H12 2U 2-Node Multi-GPU
Multi-Node Design for Compute and GPU-Acceleration Density

If your workload calls for GPU acceleration, our 2U 2-Node Multi-GPU server combines the computing power of AMD EPYC™ processors with your choice of up to six double-width or twelve single-width GPUs—all in a dense 2RU form factor.

Redefine Datacenter and Edge Computing
This Supermicro system redefines how you propel graphics-intensive workloads regardless of whether in the datacenter or at the edge. You gain high efficiency and lower costs compared to discrete servers through the platform’s shared power and cooling systems. Further reducing cost is the single AMD EPYC processor that delivers up to 64 cores of processing power, delivering in a single chip the performance that not long ago required two CPUs to attain. The AMD EPYC processor uses a system-on-chip design that eliminates the need for chip sets and external disk controllers. For powering GPU-intensive workloads the AMD EPYC CPU connects every accelerator with 16 lanes of PCI-E 4.0 bandwidth with room left for 200 Gpbs of network connectivity.

Deploy for Virtual Desktop Infrastructure
When your power users demand high-end workstation-class computing, whether they are on site or remote, the A+ Server 2114GT-DNR can deliver a dedicated GPU for up to six users. Use virtualization software to partition the CPU, giving each of your users dedicated datacenter-class CPU power, more than they would typically have at their desktop.

2 Nodes in 2 Rack Units with 3–6 GPUs per Node
Power GPU-accelerated workloads with a high-density solution:
- Resource-efficient hot-pluggable 2-node architecture in 2 rack units
- Single 2nd or 3rd Gen AMD EPYC™ Processor per node
- Up to 3 double-width or 6 single-width GPUs per node
- Up to 8 DIMMs per node for up to 2 TB of DDR4-3200 memory
- Flexible internal and front-panel storage options
- Flexible networking with OCP 3.0 interfaces (AIOM)
- Redundant 2600W Titanium Level power supplies

NAB 2022 Product of the Year Award Winner for AI and Machine Learning
The AMD EPYC CPU’s record-setting integer and floating-point performance is matched with 128 lanes of PCI-E 4.0 bandwidth. The processor moves data quickly between disk and network and the GPUs, whether the latest AMD Instinct™ MI210 or NVIDIA® Ampere GPUs. At edge locations, where performance is key, there is more than enough GPU power for AI inferencing—the server is even recognized as product of the year by the National Association of Broadcasters for AI and ML.

Accelerate Media Transcoding
GPU acceleration makes media transcoding in real time a snap. With the GPU density offered by our 2U 2-Node Multi-GPU servers combined with maximum PCI-E 4.0 bandwidth to each GPU, and I/O expansion for high-speed networking, the AS-2114GT-DNR is an excellent choice.

Drive Cloud Gaming and 3D Rendering
The GPU density of the A+ Server 2114GT-DNR makes it an excellent choice for supporting cloud gaming back-end software and 3D rendering for both gaming and motion picture development. When you host your 3D intensive applications on this server, you can set a higher bar for realism and responsiveness.
Ready for Your Choice of Compatible GPU

The AS-2114GT-DNR server supports the GPU most suitable for your workload including the most popular accelerators from AMD and NVIDIA. The maximum number of GPUs per node are determined by compatibility and the power and cooling envelope of the server.

<table>
<thead>
<tr>
<th>AMD Instinct</th>
<th>Max per Node</th>
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<tbody>
<tr>
<td>MI100</td>
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Flexible Networking

Each node includes a single Advanced I/O Module (AIMD) slot that is Open Compute Project (OCP) 3.0 compliant. This means that you can select industry-standard interfaces — such as dual 100 Gigabit Ethernet and 100G InfiniBand EDR — from the vendors you prefer, including Broadcom, Intel, NVIDIA, and Mellanox.

With OCP 3.0-compliant I/O connectivity, you enjoy the benefits of this industry standard, including:

- Better thermal characteristics from increased airflow
- Easy serviceability through tool-less installation
- TCO optimization by decreasing time to service and minimizing down time.

Designed for Flexibility

This system is designed to flexibly meet the needs of your applications. You can choose from the entire range of AMD EPYC 7002 and 7003 Series processors to match CPU power to your workload. You can mix and match NVMe and SATA storage to balance performance and capacity to best power your workloads. And you can use the optional internal M.2 slots to extend storage capacity even further.

*Certain CPUs with high TDP may be supported only under specific conditions. Please contact Supermicro Technical Support for additional information about specialized system optimization.