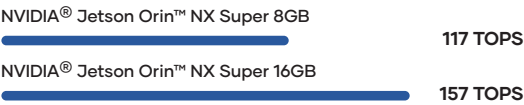
VPP6N0-S-W NX PSE

Edge (NX) Series



Feature

- Jetson Orin™ NX Super
- Fanless / Fan Both Design
- 3×M.2 M Key
- 4×USB3.2
- CAN Bus / UART / I2C / SPI



Model Name	VPP6N0-S NX	VPP6N0-S NX GMSL	VPP6N0-S 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	4×GMSL2	4×PSE (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	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	144mm×98mm×80.6mm	144mm×98mm×102.2mm	144mm×98mm×102mm

Products Images



VPP6N0-S NX



VPP6N0-S NX GMSL

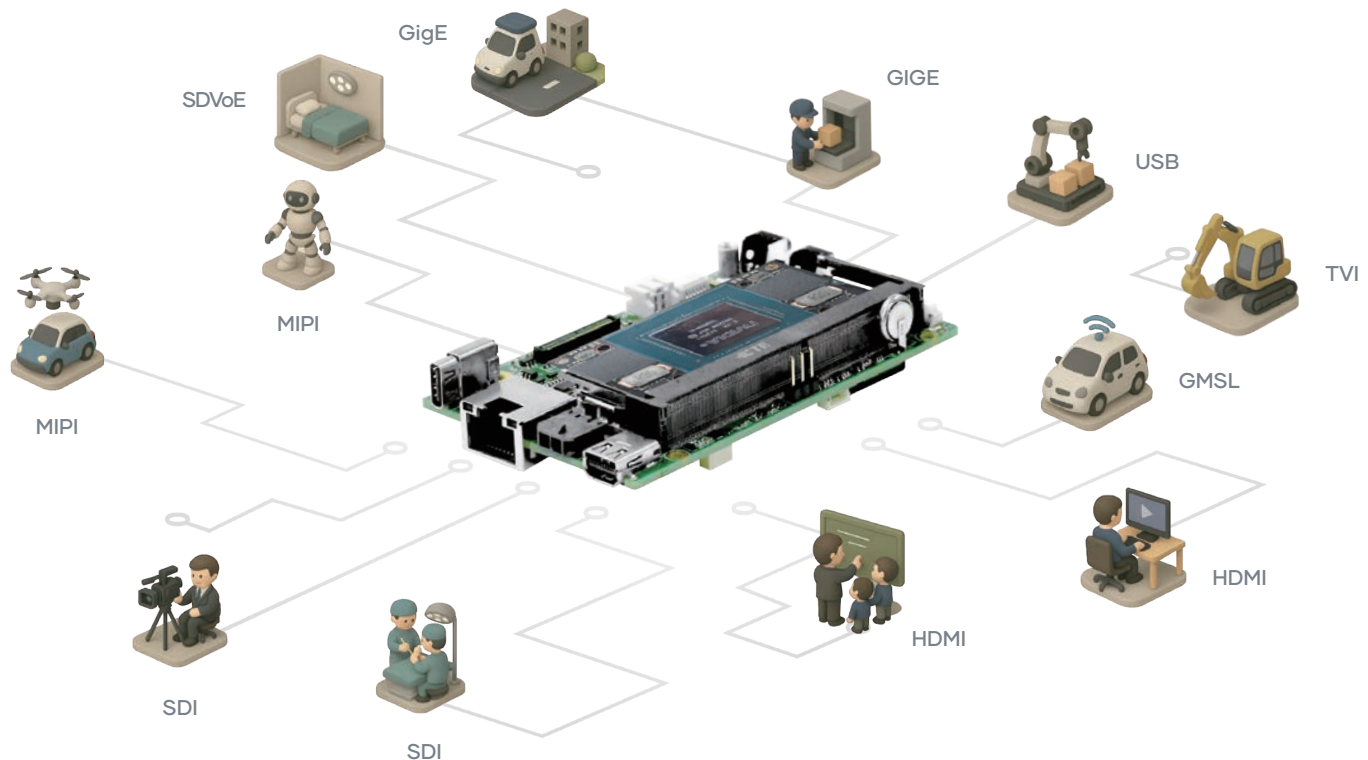


VPP6N0-S NX PSE



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



Feature

- Jetson Orin™ NX Super
- 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 NX TRX
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.19)	Support by I/O Daughter Board (Page.19)	Support by I/O Daughter Board (Page.19)
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	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	211.2mmx153.7mmx44.5mm

Products Images



AIR6N0-C NX



AIR6N0-C-W NX



AIR6N0-C NX TRX

Air Series - I/O Daughter Boards



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



AIR6N0-C-DB NX 12G-SDI



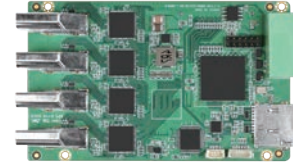
AIR6N0-C-DB NX 12G-SDI QL



AIR6N0-C-DB NX HDMI2.1



AIR6N0-C-DB NX HDMI2.0



AIR6N0-C-DB NX 4xHDMI



AIR6N0-C-DB NX SDVoE-C
SDVoE ALLIANCE



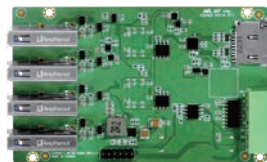
AIR6N0-C-DB NX 4xGMSL2
(PCI-e / MIPI)



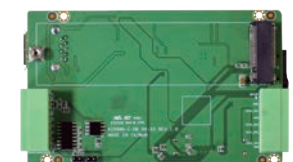
AIR6N0-C-DB NX 4xTVI



AIR6N0-C-DB NX 2xGIGE



AIR6N0-C-DB NX 4xUSB3.2



AIR6N0-C-DB NX I/O

About Eye



The YUAN Eye series combines the NVIDIA® Jetson Orin™ NX Super AI platform with Sony STARVIS 2 sensors, offering solutions for industrial inspection and smart smart city applications. An all-in-one design integrates the sensor, ISP, AI module, and I/O, simplifying deployment and improving stability. PCIe architecture supports 4K60 RGB444 capture for accurate color and fast transfer. All models support the QDEEP AI model for fast, intelligent image processing.

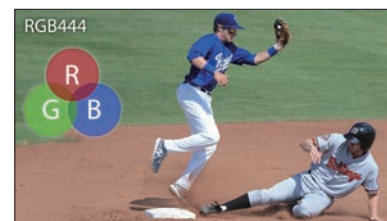
- EYE6N0-I678 : Interchangeable lenses and high-speed processing for precision industrial tasks.
- EYE6N0-S678 : Autofocus, night vision, and waterproofing for outdoor use.



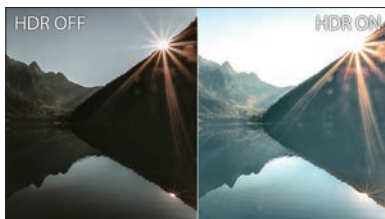
Flexible C-Mount with Zoom Lens



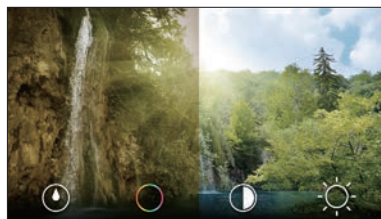
Built-in Sony STARVIS-2 Sensor



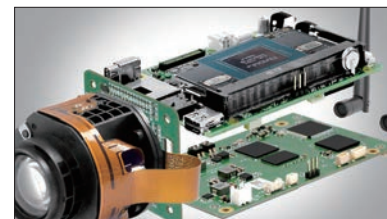
High-Bandwidth DMA PCIe Design for RGB 4:4:4



Hardware ISP with HDR Support



Built-in ISP Tuning Tool



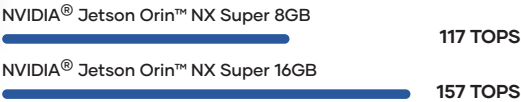
All-in-One Compact Design

Eye Series



Feature

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



Model Name	EYE6N0-S678	EYE6N0-I08M678R	EYE6N0-I08M585R
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
Video Encode	1×4K60 (Orin NX) + 1×4K60 (ISP)	1×4K60 (Orin NX) + 1×4K60 (ISP)	1×4K60 (Orin NX) + 1×4K60 (ISP)
Focal Length	Auto Focus 10.2mm (W) ~ 29.5mm (T)	C/CS-Mount	C/CS-Mount
Sensor Model / Size	Sony IMX678 / CMOS 1/1.8"	Sony IMX678 / CMOS 1/1.8"	Sony IMX585 / CMOS 1/1.1"
Exposure Mode	Rolling Shutter	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 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	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi	4G / 5G / Wi-Fi
Dimensions	100mmx100mmx230mm	94.15mm×90mmx81.5mm	94.15mm×90mmx81.5mm

Products Images



EYE6N0-S678



EYE6N0-I08M678R



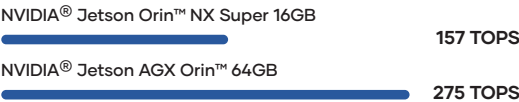
EYE6N0-I08M585R

Pixel Series



Feature

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



Model Name	Pixel AGX	Pixel NX
NVIDIA Platform	Jetson AGX Orin™ 64GB / 32GB	Jetson Orin™ NX Super 16GB / 8GB
AI Performance	275 / 200 TOPS	157 / 117 TOPS
Display	10" Touch Screen 1×HDMI2.0	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.19)	Support by I/O Daughter Board (Page.19)
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

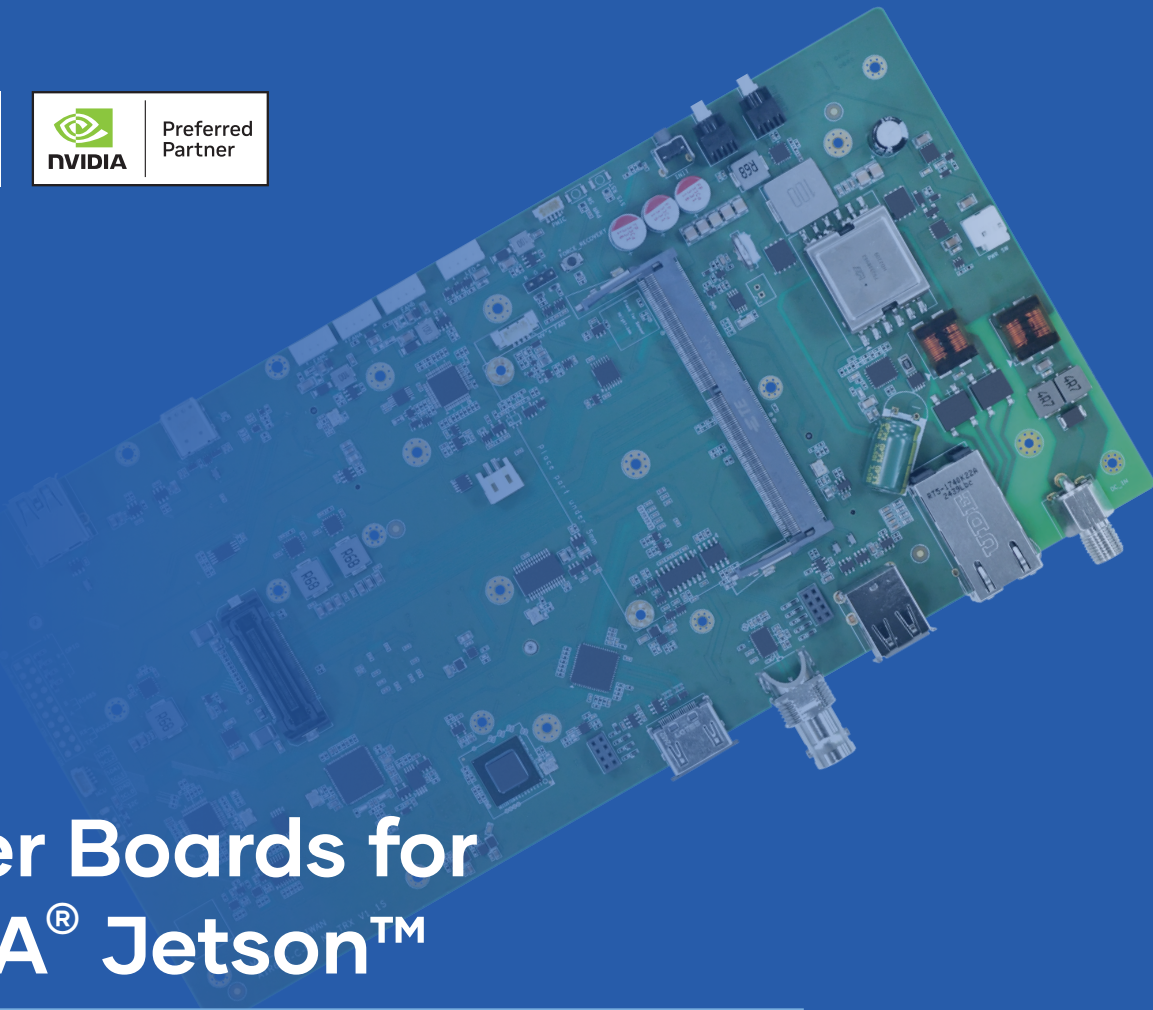
Products Images



Pixel AGX

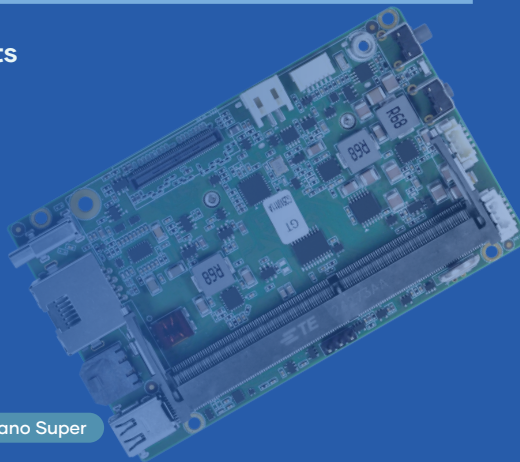


Pixel NX



Carrier Boards for NVIDIA® Jetson™

Designed for Different Edge AI Deployments



Various Form Factors

Diverse I/O Connectivity Options

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

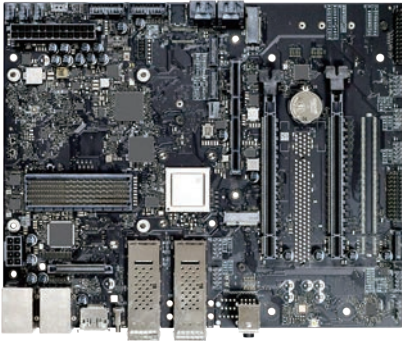
Carrier Boards - Near Series

VPP6N0-MB IGX 700

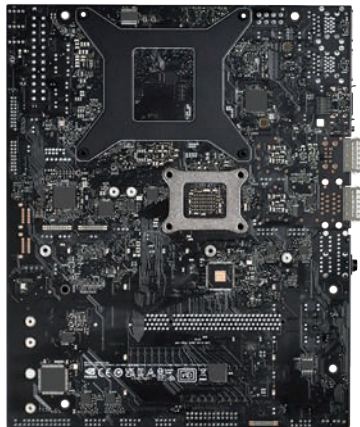
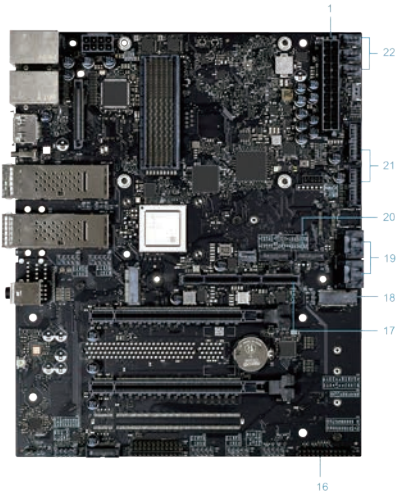
Provide 1705 TOPS of AI Computing

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 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

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

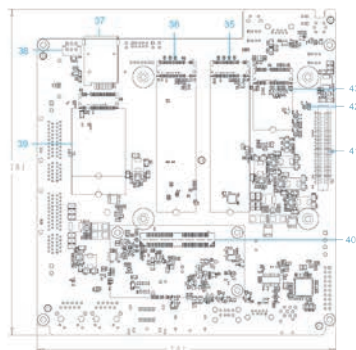
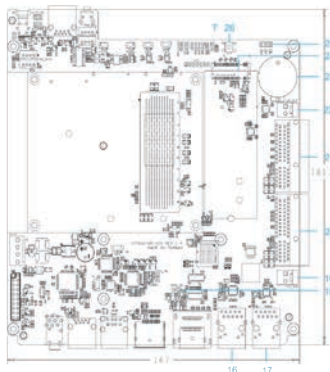
GPU NVIDIA Jetson AGX Orin™ 32GB
1792-Core NVIDIA Ampere Architecture
GPU with 56 Tensor Cores

GPU 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
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)

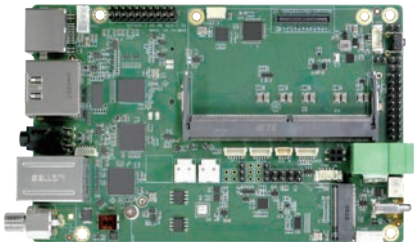
Carrier Boards - Edge (NX / Nano) Series

VPP6N0-S-MB NX / Nano

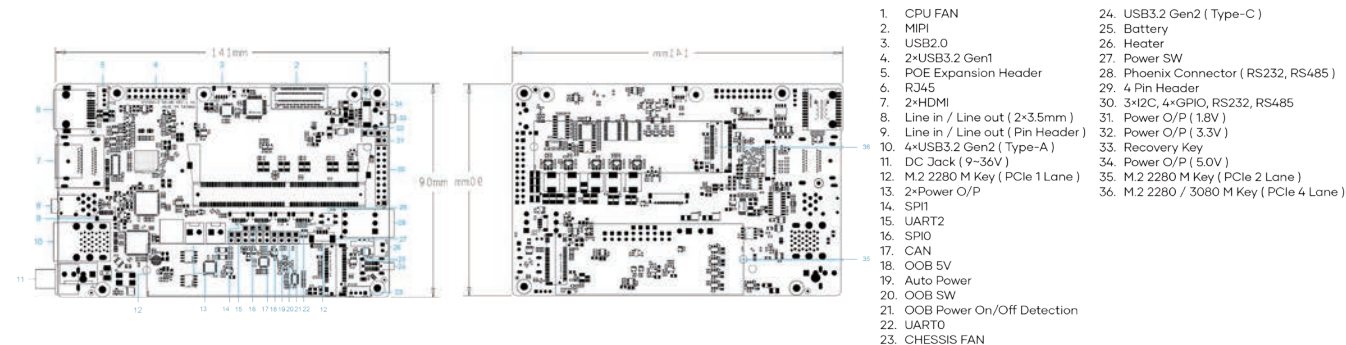
Compact Edge AI Platform

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™ Nano 4GB 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 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™ Nano 4GB Super 512-Core NVIDIA Ampere Architecture GPU with 16 Tensor Cores
	NVIDIA® Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	NVIDIA Jetson Orin™ Nano 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores
AI Performance	157 / 117 TOPS	67 / 34 TOPS
System Memory	16 / 8GB LPDDR5	8 / 4GB LPDDR5
Dimensions	140mm×90mm	140mm×90mm



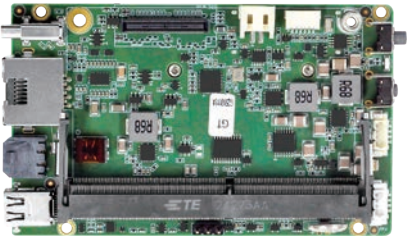
Carrier Boards – Air (NX / Nano) Series

AIR6N0-C-MB NX / Nano

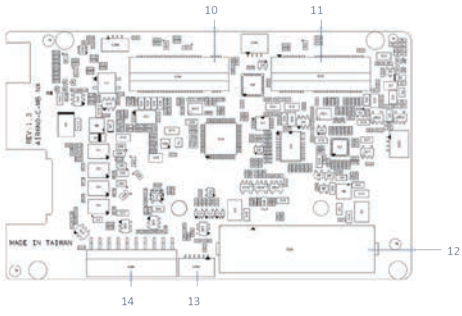
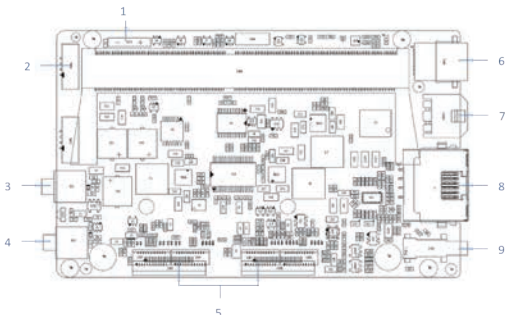
Business Card Size AI Edge Motherboard

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™ Nano 4GB 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 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™ Nano 4GB Super 512-Core NVIDIA Ampere Architecture GPU with 16 Tensor Cores
	NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or 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

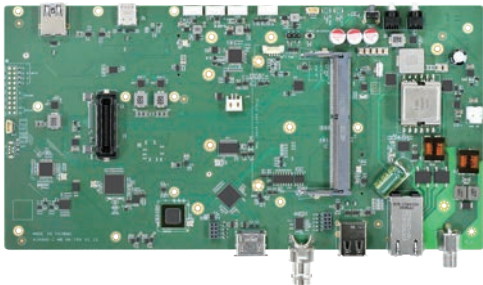
Carrier Boards – Air (TRX) Series

AIR6N0-C-MB NX TRX

4K60 AV1 & NDI Transceiver with AI

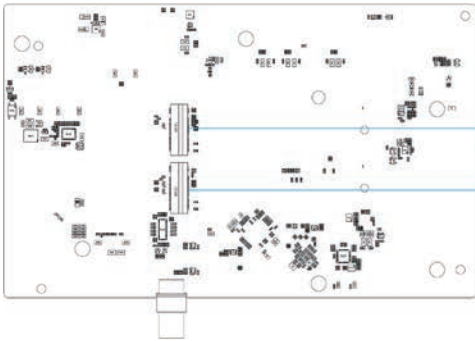
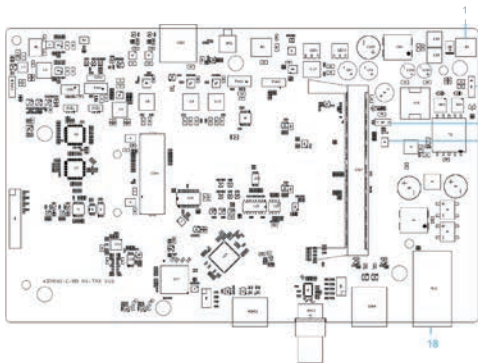
Feature

- 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 NX TRX**

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)

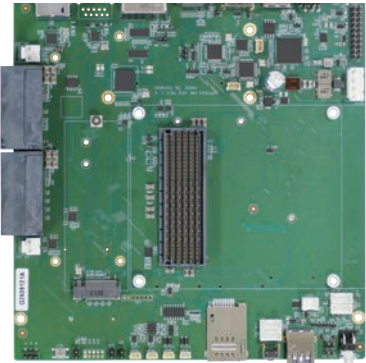
Carrier Boards - Pixel (AGX) Series

PIX6N0-MB AGX

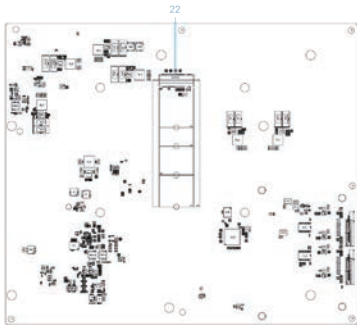
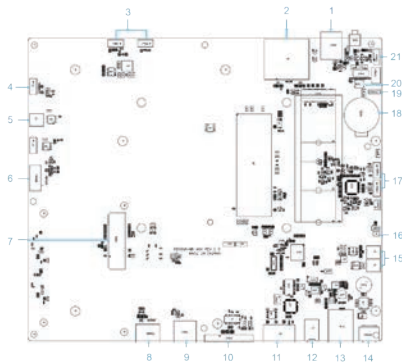
Medical-Grade AI Platform

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)

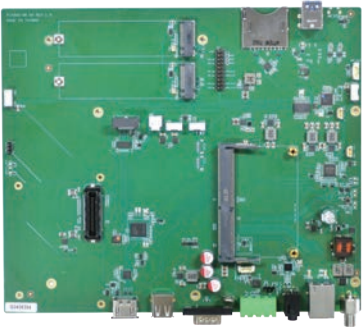
Carrier Boards - Pixel (NX) Series

PIX6N0-MB NX

Medical-Grade AI Platform

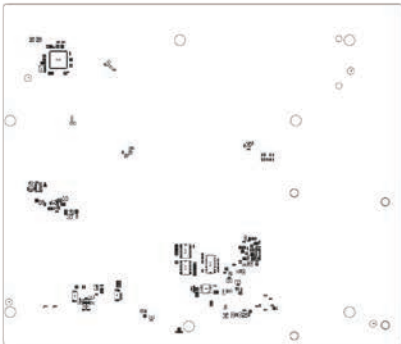
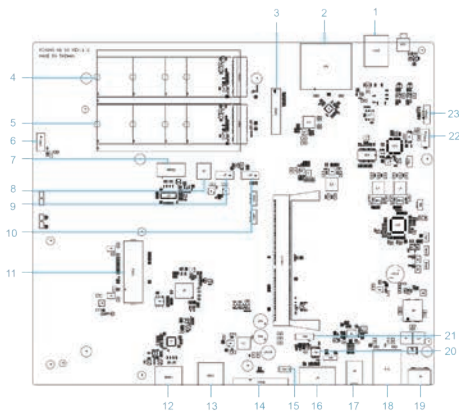
Feature

- 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 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 1×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

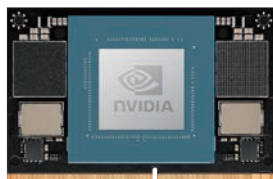
Carrier Boards Comparison (II)

Model				
Product Name	AIR6N0-C-MB NX	AIR6N0-C-MB NX TRX	PIX6N0-MB AGX	PIX6N0-MB NX
CPU	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex® A78AE v8.2 64 Bit CPU 1.5MB L2 + 4MB L3	NVIDIA Jetson Orin™ NX 8GB Super 6-Core Arm® Cortex® A78AE v8.2 64 Bit CPU 1.5MB L2 + 4MB L3	NVIDIA Jetson AGX Orin™ 32GB 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 16GB Super 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 16GB Super 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	NVIDIA Jetson Orin™ NX 8GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores	NNVIDIA Jetson Orin™ NX 8GB 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 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 Tens or Cores	NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tens or Cores	NVIDIA Jetson AGX Orin™ 64GB 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores	NVIDIA Jetson Orin™ NX 16GB Super 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores
AI Performance	157 / 117 TOPS	157 / 117 TOPS	275 / 200 TOPS	157 / 117 TOPS
Display	1×Mini DP1.4	1×HDMI2.0 1×12G-SDI (Optional)	2×HDMI2.0 1×HDMI2.0 (Internal)	2×HDMI2.0 1×HDMI2.0 (Internal)
System Memory	16 / 8GB LPDDR5	16 / 8GB LPDDR5	64 / 32GB LPDDR5	16 / 8GB LPDDR5
Expansion	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)	M2 1×M.2 2280 M Key PCIe (G4×4) 1×M.2 2280 M Key PCIe (G4×4)	M2 1×M.2 2280 M Key PCIe (G4×1) 1×M.2 2280 M Key PCIe (G4×2)
Dimensions	90mm × 55mm	203.6mmx126.1mm	224.15mm×191.2mm	224.15mm×191.2mm

NVIDIA Jetson Family

Jetson Orin™ Super Mode

Jetson Orin™ NX
16GB (Super)
157 TOPS



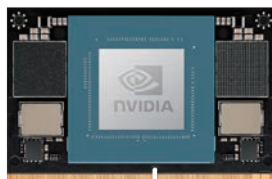
10W | 15W | 25W | 40W

Jetson Orin™ NX
8GB (Super)
117 TOPS



10W | 15W | 25W | 40W

Jetson Orin™ Nano
8GB (Super)
67 TOPS



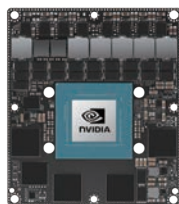
7W | 15W | 25W

Jetson Orin™ Nano
4GB (Super)
34 TOPS



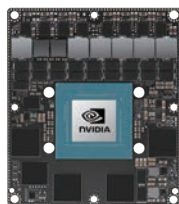
7W | 10W | 25W

Jetson AGX Orin™
64GB
275 TOPS



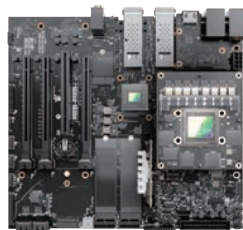
15W | 30W | 50W | 60W

Jetson AGX Orin™
32GB
200 TOPS



15W | 30W | 40W

IGX Orin™ 700
64GB
1705 TOPS



Up to 400W

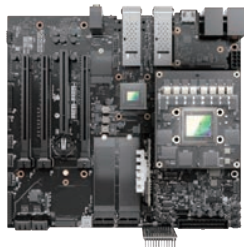
IGX Orin™ 500
64GB
248 TOPS



15W~75W

Module Specifications

IGX Orin™ 700
64GB
1705 TOPS



Up to 400W

IGX Orin™ 500
64GB
248 TOPS

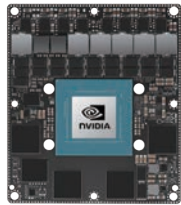


15W~75W

	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

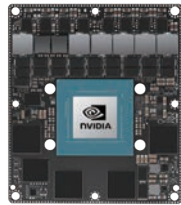
Module Specifications

Jetson AGX Orin™
64GB
275 TOPS



15W | 30W | 50W | 60W

Jetson AGX Orin™
32GB
200 TOPS



15W | 30W | 40W

	Jetson AGX Orin™ 64GB	Jetson AGX Orin™ 32GB
Performance	275 TOPS	200 TOPS
GPU	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	8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
Memory	64GB 256-Bit LPDDR5 204.8 GB/s	32GB 256-Bit LPDDR5 204.8 GB/s
Storage	64GB eMMC 5.1	
Encode	2×4K60 (H.265)	1×4K60 (H.265)
Decode	1×8K30 (H.265)	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 ~ 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



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