



# Supermicro Visualization & Design

Real-Time Collaboration, 3D Design, Game Development

Increased fidelity of 3D graphics and AI-enabled applications by modern GPUs is accelerating industrial digitization, transforming product development and design processes, manufacturing, and content creation with true-to-reality 3D simulations to achieve new heights of quality, infinite iterations at no opportunity costs, and faster time-to-market.

Build virtual production infrastructure at scale to accelerate industrial digitalization through Supermicro's fully integrated solutions, including the 4U/5U 8-10 GPU systems, an NVIDIA OVX™ reference architecture, optimized for NVIDIA Omniverse Enterprise with Universal Scene Description (USD) connectors, and NVIDIA-certified rackmount servers and multi-GPU workstations.

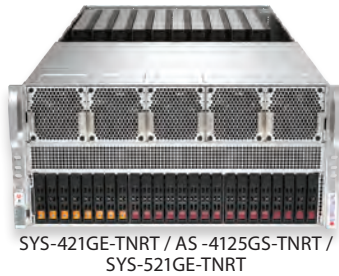
## Systems

### Omniverse Optimized Systems

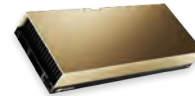
Highest Performance, Tailored for NVIDIA Omniverse

#### Large Workload: 4U/5U 8 GPU (PCIe)

- 8 NVIDIA L40S/L40 PCIe
- 3 NVIDIA ConnectX-7
- 16 U.2 NVMe drives



## Recommended NVIDIA GPUs



### L40S

- FHFL DW
- PCIe 4.0 x16
- 350W
- 48GB GDDR6

### 2U Hyper Systems

Flagship Performance Rackmount System Designed for Ultimate Flexibility

#### Medium Workload: 2U Hyper

- 4 NVIDIA L40 PCIe
- 8 NVMe drives
- 32 DIMMs DDR5-4800



### L40

- FHFL DW
- PCIe 4.0 x16
- 300W
- 48GB GDDR6

### Workstations

4-GPU Rackmount/Full Tower

#### AI Workstations: 5U Full-Tower Workstation

- 4 NVIDIA L40 PCIe
- Dual 4th Gen Intel® Xeon® Scalable
- 16 DIMM slots DDR5-4800



### RTX 6000 ADA

- FHFL DW
- PCIe 4.0 x16
- 300W
- 48GB GDDR6

#### Graphic Workstations: 5U Full-Tower Workstation

- 4 NVIDIA RTX A6000 or  
3 RTX 6000 ADA
- AMD Ryzen™ Threadripper™ PRO
- 8 DIMM Slots DDR4-3200



# Accelerate Visualization & Design Workloads

## Real-Time Collaboration, 3D Design, Game Development

### Opportunities and Challenges:

- AI-aided 3D graphics, game development, creative asset generation
- Digitizing industrial design and productization process with virtualized real-world scenarios
- Integrated engineering and enterprise-scale simulations
- Cloud and virtual collaboration with low latency

### Key Technologies:

- NVIDIA OVX reference architecture supporting NVIDIA Omniverse Enterprise, Universal Scene Description (USD) connectors
- NVIDIA RTX GPUs with ray tracing for photo realistic visuals
- NVIDIA BlueField®-2 or BlueField®-3 (DPU) for low latency, secure and fast data management
- Multi-GPU workstation or virtualized workstations
- Rack-scale integration for virtual production and collaboration infrastructure, speedy rendering, fast and secure data storing and transfer

### Solution Stack:

- Universal Scene Description Connectors
- NVIDIA Omniverse™ Enterprise

### Use Cases:

- Game development
- Product design
- City planning/architectural
- Digital twins (manufacturing, assembly lines, logistics)

## GPU Acceleration for Complete Range of Workloads

The image displays seven brochures, each representing a different AI workload. Each brochure includes a title, a brief description of the workload, and a list of recommended NVIDIA GPUs. QR codes are provided for each brochure to facilitate downloading the full solution brochure.

- Large Scale AI Training:** Generative AI Training, Autonomous Driving, Robotics. Recommended NVIDIA GPUs: H100, H800, L40S, L40.
- HPC/AI:** Scientific Research, Genomic Sequencing, Drug Discovery. Recommended NVIDIA GPUs: H100, H800, L40S, L40.
- Enterprise AI Inference & Training:** AI-enabled Services/Applications, Chatbots, Business Automation. Recommended NVIDIA GPUs: H100, H800, L40S, L40.
- Visualization & Design:** 3D Design, Game Development. Recommended NVIDIA GPUs: H100, H800, L40S, L40.
- Content Delivery & Virtualization:** Streaming (CDNs), Transcoding, Compression, Cloud Gaming/Streaming. Recommended NVIDIA GPUs: H100, H800, L40S, L40.
- AI Edge:** Edge Inference, Edge Training. Recommended NVIDIA GPUs: H100, H800, L40S, L40.

Go to [www.supernano.com/ai](http://www.supernano.com/ai) or scan the QR code to download the AI Workload Solution Brochure:

