

# H13 GrandTwin

## High Density Combined with I/O Flexibility



A+ Server 2115GT-HNTR (with rear I/O)



A+ Server 2115GT-HNTF (with front I/O)

### 2U, 4-Node-Per-Chassis Flexible Architecture

Maximize resource savings through shared power and cooling

- 4th Gen AMD EPYC™ Processor with up to 3 TB of DDR5-4800 memory per node
- Up to six 2.5" NVMe or SATA drives per node
- PCIe 5.0 with CXL 1.1+ support
- Front I/O configuration enables field service from cold aisle to help reduce downtime
- Flexible networking options with PCIe 5.0 OCP 3.0 interfaces
- Redundant Titanium level shared power supplies

Designed for maximum density, the new GrandTwin™ servers are built on a multi-node architecture for single-processor performance. Powered AMD EPYC™ 9004 Series processors, the servers deliver high performance in a modular design that can be optimized for a wide range of options, with the capability to add or remove components as needed to match data center needs.

### Modular Multi-node System with Front or Rear I/O

The new Supermicro multi-node systems are designed for applications that need a large number of discrete servers with high-speed interconnects for networked or clustered operations. They are ideal for virtualized and nonvirtualized applications including:

- **Hyperconverged infrastructure and scale-out storage applications** where a balanced set of resources is key
- **High-performance computing** including EDA simulation, computational fluid dynamics, and weather modeling
- **Content-delivery networks** where a large number of network streams need to run in parallel
- **Back-end infrastructure** for mobile devices including gaming, voice recognition, and mapping services
- **Cloud computing** where a large number of cores are needed to deliver high performance to each virtual machines
- **Big data analytics** that combine scale-out storage with the need for high compute capacity for data analysis

These 2U servers optimize compute, memory, and I/O resources to deliver maximum density—four single-socket nodes in only two rack units. The servers are available with front- or rear-panel I/O options. For the front-panel system, all storage, networking, and node trays are accessible from the cold aisle, simplifying installation and servicing in space-constrained environments.



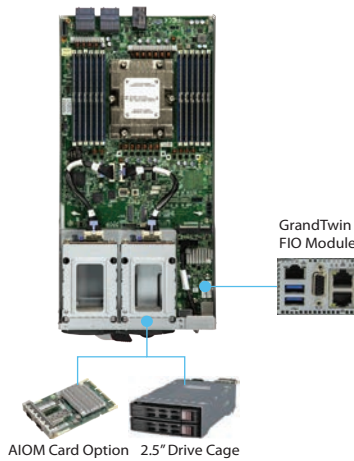
Each of the four nodes host a single AMD EPYC 9004 Series CPU with up to 128 cores, up to 12 DIMMs for a total of 3 TB of DDR5-4800 memory, up to six U.2 NVMe or SATA drives with PCIe 5.0 connectivity, two M.2 slots for boot drives, and a range of networking options to keep data flowing freely through these powerful servers. Dual redundant 2200W power supplies economize on power and cooling.

### GrandTwin Front I/O Node

The A+ Server 2115GT-HNTF has all storage and I/O accessible from the front panel for both comfort and ease of servicing in a data center cold aisle. Each node supports up to four U.2 NVMe or SATA drives and a front I/O card with options including dual 10 or 25 Gigabit Ethernet, or single 100 Gigabit Ethernet interfaces. For even more demanding network needs, the rightmost drive bay can be swapped for a Supermicro Advanced I/O Module (AIOM) cage that supports OCP 3.0 interfaces.

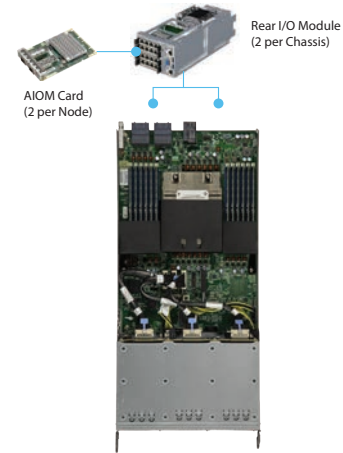
## GrandTwin Rear I/O Node

The A+ Server AS -2115GT-HNTR hosts up to six front-panel-accessible U.2 NVMe or SATA drives with all I/O connectivity in the rear of the chassis. There, each node provides two OCP 3.0-standard AIOM expansion slots for your choice of network connectivity.



## Open Management

Regardless of your data center’s management approach, our open management APIs and tools are ready to support you. In addition to a dedicated IPMI port, and a Web IPMI interface per node, Supermicro® SuperCloud Composer software helps you configure, maintain, and monitor all of your systems using single-pane-of-glass management. If your DevOps teams prefer to use their own tools, industry-standard Redfish® APIs provide access to higher-level tools and scripting languages.



H13 Generation	Single-Socket AS -2115GT-HNTR GrandTwin Node (Front I/O)	Single-Socket AS -2115GT-HNTR GrandTwin Node (Rear I/O)
Processor Support	<ul style="list-style-type: none"> <li>Single SP5 socket for one AMD EPYC™ 9004 Series processors including those with AMD 3D V-Cache™ technology</li> <li>Up to 128 cores, up to 400W TDP per socket<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>Single SP5 socket for one AMD EPYC™ 9004 Series processors including those with AMD 3D V-Cache technology</li> <li>Up to 128 cores, up to 400W TDP per socket<sup>1</sup></li> </ul>
Memory Slots & Capacity	<ul style="list-style-type: none"> <li>12-channel DDR5 memory support</li> <li>24 DIMM slots for up to 3 TB ECC DDR5-4800 RDIMM</li> </ul>	<ul style="list-style-type: none"> <li>12-channel DDR5 memory support</li> <li>24 DIMM slots for up to 3 TB ECC DDR5-4800 RDIMM</li> </ul>
On-Board Devices	<ul style="list-style-type: none"> <li>System on Chip</li> <li>NVMe and 6 Gbps SATA3 storage interfaces via AMD EPYC processor</li> <li>IPMI 2.0 with virtual-media-over-LAN and KVM-over-LAN support</li> <li>ASPEED AST2600 BMC graphics</li> <li>1 TPM 2.0 header</li> </ul>	<ul style="list-style-type: none"> <li>System on Chip</li> <li>NVMe and 6 Gbps SATA3 storage interfaces via AMD EPYC processor</li> <li>IPMI 2.0 with virtual-media-over-LAN and KVM-over-LAN support</li> <li>ASPEED AST2600 BMC graphics</li> <li>1 TPM 2.0 header</li> </ul>
I/O Ports	Choice of GrandTwin Front I/O modules; each includes dedicated RJ45 IPMI LAN port, 2x USB 3.0, VGA connector plus: <ul style="list-style-type: none"> <li>Dual RJ45 1/10 GbE Ports (AOC-GTG-I2T)</li> <li>Dual SFP28 25 GbE Ports (AOC-G25G-M2S)</li> <li>Single QSFP 100 GbE Port (AOC-G100G-X1C)</li> </ul>	<ul style="list-style-type: none"> <li>1 RJ45 Dedicated IPMI LAN port per node</li> </ul> Shared (switchable) interfaces for each pair of nodes: <ul style="list-style-type: none"> <li>2 USB 3.0 ports</li> <li>1 VGA</li> </ul>
Drive Bays	<ul style="list-style-type: none"> <li>4 hot-pluggable 2.5" drive bays for U.2 NVMe or SATA3 drives</li> <li>2 M.2 NVMe/SATA3 2280 slots</li> </ul>	<ul style="list-style-type: none"> <li>6 hot-pluggable 2.5" drive bays for U.2 NVMe or SATA3 drives</li> <li>2 M.2 NVMe/SATA3 2280 slots</li> </ul>
Expansion Slots	<ul style="list-style-type: none"> <li>Drive cage can be swapped out for an OCP 3.0 AIOM card bay</li> </ul>	<ul style="list-style-type: none"> <li>2 AIOM/OCP 3.0 with NCSI</li> </ul>
BIOS	<ul style="list-style-type: none"> <li>AMI 256 Mb (32 MB) SPI Flash ROM</li> </ul>	<ul style="list-style-type: none"> <li>AMI 256 Mb (32 MB) SPI Flash ROM</li> </ul>
System Management	<ul style="list-style-type: none"> <li>Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port</li> <li>Redfish APIs</li> <li>Supermicro SuperCloud Composer</li> <li>Supermicro Server Manager (SSM) and Supermicro Update Manager (SUM)</li> </ul>	<ul style="list-style-type: none"> <li>Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port</li> <li>Redfish APIs</li> <li>Supermicro SuperCloud Composer</li> <li>Supermicro Server Manager (SSM) and Supermicro Update Manager (SUM)</li> </ul>
Chassis	CSE-GT214BF-R2K21BP2	CSE-GT214BC-R2K21BP
Form Factor	<ul style="list-style-type: none"> <li>2U rackmount</li> </ul>	<ul style="list-style-type: none"> <li>2U rackmount</li> </ul>
Front Panel	<ul style="list-style-type: none"> <li>On/off and Universal Information (UID) buttons</li> <li>Power status and UID LEDs</li> </ul>	<ul style="list-style-type: none"> <li>On/off and Universal Information (UID) buttons</li> <li>Power status and UID LEDs</li> </ul>
Shared Power & Cooling	<ul style="list-style-type: none"> <li>2 heavy duty 8 cm PWM fans</li> <li>Redundant 2200W Titanium Level power supplies</li> </ul>	<ul style="list-style-type: none"> <li>2 heavy duty 8 cm PWM fans</li> <li>Redundant 2200W Titanium Level power supplies</li> </ul>

<sup>1</sup>Certain CPUs with high TDP may be supported only under specific conditions. Please contact Supermicro Technical Support for additional information about specialized system optimization