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NEOUSYS TECHNOLOGY

Edge AI GPU Computing Platform

Flexible and Powerful GPU-aided Computing for Advanced Applications

www.neousys-tech.com

Ahead of the Curve - Industrial Edge AI GPU Computing Platform

Based in Taiwan, Neousys Technology is a global leading manufacturer and provider of industrial edge AI GPU computing platforms.

With Expertise in industrial embedded systems and edge AI applications, Neousys continues to innovate and create patented technologies to be incorporated into industrial solutions. Designing and manufacturing industrial-grade rugged embedded systems and modules for over a decade, Neousys offers the most reliable and innovative embedded solutions on the market.

As one of the pioneers in industrial GPU computing, Neousys offers industry-leading platforms ranging from volatile environment demanding Tesla/ Quadro in SEMIL systems, mainstream dual/ single RTX 30 series graphics card configurations to power-efficient platforms supporting dual Google TPUs to satisfy a variety of edge AI workloads.

Currently an NVIDIA® Jetson™ ecosystem partner, Tesla-Qualified Server, the sole collaborating IPC hardware vendor for Baidu Apollo 2.0 and a trusted partner around the globe in various vertical markets, you can find Neousys Technology industrial edge AI GPU computing platforms in manufacturing, intelligent transportation, marine, medical, agriculture, autonomous aerial, autonomous ground vehicles and more.

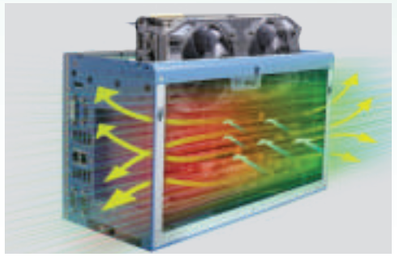
NVIDIA TESLA QUALIFIED SERVER

NVIDIA PREFERRED PARTNER

Why Choose Neousys ?

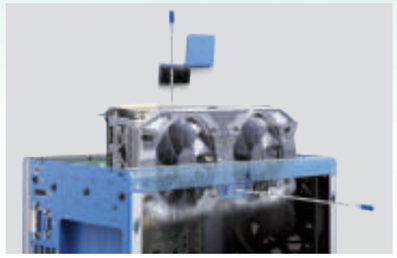
Complete GPU Support

Ranging from RTX 30 series, Tesla, Quadro, Jetson™ Xavier to Google TPU for high-performance or power-efficient applications.



Patented Thermal Design

Offering better heat distribution and dissipation for optimal performance to prevent CPU/ GPU from throttling.



Adaptive GPU Bracket

The patented adaptive GPU bracket ensures installed graphics cards are always secured in position to withstand shock and vibration.

Patented Damping Bracket

The patented damping bracket effectively absorbs shock and vibration up to 3Grms for reliable and stable operations.

Multi-GPUs via Single Wide-range DC Input

Accepting a wide range DC input from 8 to 48V, and requires only a single source of power input to sustain operation for dual high end RTX 30 series GPU cards.

Ignition Power Control

Built-in ignition control to safely shutdown and startup the system.

Rich I/Os with Screw-lock Mechanism

Available with an abundance of I/Os and screw-lock mechanism for reinforced connections.

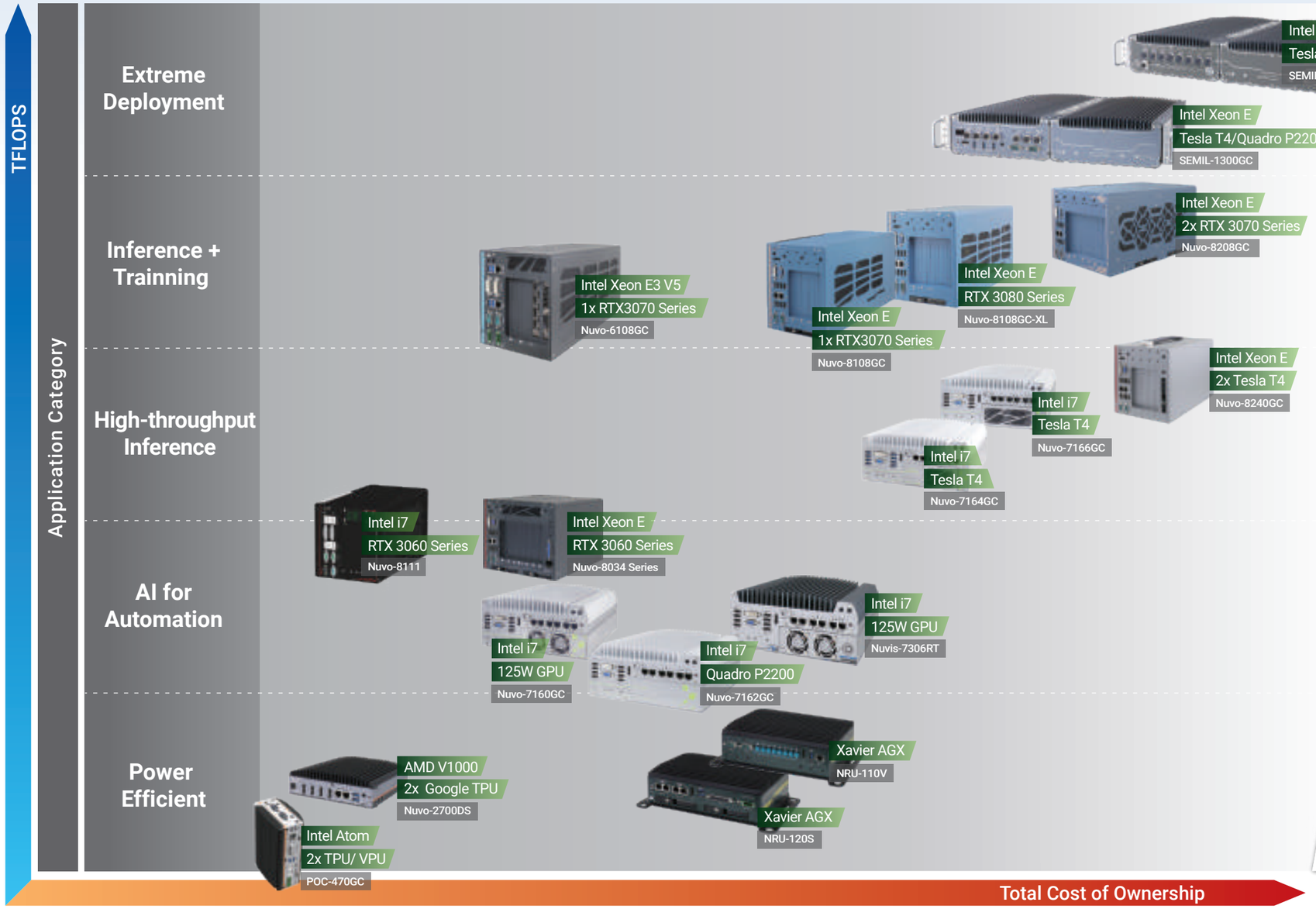
Expansion Capability

PCIe/ PCI add-on slots allow for connectivity or functionality expansion.

Versatile Edge AI GPU Platforms and Currently in Service

Addressing requirements for a variety of applications, Neousys offers a complete lineup of embedded edge AI GPU platforms that are powered by NVIDIA GPUs. Utilizing NVIDIA® Tensor cores, Neousys ruggedized edge AI platforms range from the environment demanding Tesla/ Quadro inference accelerators, mainstream cost-effective RTX 30 series graphic cards in dual or single configuration to the power-efficient Jetson™ Xavier. All Neousys systems are optimized to bring out the efficiency and efficacy in AI training, and precision in complex deep learning computations. Coupled with patented innovative industrial embedded designs, performances are maximized to dramatically boost your edge AI applications.

Supporting up to an Intel® Xeon® E or 9th/ 8th-Gen Core™ CPU, Neousys edge AI computing solutions offer unparalleled performances with true wide-temperature operation capabilities to ensure CPU/ GPU do not thermal-throttle under harsh conditions. With an array of ruggedized solutions, Neousys edge AI GPU computing solutions can be found in image/ video analysis, deep learning machine vision, autonomous machines, and more.



Reference Application

Industrial Vehicles

Featuring extreme-ruggedness, unique fanless thermal design, IP67 waterproof with Tesla T4 or Quadro P2200 inference accelerator, they are capable of operating in volatile environmental conditions.

Autonomous Vehicles

Supporting up to dual NVIDIA® RTX 30 Series to produce up to dual 59 TFLOPs in FP32, the platform features patents proven by Baidu Apollo that offer reliability and accelerated inference capabilities.

Medical Imaging & IVA

As the most compact NVIDIA® Tesla qualified server, it supports up to dual Tesla T4s for a maximum of 260 TOPS in INT8 computations and thrives at complex parallel workloads.

NVIDIA TESLA QUALIFIED SERVER

Factory AI Automation

By utilizing deep learning computer vision to detect, identify or classify objects and coupled with I/O cards, you can build cost-effective and reliable 24/7 fully automated production systems.

AMR & Law Enforcement

Featuring low power consumption, Google TPUs are designed specifically for image processing while Jetson Xavier delivers workstation graphics processing power to mobile devices.

NVIDIA PREFERRED PARTNER

Tesla T4

65 TFLOPS
Mixed-precision

NEW

SEMIL-1700GC

IP67 Waterproof GPU Computer Supporting NVIDIA® Tesla T4/ Quadro P2200 and Intel® Xeon® E or 9th/ 8th-Gen Core™ CPU with All M12 Connectors

- IP67 waterproof GPU computer with NVIDIA® Tesla T4 or Quadro P2200
- Intel® Xeon® E or 9th/ 8th-Gen Core™ i7/ i5/ i3 LGA1151 CPU
- Patented waterproof 2U 19" chassis for rack or wall-mount*
- Guaranteed non-throttling GPU performance up to 62°C ambient
- Up to eight 802.3at Gigabit PoE+ ports via M12 X-coded connectors
- VGA, USB 2.0 and COM ports via M12 A-coded connectors
- 8 to 48V wide-range DC input with built-in ignition power control
- MIL-STD-810G and EN 50155 certified

*R.O.C Patent No. I697759

*CN Patent Pending

Quadro P2200

GPU Longevity

NEW

Nuvo-7162GC

Ruggedized AI Inference Platform Supporting NVIDIA® Quadro P2200 and Intel® 9th/ 8th-Gen Core™ Processor

- Supports NVIDIA® Quadro P2200 GPU
- -25°C to 60°C wide-temperature operation, no GPU throttling up to 54°C
- Intel® 9th/ 8th-Gen Core™ hexa-core 35W/ 65W LGA1151 CPU
- 6x GigE ports, 802.3at PoE+ option available (ports 3 to 6)
- M.2 2280 M key NVMe (Gen3 x4) socket for fast storage access
- 4x USB 3.1 Gen2 ports and 4x USB 3.1 Gen1 ports
- Accommodates two 2.5” SATA HDD/ SSD with RAID 0/ 1 support
- MezIO™ interface for easy function expansion

RTX 30 Series

Up to 8704 CUDA Cores &
20 GB GDDR

NEW

Nuvo-8108GC-XL

Industrial-grade Edge AI Platform Supporting NVIDIA® RTX 30 Series GPU Card, Intel® Xeon® E and 9th/ 8th-Gen Core™ Processor

- Supports an NVIDIA® RTX 30 series graphics card up to RTX 3080
- Supports Intel® Xeon® E or 9th/ 8th-Gen Core™ i7/ i5 LGA1151 CPU
- Up to 128GB ECC/ non-ECC DDR4 2133 (4x SODIMM)
- One x16 (8-lanes), one x8 (4-lanes), Gen3 PCIe slots for add-on cards
- 2x M.2 B key and 3x full-size mini-PCIe sockets
- 8 to 48V wide-range DC input with built-in ignition power control
- Patented thermal design for -25°C to 60°C rugged operations*
- Patented damping brackets* to withstand 3 Grms vibration

AGX Jetson Xavier™

30W Low Power
Consumption

NEW

NRU-120S

NVIDIA® Jetson AGX Xavier™ AI NVR for Intelligent Video Analytics

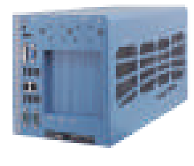
- Powered by NVIDIA® Jetson AGX Xavier™ SOM bundled with JetPack 4.4
- 4x IEEE 802.3at Gigabit PoE+ ports with screw-lock
- 2x front-accessible, hot-swappable 2.5" HDD trays
- 1x M.2 2280 M key socket for NVMe SSD
- 1x mini PCIe socket for WiFi/4G module
- 1x isolated CAN bus port and 1x RS232 port with flow control
- 1x GPS PPS input, 3-CH isolated DI and 4-CH isolated DO
- 8 to 35V wide-range DC input with built-in ignition power control

NVIDIA PREFERRED PARTNER

GPU Computing Platform Specification Table



Extreme Deployment				
	Model Name	SEMIL-1744GC/ SEMIL-1724GC	SEMIL-1748GC/ SEMIL-1728GC	SEMIL-1341GC/ SEMIL-1321GC
Chassis	Dimensions (W x D x H)	440 x 310 x 86.5 mm	440 x 310 x 86.5 mm	440 x 310 x 86.5 mm
	Weight	12 kg	12.2 kg	12 kg
	Chassis Construction	Aluminum alloy with stainless steel /waterproof	Aluminum alloy with stainless steel /waterproof	Aluminum alloy with stainless steel
	IP Rating	IP67	IP67	IP4X
System	Processor	Intel® Xeon® E-2176G/ E-2278GE/ E-2278GEL Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	Intel® Xeon® E-2176G/ E-2278GE/ E-2278GEL Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	Intel® Xeon® E-2176G/ E-2278GE/ E-2278GEL Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T
	Acceleration GPU	NVIDIA® Tesla T4 (SEMIL-1744GC) NVIDIA® Quadro P2200 (SEMIL-1724GC)	NVIDIA® Tesla T4 (SEMIL-1748GC) NVIDIA® Quadro P2200 (SEMIL-1728GC)	NVIDIA® Tesla T4 (SEMIL-1341GC) NVIDIA® Quadro P2200 (SEMIL-1321GC)
	Chipset	Intel® C246	Intel® C246	Intel® C246
	Graphics	Intel® UHD Graphics 630	Intel® UHD Graphics 630	Intel® UHD Graphics 630
	Memory	Up to 64 GB DDR4-2666/ 2400	Up to 64 GB DDR4-2666/ 2400	Up to 64 GB DDR4-2666/ 2400
I/O Interface	PoE	1x IEEE 802.3at (25.5W) by Intel I219 (M12 X-coded) 3x IEEE 802.3at (25.5W) by Intel I210 (M12 X-coded)	1x IEEE 802.3at (25.5W) by Intel I219 (M12 X-coded) 7x IEEE 802.3at (25.5W) by Intel I210 (M12 X-coded)	1x IEEE 802.3at (25.5W) by Intel I219 (M12 X-coded) 3x IEEE 802.3at (25.5W) by Intel I210 (M12 X-coded)
	10GbE Port	Optional 1x 10G port (M12 X-coded)	Optional 1x 10G port (M12 X-coded)	Optional 1x 10G port (M12 X-coded)
	Video Port	1x VGA (M12 A-coded)	1x VGA (M12 A-coded)	1x VGA (M12 A-coded) 1x DisplayPort
	Serial Port	2x RS-232 ports (M12 A-coded)	2x RS-232 ports (M12 A-coded)	2x RS-232 ports (M12 A-coded) 1x RS-232/422/485 1x RS-232
	USB 2.0	2x USB 2.0 (M12 A-coded) 1x USB 2.0 (internal)	4x USB 2.0 (M12 A-coded) 1x USB 2.0 (internal)	2x USB 2.0 (M12 A-coded) 1x USB 2.0 (internal)
	USB 3.1	-	-	3
	Audio	-	1x Mic-in and speaker-out (M12 A-coded)	1x Mic-in and speaker-out
	Digital I/O	-	-	-
Storage Interface	SATA HDD	2	2	2
	mSATA	2	2	2
	M.2 (M-key)	1	1	1
	Mini PCI-E	2 (mux with mSATA)	4 (mux with mSATA)	2 (mux with mSATA)
Expansion Bus	M.2 (B-key/ E-Key)	-	-	1x M.2 B-key 1x M.2 E-key
	SIM	2	2	4
	MezIO™	-	-	-
	PCI/PCI Express	1x PCIe with NVIDIA® Tesla T4 pre-installed (SEMIL-1744GC) 1x PCIe with NVIDIA® Quadro P2200 pre-installed (SEMIL-1724GC)	1x PCIe with NVIDIA® Tesla T4 pre-installed (SEMIL-1748GC) 1x PCIe with NVIDIA® Quadro P2200 pre-installed (SEMIL-1728GC)	1x PCIe with NVIDIA® Tesla T4 pre-installed (SEMIL-1341GC) 1x PCIe with NVIDIA® Quadro P2200 pre-installed (SEMIL-1321GC)
Power Supply	DC Input	8 to 48V DC (M12 S-coded)	8 to 48V DC (M12 S-coded)	8 to 48V DC
	Ignition Control	Built-in	Built-in	Built-in
Environmental	Operating Temperature	**with 35W CPU** -25°C~ 70°C **with >= 65W CPU** -25°C~70°C (configured as 35W TDP mode) -25°C~ 50°C (configured as 65W TDP mode)	**with 35W CPU** -25°C~ 70°C **with >= 65W CPU** -25°C~70°C (configured as 35W TDP mode) -25°C~ 50°C (configured as 65W TDP mode)	**with 35W CPU** -25°C~ 70°C **with >= 65W CPU** -25°C~70°C (configured as 35W TDP mode) -25°C~ 50°C (configured as 65W TDP mode)
	Certification	EN 50155, CE/ FCC, MIL-STD-810G	EN 50155, CE/ FCC, MIL-STD-810G	EN 50155, CE/ FCC, MIL-STD-810G

Inference + Training					
	Model Name	Nuvo-8208GC	Nuvo-8108GC-XL	Nuvo-8108GC	Nuvo-6108GC
Chassis	Dimensions (W x D x H)	235 x 360 x 186 mm	193 x 388 x 198 mm	170 x 360 x 198 mm	167 x 360 x 174 mm
	Weight	8.6 kg	5.2 kg	5 kg	4.7 kg
	Chassis Construction	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal
System	Processor	Intel® Xeon® E-2176G/ E-2278GE/ E-2278GEL Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	Intel® Xeon® E-2176G/ E-2278GE/ E-2278GEL Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	Intel® Xeon® E-2176G/ E-2278GE/ E-2278GEL Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	Intel® Xeon™ E3-1275 v5 Intel® Xeon™ E3-1268L v5 Intel® Core™ i7- 6700/ 6700TE Intel® Core™ i5- 6500/ 6500TE
	Chipset	Intel® C246	Intel® C246	Intel® C246	Intel® C236
	Graphics	x16 PEG port, or Intel® HD Graphics 630	x16 PEG port, or Intel® HD Graphics 630	x16 PEG port, or Intel® UHD Graphics 630	x16 PEG port, or Intel® HD Graphics 530
	Memory	Up to 128 GB DDR4-2133	Up to 128 GB DDR4-2133	Up to 128 GB DDR4-2133	Up to 32 GB DDR4-2133
I/O Interface	PoE	-	-	-	-
	Ethernet	1x GbE by Intel® I219 1x GbE by Intel® I210	1x GbE by Intel® I219 1x GbE by Intel® I210	1x GbE by Intel® I219 1x GbE by Intel® I210	1x GbE by Intel® I219 1x GbE by Intel® I210
	Video Port	1x VGA 1x DVI-D 1x DisplayPort	1x VGA 1x DVI-D 1x DisplayPort	1x VGA 1x DVI-D 1x DisplayPort	2x DVI-D
	Serial Port	2x RS-232/422/485	2x RS-232/422/485	2x RS-232/422/485	2x RS-232/422/485
	USB 2.0	1 (internal)	1 (internal)	1 (internal)	1 (internal)
	USB 3.1	8	8	8	4
	Audio	1x Mic-in and speaker-out	1x Mic-in and speaker-out	1x Mic-in and speaker-out	1x Mic-in and speaker-out
	Digital I/O	-	-	-	-
Storage Interface	SATA HDD	2x Hot-swap tray for 2.5" HDD/ SSD	1x 2.5" HDD/ SSD 1x Hot-swap tray for 2.5" HDD/ SSD	1x 2.5" HDD/ SSD 1x Hot-swap tray for 2.5" HDD/ SSD	4x 2.5" HDD/ SSD
	mSATA	2 (mux. with mini-PCIe)	2 (mux. with mini-PCIe)	2 (mux. with mini-PCIe)	-
	M.2 (M-key)	1	1	1	-
Expansion Bus	Mini PCI-E	2	2	2	1
	M.2 (B-key/ E-Key)	1	1	1	1
	SIM	4	4	4	1
	MezIO™	-	-	-	-
	PCI/PCI Express	2x PCIe x16 slot @ Gen3, 8-lanes supporting NVIDIA® RTX 30 series 2x PCIe x8 slots @ Gen3, 4-lanes 1x PCIe x4 slot @ Gen3, 1-lane (Installing a GPU card will obstruct one PCIe slot!)	1x PCIe x16 slot @ Gen3, 8-lanes supporting NVIDIA® RTX 3080 1x PCIe x16 slot @ Gen3, 8-lanes 2x PCIe x8 slots @ Gen3, 4-lanes (Installing a GPU card will obstruct one PCIe slot!)	1x PCIe x16 slot @ Gen3, 8-lanes supporting NVIDIA® RTX 30 series 1x PCIe x16 slot @ Gen3, 8-lanes 2x PCIe x8 slots @ Gen3, 4-lanes (Installing a GPU card will obstruct one PCIe slot!)	1x PCIe x16 slot @ Gen3, 16-lanes, supporting NVIDIA® RTX 3070 GPU 2x PCIe x8 slot @ Gen3, 4-lanes
Power Supply	DC Input	8 to 35V DC	8 to 48V DC	8 to 48V DC	24V DC
	Ignition Control	Built-in	Built-in	Built-in	-
Environmental	Operating Temperature	-25°C ~ 60°C	-25°C ~ 60°C	-25°C ~ 60°C	-25°C ~ 60°C
	Certification	CE/ FCC	CE/ FCC	CE/ FCC	CE/ FCC, UL 62368-1

GPU Computing Platform Specification Table









High-throughput Inference				AI for Automation		
Model Name		Nuvo-8240GC	Nuvo-7166GC/ 7164GC	Nuvo-8034	Nuvis-7306RT	Nuvo-7162GC
Chassis	Dimensions (W x D x H)	190 x 271 x 198.5 mm	240 x 225 x 111 mm	259 x 280 x 198 mm	240 x 225 x 111 mm	240 x 225 x 111 mm
	Weight	3.5 kg	4.5 kg	7 kg	4.5 kg	4.5 kg
	Chassis Construction	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal
System	Processor	Intel® Xeon® E-2176G/ E-2278GE/ E-2278GEL Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	Intel® Xeon® E-2176G/ E-2124G/ E-2278GE/ E-2278GEL Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T	Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T
	Chipset	Intel® C246	Intel® Q370	Intel® C246	Intel® Q370	Intel® Q370
	Graphics	Intel® UHD Graphics 630	Intel® UHD Graphics 630	Intel® HD Graphics 630, or x16 PEG port	Intel® UHD Graphics 630	Intel® UHD Graphics 630
	Memory	Up to 128 GB DDR4-2133	Up to 64 GB DDR4-2666/ 2400	Up to 128 GB DDR4-2133	Up to 64 GB DDR4-2666/ 2400	Up to 64 GB DDR4-2666/ 2400
I/O Interface	PoE	-	Optional (Port 3 to 6, IEEE 802.3at, 25.5W)	-	IEEE 802.3at (25.5W) for 4 GbE ports	Optional (Port 3 to 6, IEEE 802.3at, 25.5W)
	Ethernet	1x GbE by Intel® I219 1x GbE by Intel® I210	6x GbE by Intel® I219 and I210	1x GbE by Intel® I219 1x GbE by Intel® I210	6x GbE by Intel® I219 and I210	6x GbE by Intel® I219 and I210
	Video Port	1x VGA 1x DVI-D 1x DisplayPort	1x VGA 1x DVI-D 1x DisplayPort	1x VGA 1x DVI-D 1x DisplayPort	1x VGA 1x DVI-D 1x DisplayPort	1x VGA 1x DVI-D 1x DisplayPort
	Serial Port	2x RS-232/422/485	2x RS-232/422/485 2x RS-232	2x RS-232/422/485 2x RS-232 (optional)	2x RS-232/422/485 2x RS-232	2x RS-232/422/485 2x RS-232
	USB 2.0	1 (internal)	1 (internal)	1 (internal)	1 (internal)	1 (internal)
	USB 3.1	8	8	8	8	8
	Audio	1x Mic-in and speaker-out	1x Mic-in and speaker-out	1x Mic-in and speaker-out	1x Mic-in and speaker-out	1x Mic-in and speaker-out
	Digital I/O	-	Optional via MezIO™ module	8 DI + 8 DO	Patented DTIO/ NuMCU for real-time trigger control	Optional via MezIO™ module
Storage Interface	SATA HDD	1x 2.5" HDD/ SSD 1x Hot-swap tray for 2.5" HDD/ SSD	2x 2.5" HDD/ SSD	2x Hot-swap tray for 2.5" HDD/ SSD	2x 2.5" HDD/ SSD	2x 2.5" HDD/ SSD
	mSATA	2 (mux. with mini-PCIe)	1 (mux. with mini-PCIe)	2 (mux. with mini-PCIe)	1 (mux. with mini-PCIe)	1 (mux. with mini-PCIe)
	M.2 (M-key)	1	1	1	1	1
Expansion Bus	Mini PCI-E	2	1	2	1	1
	M.2 (B-key/ E-Key)	1	1	1	1	1
	SIM	4	3	4	3	3
	MezIO™	-	Yes	-	-	Yes
	PCI/PCI Express	2x PCIe x16 slot, supporting NVIDIA® Tesla T4 GPU 2x PCIe x8 slots @ Gen3, 4-lanes	1x PCIe x16 slot, supporting NVIDIA® Tesla T4 GPU (Nuvo-7164GC) 2x PCIe x16 slot, supporting NVIDIA® Tesla T4 GPU and one additional PCIe card (Nuvo-7166GC)	2x PCIe x16 slot @ Gen3, 8-lanes 2x PCIe x8 slots @ Gen3, 4-lanes 3x 33MHz/ 32-bit 5V PCI slots	2x PCIe x16 slot, supports - Independent NVIDIA® GPU (120W) - COTS CameraLink and CoaXPress camera interface card	1x PCIe x16 slot, supporting NVIDIA® Quadro P2200 GPU
Power Supply	DC Input	8 to 48V DC	8 to 35V DC	8 to 35V DC	8 to 35V DC	8 to 35V DC
	Ignition Control	Built-in	Optional via MezIO™ module	-	-	Optional via MezIO™ module
Environmental	Operating Temperature	-25°C ~ 60°C	**with 35W CPU** -25°C ~ 60°C **with 65W CPU** -25°C ~ 50°C	-25°C ~ 60°C	**with 35W CPU** -25°C ~ 60°C **with 65W CPU** -25°C ~ 50°C	**with 35W CPU and Quadro P2200** -25°C ~ 60°C **with 65W CPU and Quadro P2200** -25°C ~ 60°C (configured as 35W TDP mode) -25°C ~ 50°C (configured as 65W TDP mode)
	Certification	CE/ FCC	CE/ FCC	CE/ FCC	CE/ FCC	CE/ FCC

AI for Automation			Power Efficient		
Model Name		Nuvo-7160GC	NRU-110V	NRU-120S	Nuvo-2700DS
Chassis	Dimensions (W x D x H)	240 x 225 x 111 mm	230 x 173 x 66 mm	230 x 173 x 66 mm	173 x 174 x 50mm
	Weight	4.5 kg	2.7 kg	2.7 kg	1.6 kg
	Chassis Construction	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal
System	Processor	Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T	NVIDIA® Jetson AGX Xavier™	NVIDIA® Jetson AGX Xavier™	AMD Ryzen™ Embedded V1605B CPU
	Chipset	Intel® Q370	-	-	-
	Graphics	x16 PEG port, or Intel® UHD Graphics 630	-	-	Vega GPU with 8 compute units
	Memory	Up to 64 GB DDR4-2666/ 2400	32GB LPDDR4x @ 2133 MHz	32GB LPDDR4x @ 2133 MHz	Up to 64 GB DDR4-2400
I/O Interface	PoE	Optional (Port 3 to 6, IEEE 802.3at, 25.5W)	-	IEEE 802.3at (25.5W) for 4 GbE ports	-
	Ethernet	6x GbE by Intel® I219 and I210	1x 10GBASE-T 10G by Intel® X550-AT	-	2x GbE by Intel® I210
	Video Port	1x VGA 1x DVI-D 1x DisplayPort	2x DisplayPort	2x DisplayPort	4x DisplayPort
	Serial Port	2x RS-232/422/485 2x RS-232	1x RS-232	1x RS-232	2x RS-232 (COM1 in DB9, COM2 in RJ50)
	USB 2.0	1 (internal)	-	-	2
	USB 3.1	8	3	3	2
	Audio	1x Mic-in and speaker-out	-	-	1x Mic-in and line-out
	Digital I/O	Optional via MezIO™ module	1x GPS PPS, 3 DI + 4 DO	1x GPS PPS, 3 DI + 4 DO	Optional 4 DI + 4 DO
Storage Interface	SATA HDD	2x 2.5" HDD/ SSD	-	2x Hot-swap tray for 2.5" HDD/ SSD	-
	mSATA	1 (mux. with mini-PCIe)	-	-	-
	M.2 (M-key)	1	1	1	1
Expansion Bus	Mini PCI-E	1	1	1	2
	M.2 (B-key/ E-Key)	1	-	-	1x M.2 B-key 1x M.2 E-key
	SIM	3	1	1	1
	MezIO™	Yes	-	-	-
	PCI/PCI Express	1x PCIe x16 slot, supporting NVIDIA® GPU (120W)	-	-	-
Power Supply	DC Input	8 to 35V DC	8 to 35V DC	8 to 35V DC	8 to 35V DC
	Ignition Control	Optional via MezIO™ module	Built-in	Built-in	Built-in
Environmental	Operating Temperature	**with 35W CPU and 120W GPU** -25°C ~ 60°C **with 65W CPU and 120W GPU** -25°C ~ 50°C	-25°C ~ 50°C (MAX TDP mode) -25°C ~ 70°C (30W TDP mode) -25°C ~ 70°C with optional fan kit (all modes)	-25°C ~ 50°C (MAX TDP mode) -25°C ~ 70°C (30W TDP mode) -25°C ~ 70°C with optional fan kit (all modes)	-25°C ~ 70°C
	Certification	CE/ FCC	CE/ FCC, MIL-STD-810G	CE/ FCC, MIL-STD-810G	CE/ FCC, MIL-STD-810G