



A+ Server Solutions

World's Most Versatile Portfolio of AMD Processor-Based Systems
Supporting AMD EPYC™ & Ryzen™ Series Processors



SUPERMICRO® H13 AND H12 GENERATION A+ SERVERS

The Most Comprehensive Portfolio of AMD Processor-Based Systems, now with AMD EPYC™ 9004 Series and Ryzen™ 7000 Series Processors, Including Servers, Storage, GPU-Optimized, Blade, and Multi-Node Solutions to Exactly Match System Requirements to Your Workload



September 2023



INTRODUCING H13 GENERATION A+ SERVERS



AMD EPYC™ 9004 SERIES PROCESSORS

- Up to 128 "Zen 4C" cores or 96 "Zen 4" cores per socket with AMD 3D V-Cache™ technology
- Up to 6TB of memory of 12-channel DDR5 with ECC 4800MHz and Advanced Memory Device Correction (AMDC) and now supports 2 DIMMs per channel (2DPC) with single socket
- PCIe 5.0 up to 160 lanes (4U GPU system)
- Next Generation Reliability, Availability, and Serviceability (RAS)

WORKLOAD OPTIMIZED SYSTEMS WITH OPEN ARCHITECTURES

- Vast I/O, storage, networking and expansion slot options for maximum versatility
- Flexible networking options with Advanced I/O Modules (AIOMs), up to 400Gbps throughput per card and OCP 3.0 support
- Market-leading GPU optimized servers for large scale AI/ML and HPC workloads
- Compute Express Link (CXL 1.1+) peripheral support including memory expansion through PCIe 5.0 lanes

INCREASED OPERATIONAL EFFICIENCY

- Tool-less chassis design
- Rear and Front I/O options
- Hot-swappable nodes with shared power for multi-node system
- Titanium level redundant power supplies
- Efficient resource-saving multi-node designs with shared power and cooling.

H13 GPU OPTIMIZED SYSTEM

Maximum Acceleration for AI/Deep Learning and HPC



H13 GRANDTWIN™ SYSTEM

Leading Multi-Node Architecture with Front or Rear I/O



H13 FLASH STORAGE SYSTEM

Purpose-built All-Flash E3.S Petascale Storage Solution



H13 WIO SYSTEM

Excellent Density and Energy Efficiency for Intelligent Edge



H13 HYPER SYSTEM

Industry Leading IOPS Servers with Energy Efficiency and Flexibility



H13 SHORT DEPTH FRONT I/O

Compact Front I/O design optimized for Telco deployments



H13 CLOUDDC SYSTEM

All-in-One Servers with Flexible I/O Options for Cloud Scale Data Centers



H13 WORKSTATION SYSTEM

Server-Grade Workstations for High Compute and Graphic Workloads



H13 GPU-OPTIMIZED SYSTEMS

Maximum Acceleration for AI/Deep Learning and HPC

High performance AI/Deep Learning and HPC-optimized systems

Dual AMD EPYC™ 9004 Series Processors including CPUs with AMD 3D V-Cache™ technology

Double the CPU to GPU throughput with PCIe 5.0

Powered by NVIDIA HGX H100 8-GPU SXM or up to 10 FHFL double-width PCIe GPUs including NVIDIA H100 PCIe and AMD Instinct MI210 PCIe GPUs



AS-4125GS-TNRT1



AS-8125GS-TNHR

8U dual processors system with NVIDIA HGX H100 8-GPU, supports PCIe 5.0 with 1:1 networking at 400G to the 8 GPUs and up to 16 NVMe and 2 SATA SSD drives



AS-4125GS-TNRT

4U dual processors, direct attached GPU system, supporting 8 PCIe 5.0 GPUs, AMD Instinct, NVIDIA Enterprise level GPUs



AS-4125GS-TNRT1

4U dual processors, single-root GPU system with PLX, supporting 10 PCIe 5.0 GPUs, AMD Instinct, NVIDIA Enterprise level GPUs



AS-4125GS-TNRT2

4U dual processors, dual-root GPU system with PLX, supporting 10 PCIe 5.0 GPUs, AMD Instinct, NVIDIA Enterprise level GPUs

MAXIMUM ACCELERATION A+ GPU SYSTEMS

Optimized for AI, Deep Learning, and HPC, providing maximum acceleration, flexibility, high-performance and balanced solutions, Supermicro GPU-optimized systems support PCIe 5.0 and HGX accelerators and deliver a multitude of performance gains compared to previous generations.

The H13 GPU-optimized servers deliver unprecedented acceleration at every scale to power the world's highest performing data centers for AI, data analytics, and HPC applications.

Key Applications

- AI/ML
- Deep Learning
- High Performance Computing (HPC)
- Research Laboratory/National Laboratory
- Molecular Dynamics Simulation
- Astrophysics Simulation
- Chemistry Simulation



H13 GRANDTWIN™ SYSTEMS

Leading Multi-node Architecture with Front or Rear I/O

2U 4-node system optimized for single processor per node performance

Configurable up to six 2.5" drive bays supporting NVMe or SATA per node

Field serviceable from front/cold aisle to reduce downtime for higher availability

Flexible networking options with AIOM / OCP 3.0 support



AS-2115GT-HNTF

2U 4-Node Rear I/O GrandTwin



AS-2115GT-HNTR

2U system with up to 6 U.2 NVMe/SATA drives per node

2U 4-Node Front I/O GrandTwin



AS-2115GT-HNTF

2U system with up to 4 U.2 NVMe/SATA drives per node

Highly Configurable Single Processor System with Front or Rear I/O

GrandTwin™ is an all-new multi-node architecture purpose-built for single-processor performance. The design maximizes compute, memory and efficiency to deliver maximum density. Powered by AMD EPYC™ 9004 Series Processors now with AMD 3D V-Cache™ technology, GrandTwin's flexible modular design can be easily adapted for a wide range of applications, with the ability to add or remove components as required, reducing cost.

For front I/O configurations, all I/O and node trays are fully accessible from the cold aisle, simplifying installation and servicing in space-constrained environments. Flexible storage and networking options are available via front AIOM modules, allowing countless custom configurations.

Key Applications

- HCI
- HPC
- CDN
- Technical Computing (EDA, CFD, FEA)
- Cloud Computing
- Big Data Analytics
- Scale-Out Storage



H13 HYPER SYSTEMS

Industry Leading IOPS Rackmount Servers with Energy Efficiency and Flexibility

Dual AMD EPYC™ 9004 Series Processors

3 PCIe 5.0 x16 slots (1U), or up to 4 PCIe 5.0 x16 slots/ 8 PCIe 5.0 x8 slots (2U) and CXL 1.1+ support

Up to 2 AIOM networking slots with OCP 3.0 support

Flexible NVMe and SATA hot-swap drive options

Tool-less design for easy deployment and maintenance



AS-1125HS-TNR

1U Hyper



AS-1125HS-TNR

1U dual processor server with 24 DIMMs and up to 12 hot-swap 2.5" NVMe/SATA drives

2U Hyper



AS-2025HS-TNR

2U dual processor server with 24 DIMMs and 12 hot-swap 3.5" NVMe/SATA drives

2U Hyper



AS-2125HS-TN

2U dual processor server with 24 DIMMs and 24 hot-swap 2.5" NVMe/SATA drives

Highest Performance A+ Hyper Servers

The new H13 Hyper series brings next-generation versatility and performance to Supermicro's range of rackmount servers, built to take on the most demanding workloads along with the storage & I/O flexibility that provide customer fit for a wide range of application needs.

- Uncompromised performance design with 2 CPU sockets and 24 DIMMs optimized for supporting the highest processor TDP
- Best-in-class server features including all NVMe, hybrid storage and low latency optimizations
- Fast PCIe 5.0 expansion slots for accelerators, AIOM/OCP 3.0 networking, and CXL 1.1+ peripheral support including memory expansion.

Key Applications

- Enterprise Server
- Hyperconverged Storage
- Virtualization
- AI Training/Inferencing
- Big Data Analytics
- Cloud Computing
- CDN
- In-Memory Database



H13 HYPER-U SYSTEMS

Enterprise-Focused Servers delivering Memory Density, Flexibility, and Power Efficiency

Single AMD EPYC™ 9004 Series Processor with up to 128 cores

Up to 12-channel 24 DIMMs (2 DIMMs per channel) for up to 6 TB of DDR5 memory in a single-socket platform

Flexible NVMe, SAS, and SATA3 drive options

Configurable PCIe 5.0 expansion capabilities for GPUs and CXL 1.1+ support



AS-1115HS-TNR

1U Hyper-U



AS-1115HS-TNR

1U single processor server, supports 8 hot-swap 2.5" NVMe/SATA/SAS drives

2U Hyper-U



AS-2015HS-TNR

2U single processor server, supports 12 hot-swap 3.5" NVMe/SATA/SAS drives

2U Hyper-U



AS-2115HS-TNR

2U single processor server, supports 24 hot-swap 2.5" NVMe/SATA/SAS drives

Designed for Enterprise and Cloud Native Workloads

Supermicro H13 Hyper-U series are the ultimate single processor servers that can offer more cores than most 2 socket servers can, ideal for cloud native workloads, such as virtualization and HCI.

The 1U and 2U Hyper-U systems offer high-performance, density, and power efficiency on the latest AMD processors supporting up to 128 cores and up to 12 channels of DDR5 in 24 DIMMs slots. Additionally, the systems have configurable expansion capabilities such as CLX 1.1+ memory expansion devices, and GPU to support AI inferencing and other accelerated workloads.

Key Applications

- Enterprise Server
- Cloud Computing
- Virtualization
- AI Inference and Machine Learning
- Software-Defined Storage



H13 CLOUDDC SYSTEMS

All-in-One Servers with Flexible I/O Options for Cloud-Scale Data Centers

Single AMD EPYC™ 9004 Series Processor

Up to 12 hot-swap NVMe/SATA drives

2 PCIe 5.0 x16 slots (1U) or
up to 4 PCIe 5.0 x16 slots (2U)

Flexible networking options with AIOM/
OCP 3.0 support

Best-in-class serviceability features with
tool-less chassis design



AS-1115CS-TNR

CloudDC - 1U



AS-1015CS-TNR

1U single processor server with
12 DIMMs, supports dual AIOM and
4 hot-swap 3.5" NVMe/SATA drives

CloudDC - 1U



AS-1115CS-TNR

1U single processor server with
12 DIMMs, supports dual AIOM and
10 hot-swap 2.5" NVMe/SATA drives

CloudDC - 2U



AS-2015CS-TNR

2U single processor server with
12 DIMMs, supports 2 double-width PCIe GPUs, dual
AIOM and 12 hot-swap 3.5" NVMe/SATA drives

Cost Optimized Versatile Solutions for Rapid Cloud Deployment and Easy Maintenance

Ultimate flexibility on I/O and storage with 2 to 4 PCIe 5.0 slots and dual AIOM slots (PCIe 5.0; OCP 3.0 compliant) for maximum data throughput. Supermicro H13 CloudDC systems offer convenient serviceability with tool-less brackets, hot-swap drive trays and redundant power supplies that ensure a rapid deployment and more efficient maintenance in data centers.

The H13 CloudDC servers are designed for cost-effective service delivery in cloud computing environments, including Internet infrastructure such as web hosting, email services, public and private cloud computing, and content-delivery networks (CDNs).

Key Applications

- Cloud Computing
- Web Server
- Hyper-converged Storage
- Virtualization, File Servers
- Head-node Computing
- Telcom Security Server
- CDN



H13 WIO SYSTEMS

Excellent Density and Energy Efficiency for Intelligent Edge

Single AMD EPYC™ 8004 Series Processor

6 DIMM slots; Up to 576GB DDR5-4800

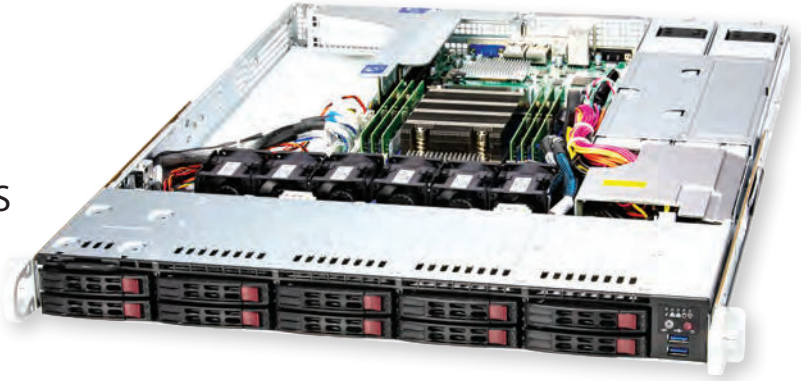
Up to 10 SATA/NVMe/SAS (1U)

Up to 12 SATA/SAS or 6 NVMe and SATA/SAS (2U)

Redundant titanium level power supply

Up to 2 PCIe 5.0 x16 FHFL slots and

1 PCIe 5.0 x16 LP (1U), 2 PCIe 5.0 x8 LP (2U)



AS-1115SV-WTNRT

WIO-1U



AS-1015SV-WTNRT

1U single processor server with 6 DIMMs, supports 4 hot-swap 3.5"/2.5" SATA/NVMe/SAS drives

WIO-1U



AS-1115SV-WTNRT

1U single processor server with 6 DIMMs, supports 10 hot-swap 2.5" SATA/NVMe/SAS drives

WIO-2U



AS-2015SV-WTNRT

2U single processor server with 6 DIMMs, supports 12 hot-swap 3.5"/2.5" SATA/NVMe/SAS drives

Cost and Energy Efficient for Intelligent Edge and Data Center Application

The Supermicro WIO systems are energy-efficient single socket (SP6) servers that lower the operating costs for data center, enterprise edge, cloud computing and network security applications. The Supermicro WIO with AMD EPYC™ 8004 series processor are designed for impressive performance balanced with cost, power, and flexible I/O options.

Key Applications

- Cloud Services
- Enterprise Edge
- Virtualization
- Database Storage
- Web Server
- DNS and Gateway Server



H13 SHORT DEPTH FRONT I/O

Compact Front I/O design optimized for Telco deployments

Single AMD EPYC™ 8004 Series Processor

6 DIMM slots; Up to 576GB DDR5-4800

Up to 2 2.5" Internal Drives

2 PCIe 5.0 x16 FHFL Slots

Both AC and DC Power Supply Options Available



AS -1115S-FWTRT

Short Depth - AC



AS -1115S-FWTRT

1U Single Processor with 6 DIMM supporting up to 3 PCIe5.0 and up to 2 2.5" Internal Drives

Short Depth - DC



AS -1115S-FDWTRT

1U Single Processor with 6 DIMM supporting up to 3 PCIe 5.0 and up to 2 2.5" Internal Drives

NEBS Compliant Design Optimized for Edge and Telco Application

The short-depth front I/O system is a compact form factor solutions quieter than traditional servers, ideal for Telco and Edge deployments with space and thermal limitations. Powered by AMD EPYC 8004 series processor supporting operating temperatures of up to 40~55°, depending on the processor core count. The new systems use Platinum power supplies for increased energy efficiency, resulting in higher performance per watt. The H13 Short depth front I/O system offers AC and DC options and features NEBS compliant design required for telco related operations.

Key Applications

- Virtualization
- Edge Cloud AI Computing
- vRAN/O-RAN/NEBS environment
- Telco 5G
- CDN/vCDN/Cloud CDN



H13 MICROCLOUD SYSTEM

High Density Multi-Node System for Cloud and Dedicated Hosting

8 nodes in 3U system

Supporting single AMD Ryzen™ 7000 series processor per node

Up to 128GB ECC/non ECC UDIMM;
DDR5 5200MHz, in 4 DIMM sockets per node

Single 8-lane PCIe 5.0 low profile slot
per node (can be used for GPU accelerator)

8 sets of 2 front NVMe U.2/ SAS/ SATA3
drives w/ optional kits



AS -3015MR-H8TNR

3U MicroCloud



AS -3015MR-H8TNR

AMD Ryzen 7000 Series,

8 single processor server nodes with 2 NVMe U.2 SAS/SATA drives

3U 8-Nodes Flexible Architecture for Dedicated Hosting

Supermicro H13 MicroCloud is a 3U, multi-node server powered by AMD Ryzen™ 7000 series processors with 8 single-processor nodes delivering excellent density and power efficiency.

The MicroCloud system is designed for applications that require large numbers of discrete servers, offering 8 nodes containing up to two front-accessible NVMe U.2, as well as a single 8 lane PCIe 5.0 low profile slot that can be used for GPU accelerators for Web Hosting, Cloud Gaming, Content Creation, and Virtual Private Servers.

Key Applications

- Cloud Computing
- Web Cache, CDN, Video Streaming
- Web Colocation Services
- Social Networking Downloads
- Corporate -WINS, DNS, Print, Login



H13 MAINSTREAM 1U SYSTEM

Powerful and Economical Server for SMB

Supporting single AMD Ryzen 7000 series processor

Cost-Optimized for SMB

Up to 192GB DDR5 5200MHz

1x PCIe 5.0 x16 (FHHL) slot

668W Platinum certified power supply



AS-1015A-MT

Mainstream-1U



AS-1015A-MT

AMD Ryzen 7000 Series,
1U single processor with 1x 3.5" SATA drive

Ryzen™ 7000 powered server for Web Hosting and SMB applications

Supermicro H13 1U system offers versatile storage options with 2 PCIe Gen5 M.2 slots and flexible configurations, effortlessly adapting to your growing business needs. This economical server is designed for small and medium businesses, remote offices, and branch offices, delivering unparalleled performance

Key Applications

- Cloud Computing
- Web Hosting, CDN, Video Streaming
- SMB Application
- Email/ Firewall/ Application Server



H13 MINI TOWER SYSTEM

Flexible Tower Workstation Optimized for Content Creation

Single AMD Ryzen 7000 series processor
4x DIMM up to 128GB, 4x 32GB DRAM
Up to 192GB DDR5-5200 memory
2x PCIe 5.0 x16 Slots (x16/NA or x8/x8)
668W Platinum level shared power supplies



AS-3015A-I

Mini Tower



AS-3015A-I

Versatile mini-tower system that can be deployed as a server, workstation or as a desktop

Versatile Workstation Solutions for Content Creation and Entry Level Server Applications

Designed with versatility in mind, the latest mini-tower system based on AMD Ryzen 7000 series processor offers versatile storage options with 2 PCIe Gen5 M.2 slots and a flexible configuration, ensuring it seamlessly adapts to your evolving business requirements.

With remote management features via IPMI, this system can be deployed as an entry level server, workstation or as a desktop. No more settling for one-size-fits-all solutions - this system is ready to be tailored to elevate your IT infrastructure.

Key Applications

- 2D/3D Content Creation
- SMB Application
- Email/ Firewall/ Application Server



H13 ALL-FLASH EDSFF SYSTEM

All-Flash EDSFF Petascale for Software-Defined Data Center Workloads

Single 4th Generation AMD EPYC 9004 Scalable processor

24 DIMMs slots; up to 6TB DDR5 4800MHz

Two PCIe 5.0 x16 FHHL Slots, two PCIe 5.0 x16 AIOM Slots (OCP 3.0 SFF compliant)

16 hot-swap EDSFF E3.S (7.5mm) NVMe drive bays

Optional configuration supports 8 E3.S drives and 4 CXL devices in E3.S 2T form factor for memory expansion in 1U



ASG-1115S-NE316R

1U High Capacity All-Flash



ASG-1115S-NE316R
16 EDSFF (E3 7.5mm NVMe SSD)

2U High-Capacity All-Flash



ASG-2115S-NE332R
32 EDSFF (E3 7.5mm NVMe SSD)

Extreme Density, High-Performance All-Flash Servers

Supermicro H13 All-Flash NVMe storage systems powered by AMD EPYC 9004 series processors are designed with the latest EDSFF and CXL technologies allowing unprecedented capacity and performance to enable today's data hungry workloads supporting latest software-defined storage and NVMe over fabrics solutions, as well as in-memory databases.

The new all-flash petascale servers take advantage of 128 PCIe 5.0 lanes, supporting up to 32 E3.S (x2) in 2U, and 16 E3.S drives (x4) in 1U, or configured with 8 E3.S (x4) drives and 4 CXL devices in E3.S 2T (x8) form factor allowing memory expansion.

Key Applications

- Software-Defined Storage
- Data Intensive HPC
- Private and Hybrid Cloud
- NVMe Over Fabrics Solution
- In-Memory Computing



H12 UNIVERSAL GPU SYSTEM

Modular Platform for HPC Applications and Advanced Data Center AI Infrastructure

Dual AMD EPYC™ 7003 series processors

Supports the new AMD Instinct MI250 OAM Accelerator

32 DIMM slots per node supporting DDR4-3200MHz

Flexible Storage configuration with 10 hot-swap 2.5" U.2 NVMe drives

4U with optional 1U extension for a 5U system providing PCIe slots expansion with Supermicro AIOM support.

Supports next-generation GPUs in a variety of form factors

Universal GPU server OCP standards-based design

Modular design for flexibility/future-proofing

Optimized thermal capability for 500W/700W GPUs

4U 4-GPU



5U 4-GPU



AS-4124GQ-TNMI

OPEN, MODULAR, STANDARDS BASED UNIVERSAL GPU SYSTEM

Supermicro A+ Universal GPU systems are open, modular, standards-based servers which provide superior performance and serviceability with dual AMD EPYC™ 7003 series processors, supporting AMD Instinct™ MI250 OAM Accelerator and various GPU and accelerator form factors, and featuring a hot-swappable, tool-less design. The system's "future proofed" design allows to standardize on one GPU platforms with multiple configurations for all data center needs with optimized thermal management.

Key Applications

- AI/ML
- HPC
- Vertical Markets (thermal modeling and other parallel-processing intensive tasks)
- Big Data Analytics



H12 TWIN SYSTEMS

Leading Multi-node Architectures

Highly configurable 2U 4-node systems

2-socket with 16 DIMMs or
1-socket with 8 DIMMs per node

Flexible storage and I/O options
including NVMe/SATA3 and SIOM
networking



A+ BigTwin® (2U4N)

BigTwin® - 2U 4 DP Nodes



AS-2124BT-HNTR
2U System with 4 hot-pluggable
Dual-Processor Server Nodes with U.2 NVMe

BigTwin® - 2U 4 DP Nodes



AS-2124BT-HTR
2U System with 4 hot-pluggable
Dual-Processor Server Nodes with SATA

TwinPro® - 2U 4 UP Nodes



AS-2014TP-HTR
2U System with 4 hot-pluggable
Single-Processor Server Nodes

NO-COMPROMISE 2U 4-NODE ARCHITECTURE

BigTwin is the 5th generation in the Supermicro® Twin Family with a multitude of innovations and engineering breakthroughs.

TwinPro systems are designed for simplified deployment and maintenance, and assembled with the highest quality to ensure continuous operation even at maximum capacity.

With AMD EPYC™ 7003 Series Processors with AMD 3D V-Cache™ Technology, customers in high-end enterprise, data center, HPC and Cloud Computing environments receive the greatest competitive advantage from data center resources with the Supermicro® TwinPro.

Key Applications

- HCI
- HPC
- CDN
- 5G UPF
- Technical Computing (EDA, CFD, FEA)
- Cloud Computing
- Big Data Analytics
- Back-up and Recovery
- Scale-Out Storage



H12 ULTRA SYSTEMS

Industry Leading IOPS, Energy Efficiency, and Flexibility

Optimized for highest processor TDPs

Up to 24x Hybrid NVMe/SAS/SATA drive bays

Up to 3 double width GPUs



AS-2124US-TNRP

1U Ultra, 12 NVMe



AS-1124US-TNRP

1U Dual-Processor Server with 32 DIMMs and 12x hot-swap 2.5" U.2 NVMe drives

1U Ultra, 8TB DDR4



AS-1024US-TRT

1U Dual-Processor Server with 32 DIMMs and 4x hot-swap 3.5" SATA/NVMe drives

2U Ultra, 8TB DDR4



AS-2124US-TNRP

2U Dual-Processor Server with 32 DIMMs and 24x hot-swap 2.5" U.2 NVMe drives

2U Ultra, 8TB DDR4



AS-2024US-TRT

2U Dual-Processor Server with 32 DIMMs and 12x hot-swap 3.5" SATA/NVMe drives

HIGHEST PERFORMANCE A+ ULTRA SERVERS

Supermicro® A+ Ultra system are designed to deliver the highest performance, flexibility, scalability and serviceability to demanding IT environments, and to power mission-critical Enterprise workloads, including support for dual AMD EPYC™ 7003/7002 Series Processors* and 32 DIMMs of DDR4-3200MHz memory for up to 8TB of capacity.

- Uncompromised performance design with 2 CPU sockets and 32 DIMMs optimized for supporting the highest processor TDPs
- Best-in-class server features including all NVMe, hybrid storage and low latency optimizations
- Vast networking and expansion possibilities with Ultra Riser cards

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

Key Applications

- Enterprise Server
- Hyperconverged Storage
- Virtualization
- AI Training/Inferencing
- Big Data Analytics
- Cloud Computing
- CDN
- In-Memory Database



H12 FATTWIN®

Advanced 4U Twin Architecture with 8 and 4 Nodes

Highly modular multi-node (4U 8-Node or 4U 4-Node) systems with tool-less design and independent backplanes built-in per node to eliminate a single point of failure

Front or Rear I/O accessible service design depending on data center environments

All-hybrid drive bays
- NVMe, SAS, or SATA



AS-F1114S-FT

FatTwin® - Front I/O 8 UP Nodes



AS-F1114S-FT

4U Front I/O System with 8 Hot-pluggable Single-Processor Server Nodes with 2-4x 2.5" SATA3/NVMe drives per node

FatTwin® - Rear I/O 4 UP Nodes



AS-F2014S-RNTR

4U Rear I/O System with 4 Hot-pluggable Single-Processor Server Nodes with 8x 3.5" drives and 4x M.2 per node

FatTwin® - Rear I/O 8 UP Nodes



AS-F1114S-RNTR

4U Rear I/O System with 8 Hot-pluggable Single-Processor Server Nodes with 6x 2.5" drives and 4x M.2 per node

FRONT OR REAR I/O TWIN ARCHITECTURE TO MAXIMIZE SERVICEABILITY AND RELIABILITY

The innovative FatTwin architecture provides flexibility and system accessibility for unique datacenter requirements with front or rear I/O, as well as electrically isolated, modularized left/right nodes with redundant power supplies for maximum reliability.

- Single AMD EPYC™ 7003/7002 Series Processor* (TDP up to 280W) per node
- Flexible AIOM networking
- Electrically isolated Redundant Titanium Level power supplies per side (2 left, 2 right)

Key Applications

- Hyperscale / Hyperconverged
- HPC and Big Data
- Data Center Enterprise Applications
- Scale Out Storage
- Telco Data Center & Virtualization Server



H12 SUPERBLADE®

Performance and Density Optimized Resource Saving Architecture

Up to 20 hot-pluggable nodes in 8U

Highest density GPU platform for AI and Deep Learning

Integrated HPC network fabrics for up to 200G HDR InfiniBand with 100% non-blocking switch



SBE-820C/H/L/J (Front View)

Up to 20 Single Processor Nodes in 8U with 8 DIMMs and mezzanine card for advanced networking



SBA-4114S-T2N
SATA/NVMe Model (AIOM module)



SBA-4114S-C2N
SAS/SATA/NVMe Model (AIOM module)



SBA-4119SG
GPU Model with 2 GPUs, M.2 NVMe

RESOURCE SAVING ARCHITECTURE

SuperBlade with AMD EPYC™ 7003 Series Processors with AMD 3D V-Cache is an ideal choice for modern technical computing workloads including EDA.

The system can contain up to 20 CPUs in an 8U chassis, including a network switch built into the chassis. A shared cooling, power and networking infrastructure is key to the high density and server efficiency offered by blade solutions. Supermicro's high performance, density optimized, and energy-efficient SuperBlade® can significantly reduce initial capital and operational expenses for many organizations.

In particular, Supermicro's new generation blade product portfolio has been designed to optimize the TCO of key components for today's datacenters, such as free-air cooling, power efficiency, node density and networking management.

Key Applications

- EDA
- HPC
- AI/ML/DL
- Hybrid Cloud
- Virtualization
- Health
- Financial Services



* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

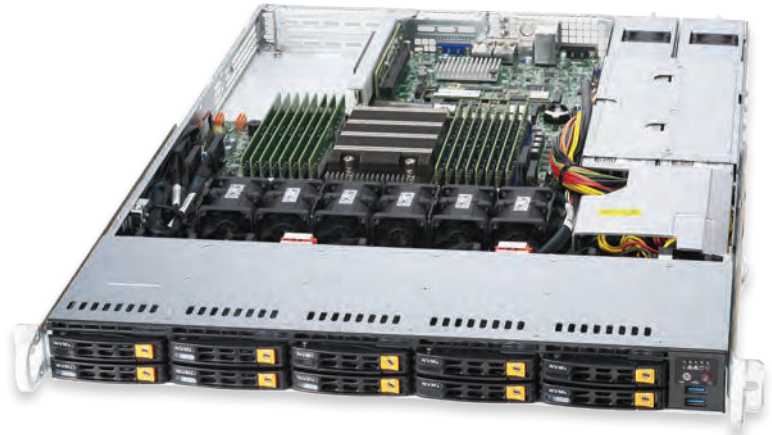
H12 WIO SERVERS

Industry's Widest Variety of I/O Optimized Servers

Cost saving single-socket I/O configurability with up to 64 cores, 8 or 16 DIMMs

Up to 10x (1U) or 24x (2U) U.2 NVMe and dual onboard 10G

Redundant high-efficiency 750W Platinum Level or 1200W Titanium power supplies



AS-1114S-WN10RT



AS-1014S-WTRT

1U Single-Processor Server with 8 DIMMs, 4x 3.5" SATA drives, 2x M.2, optional 4x U.2 NVMe and 2x NVIDIA T4 GPUs



AS-1114S-WTRT

1U Single-Processor Server with 8 DIMMs, 10x 2.5" SATA, 2x M.2, optional 2x U.2 NVMe drives and 2 NVIDIA T4 GPUs



AS-1114S-WN10RT

1U Single-Processor Server with 16 DIMMs and 10x 2.5" U.2 NVMe drives



AS-2114S-WN24RT

2U Single-Processor Server with 16 DIMMs and 24x U.2 NVMe drives

COST AND ENERGY EFFICIENCY FOR DATA CENTER ENVIRONMENTS

Supermicro® A+ WIO systems offer a wide range of I/O options to deliver truly optimized systems for specific requirements. Users can optimize the storage and networking alternatives to accelerate performance, increase efficiency and find the perfect fit for their applications.

In addition to enabling customizable configurations and optimization for multiple application requirements, A+ WIO servers also provide attractive cost advantages and investment protection.

Key Applications

- Enterprise Mission-critical Applications
- Data Center Cloud Computing
- Virtualization
- Big Data
- Financial Analysis



H12 MAINSTREAM & TOWER

Versatile Entry Level and Volume Servers for Enterprise Server Applications

Highly versatile servers to enable a wide variety of enterprise server applications

Choices of multiple form factors including rackmount, short-depth rackmount and tower

A rich selection of storage options, AOCs, CPU TDP and memory speed support



SuperWorkstation
5U Rackmountable/Tower
AS-5014A-TT



AS-2014S-TR
2U Single-Processor Server
with 8 DIMMs



AS-2024S-TR
2U Dual-Processor
with 16 DIMMs



AS-3014TS-i
Mid-Tower Single-Processor Server
with 8 DIMMs, up to 3 GPUs



SuperWorkstation
AS-5014A-TT
AMD Ryzen™ Threadripper™ PRO
3000WX Series Processor with 8 DIMMs,
6 PCIe x16 and dual 10GbE

MAINSTREAM APPLICATION OPTIMIZED

The A+ H12 Mainstream Application Optimized product family from Supermicro® is a series of servers designed for entry level or volume selections. Enterprise IT managers can choose the exact model for their applications, with a precise set of integrated features needed for their applications.

These powerful yet cost-effective systems provide excellent flexibility and value at entry-level price points.

Key Applications

- SMB
- Virtualization
- Web Server
- AI – Inferencing
- Cloud Computing
- Head-node Computing



H13 GPU-OPTIMIZED

(For Complete System Only)

8U Universal GPU

4U 8-GPU with PCIe

4U 10-GPU with PCIe

4U 10-GPU with PCIe



| MODEL | AS -8125GS-TNHR | AS -4125GS-TNRT | AS -4125GS-TNRT1 | AS -4125GS-TNRT2 |
|----------------------------|---|--|--|--|
| Processor Support | AMD EPYC™ 9004 Series Processors Dual Socket (Socket SP5) | AMD EPYC™ 9004 Series Processors Dual Socket (Socket SP5) | AMD EPYC™ 9004 Series Processors Dual Socket (Socket SP5) | AMD EPYC™ 9004 Series Processors Dual Socket (Socket SP5) |
| Key Applications | <ul style="list-style-type: none"> AI/Deep Learning Training High Performance Computing | <ul style="list-style-type: none"> AI/Deep Learning High Performance Computing (HPC) Rendering/VDI Molecular Dynamics Simulation | <ul style="list-style-type: none"> AI/Deep Learning High Performance Computing (HPC) Rendering/VDI Molecular Dynamics Simulation | <ul style="list-style-type: none"> AI/Deep Learning High Performance Computing (HPC) Rendering/VDI Molecular Dynamics Simulation |
| Outstanding Features | <ul style="list-style-type: none"> High density 8U system with NVIDIA® HGX™ H100 8-GPU Highest performance GPU communication using NVIDIA® NVLINK™ + NVIDIA® NVSwitch™ 8 NIC for GPU direct RDMA (1:1 GPU Ratio) 8 NVMe for GPU direct storage 1 M.2 NVMe for boot drive | <ul style="list-style-type: none"> Drive configurations for 2x 2.5" hot-swap SATA and up to 4x 2.5" hot-swap NVMe bays Up to 10 PCIe 5.0 slots for up to 8 direct-attached double-width, full length, enterprise-level GPUs Flexible GPU support: active and passive GPUs Dual onboard 10GbE ports with up to 1 AIOM/OCF 3.0 slot 1 M.2 slot onboard 8 hot-swap cooling fans | <ul style="list-style-type: none"> Drive configurations for 2x 2.5" hot-swap SATA and up to 8x 2.5" hot-swap NVMe bays Single root architecture with PCIe switch for up to 10 double width, full length enterprise-level GPUs Flexible GPU support: active and passive GPUs Dual onboard 10GbE ports with up to 1 AIOM/OCF 3.0 slot 1 M.2 slot onboard 8 hot-swap cooling fans | <ul style="list-style-type: none"> Drive configurations for 2x 2.5" hot-swap SATA and up to 8x 2.5" hot-swap NVMe bays Dual root architecture with PCIe switch for up to 10 double width, full length enterprise-level GPUs Flexible GPU support: active and passive GPUs Dual onboard 10GbE ports with up to 1 AIOM/OCF 3.0 slot 1 M.2 slot onboard 8 hot-swap cooling fans |
| Serverboard | SUPER● H13DSG-O-CPU-D | SUPER● H13DSG-O-CPU | SUPER● H13DSG-O-CPU | SUPER● H13DSG-O-CPU |
| Chipset | System on Chip | System on Chip | System on Chip | System on Chip |
| System Memory (Max.) | Up to 6TB 3DS ECC RDIMM DDR5-4800 MHz in 24 DIMMs | Up to 6TB 3DS ECC RDIMM DDR5-4800 MHz in 24 DIMMs | Up to 6TB 3DS ECC RDIMM DDR5-4800 MHz in 24 DIMMs | Up to 6TB 3DS ECC RDIMM DDR5-4800 MHz in 24 DIMMs |
| Expansion Slots | 8 PCIe 5.0 x16 LP, 2 FHFL PCIe 5.0 x16 Slots | 9 PCIe 5.0 X16 Slots | 12 PCIe 5.0 X16 Slots | 12 PCIe 5.0 X16 Slots |
| Onboard Storage Controller | AMD SP5 | AMD SP5 | AMD SP5 | AMD SP5 |
| Connectivity | Optional FHFL x16 NIC for node management | 2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710 | 2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710 | 2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710 |
| VGA/Audio | 1 VGA port | 1 VGA port | 1 VGA port | 1 VGA port |
| Management | IPMI 2.0; KVM with dedicated LAN; NMI; OOB Management Package (SFT-OOB-LIC); Redfish API; SPM; SSM; SUM; SuperDoctor® 5; Watch Dog | IPMI 2.0; KVM with dedicated LAN; NMI; OOB Management Package (SFT-OOB-LIC); Redfish API; SPM; SSM; SUM; SuperDoctor® 5; Watch Dog | IPMI 2.0; KVM with dedicated LAN; NMI; OOB Management Package (SFT-OOB-LIC); Redfish API; SPM; SSM; SUM; SuperDoctor® 5; Watch Dog | IPMI 2.0; KVM with dedicated LAN; NMI; OOB Management Package (SFT-OOB-LIC); Redfish API; SPM; SSM; SUM; SuperDoctor® 5; Watch Dog |
| Drive Bays | 14x 2.5" hot-swap NVMe/SATA drive bays (12x 2.5" NVMe, 2x 2.5" SATA) | 24x 2.5" hot-swap drive bays (up to 4x 2.5" NVMe dedicated) | 24x 2.5" hot-swap drive bays (up to 8x 2.5" NVMe dedicated) | 24x 2.5" hot-swap drive bays (up to 8x 2.5" NVMe dedicated) |
| Power Supply | Redundant 9000W Titanium level (96%) with option to increase to 12KW redundant power | Redundant 4000W Titanium level (96%) | Redundant 4000W Titanium level (96%) | Redundant 4000W Titanium level (96%) |
| Cooling System | 10 heavy duty fan(s) | 8 heavy duty fan(s) | 8 heavy duty fan(s) | 8 heavy duty fan(s) |
| Form Factor | 8U Rackmount Enclosure: 437 x 355.6 x 843.28mm (17.2" x 14" x 33.2") Package: 698 x 750 x 1300mm (27.5" x 29.5" x 51.2") | 4U Rackmount Enclosure: 437 x 178 x 737mm (17.2" x 7" x 29") Package: (27" x 26.57" x 41") | 4U Rackmount Enclosure: 437 x 178 x 737mm (17.2" x 7" x 29") Package: (27" x 26.57" x 41") | 4U Rackmount Enclosure: 437 x 178 x 737mm (17.2" x 7" x 29") Package: (27" x 26.57" x 41") |

H12 GPU-OPTIMIZED

(For Complete System Only)

4U 8-GPU with PCIe



2U 2-Node, 4-GPU with PCIe



4U 8-GPU with HGX



2U 4-GPU with HGX



| MODEL | AS -4124GS-TNR+ | AS -2114GT-DNR | AS -4124GO-NART | AS -2124GQ-NART |
|----------------------------|---|---|---|--|
| Processor Support | Dual AMD EPYC™ 7003/7002 Series Processors* | Single AMD EPYC™ 7003/7002 Series Processor* | Dual AMD EPYC™ 7003/7002 Series Processors* | Dual AMD EPYC™ 7003/7002 Series Processors* |
| Key Applications | <ul style="list-style-type: none"> HPC AI/ML Cloud Gaming Research & Academia | <ul style="list-style-type: none"> Cloud Gaming Media/Video Streaming Gaming AI Inference and Machine Learning | <ul style="list-style-type: none"> AI Compute / Model Training / Deep Learning HPC System for All AI Workload | <ul style="list-style-type: none"> AI Compute / Model Training / Deep Learning HPC |
| Outstanding Features | <ul style="list-style-type: none"> 160 PCIe lanes 8 direct attached GPUs PCIe 4.0 Flexible architecture AIOM support | <ul style="list-style-type: none"> 4 NVMe for GPUDirect Storage Up to 8 DIMMs per node M.2 Support Supports 6 PCIe and 1 Mezzanine card | <ul style="list-style-type: none"> Highest 8 GPU communication using NVIDIA NVLink and NVSwitch Up to 8 NICs for GPUDirect RDMA (1:1 GPU Ratio) Up to 8 NVMe for GPUDirect Storage with optional backplane | <ul style="list-style-type: none"> High-density 2U with 4 GPU peer-to-peer communication Directly attached GPUs for low latency 4 NICs for GPUDirect RDMA (1:1 GPU Ratio) |
| Serverboard | SUPER● H12DSG-O-CPU | SUPER● H12SSG-AN6 | SUPER● H12DGO-6 | SUPER● H12DSG-Q-CPU6 |
| System Memory (Max.) | Up to 8TB ECC DDR4 3200MHz SDRAM in 32 DIMMs | Up to 2TB ECC DDR4 3200MHz SDRAM in 8 DIMMs | Up to 8TB ECC DDR4 3200MHz SDRAM in 32 DIMMs | Up to 8TB ECC DDR4 3200MHz SDRAM in 32 DIMMs |
| Expansion Slots | 9 PCIe 4.0 x16 (Option: 10 PCIe 4.0 x16 slots without NVMe devices) | 6 PCIe 4.0 x16 (4 Internal and 2 external); 1 AIOM card support; 2 M.2 PCIe 4.0 x4 slots 2280/22110; M-key | 8 PCIe 4.0 x16 (LP) slots from PCIe Switch; 1 PCIe 4.0 x16 (LP); 1 PCIe 4.0 x8 slot from CPUs | 4 PCIe 4.0 x16 (LP) slots; 1 PCIe 4.0 x8 (LP) slot |
| Onboard Storage Controller | 2x 2.5" SATA in RAID 1 via onboard Marvell 9230 | AMD SP3 | SATA3, PCIe 4.0 U.2 NVMe and PCIe 4.0 M.2 NVMe | SATA/NVMe Hybrid or SAS with optional HBA |
| Connectivity | 2 GbE LAN ports (rear) | AIOM Network Card For Flexible Networking Options (not included) | OCP 3.0 / AIOM NIC | Dual RJ45 10GbE-aggregate host LAN, RJ45 1GbE IPMI |
| VGA/Audio | Aspeed AST2500 BMC | Aspeed AST2600 BMC | Aspeed AST2600 BMC | Aspeed AST2600 BMC |
| Management | IPMI 2.0 with virtual media over LAN and KVM-over-LAN support | IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog | IPMI 2.0 with Virtual Media over LAN and KVM-over-LAN support. Dedicated IPMI LAN port | IPMI 2.0 with Virtual Media over LAN and KVM-over-LAN support. Dedicated IPMI LAN port |
| Drive Bays | Up to 24x 2.5" SAS/SATA drive bays | 2 Front Hot-swap U.2 NVMe Gen4 drive bays per node | 6x hot-swap 2.5" drive bays (SATA/ NVMe Hybrid or SAS with optional HBA) Up to 10x hot-swap 2.5" drive bays with optional backplane, 2 NVMe M.2 (Internal) | 4x hot-swap 2.5" drive bays (SATA/ NVMe Hybrid or SAS with optional HBA) |
| Power Supply | 2000W (2+2) Redundant Titanium Level (96%+) power supplies | Redundant 1 + 1 2600W Titanium Level (96%) (Full redundancy based on configuration and application load) | Four 2200W high-efficiency Platinum Level power supplies | Two 2200W high-efficiency Platinum Level power supplies |
| Cooling System | 8x hot-swap heavy duty PWM fans | 4x 80mm heavy duty PWM fans | 4x hot-swap heavy duty PWM fans | 4x hot-swap heavy duty PWM fans |
| Form Factor | 4U Rackmount 178 x 437 x 737mm (7.0" x 17.2" x 29") | 2U (2-node) Rackmount 447 x 88 x 760mm (17.6" x 3.47" x 29.9") | 4U Rackmount 446 x 174 x 900mm (17.6" x 6.9" x 35.4") | 2U Rackmount 437 x 89 x 823mm (17.2" x 3.5" x 32.4") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

** Can be sold as barebone system

H13 GrandTwin™

(For Complete System Only)

2U 4-Node Rear I/O



2U 4-Node Front I/O



| MODEL | AS -2115GT-HNTR | AS -2115GT-HNTF |
|----------------------------|---|--|
| Processor Support | AMD EPYC™ 9004 Series Processors Single Socket (Socket SP5) | AMD EPYC™ 9004 Series Processors Single Socket (Socket SP5) |
| Key Applications | <ul style="list-style-type: none"> • HPC • Mission Critical Web Applications • EDA (Electric Design Automation) • Telco Edge Cloud • High-availability Cache Cluster • Multi-Purpose CDN • MEC (Multi-Access Edge Computing) • Cloud Gaming | <ul style="list-style-type: none"> • HPC • Mission Critical Web Applications • EDA (Electric Design Automation) • Telco Edge Cloud • High-availability Cache Cluster • Multi-Purpose CDN • MEC (Multi-Access Edge Computing) • Cloud Gaming • Flexible front slots to configure storage or AIOM/OCP 3.0 cards |
| Outstanding Features | <ul style="list-style-type: none"> • Up to 6 2.5" hot-swap NVMe/SATA drives per node • 2x AIOM / OCP 3.0 slots per node • 2x M.2 NVMe/SATA slots per node • Front access node trays for easy serviceability and maintenance | <ul style="list-style-type: none"> • up to 4 2.5" hot-swap NVMe/SATA drives per node or • up to 1x AIOM / OCP 3.0 slots per node • 2x M.2 NVMe/SATA slots per node • GrandTwin I/O for flexible networking options • Front access node trays for easy serviceability and maintenance |
| Serverboard | SUPER● H13SST-G | SUPER● H13SST-G |
| Chipset | System on Chip | System on Chip |
| System Memory (Max.) | Up to 3TB 3DS ECC RDIMM DDR5-4800MHz in 12 DIMMs | Up to 3TB 3DS ECC RDIMM DDR5-4800MHz in 12 DIMMs |
| Expansion Slots | 2 AIOM/OCP 3.0 slots per node | 1 PCIe 4.0 x16 LP slot optional, internal only |
| Onboard Storage Controller | AMD SP5 | AMD SP5 |
| Connectivity | via AIOM and onboard dedicated BMC port | via AIOM and GrandTwin I/O Module |
| VGA/Audio | 1 VGA port | 1 VGA port |
| Management | SuperCloud Composer; SuperDoctor® 5 (SD5); Supermicro Diagnostics Offline (SDO); Supermicro Intelligent Mgmt (BMC Resources); Supermicro IPMI Utilities; Supermicro Power Manager (SPM); Supermicro Server Manager (SSM); Supermicro Server Mgmt (Redfish® API); Supermicro Thin-Agent Service (TAS); Supermicro Update Manager (SUM) | SuperCloud Composer; SuperDoctor® 5 (SD5); Supermicro Diagnostics Offline (SDO); Supermicro Intelligent Mgmt (BMC Resources); Supermicro IPMI Utilities; Supermicro Power Manager (SPM); Supermicro Server Manager (SSM); Supermicro Server Mgmt (Redfish® API); Supermicro Thin-Agent Service (TAS); Supermicro Update Manager (SUM) |
| Drive Bays | 6x 2.5" hot-swap NVMe/SATA drive bays | 4x 2.5" hot-swap NVMe/SATA drive bays |
| Power Supply | Redundant 2200W Titanium level (96%) | Redundant 2200W Titanium level (96%) |
| Cooling System | 2x 8cm heavy duty fans | 2x 8cm heavy duty fans |
| Form Factor | 2U Rackmount Enclosure: 449 x 88 x 711.2mm (17.67" x 3.46" x 28") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28") | 2U Rackmount Enclosure: 449 x 88 x 711.2mm (17.67" x 3.46" x 28") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28") |

H13 MicroCloud

(For Complete System Only)

H13 Mainstream

(For Complete System Only)



| MODEL | AS -3015MR-H8TNR | AS -1015A-MT | AS -3015A-I |
|----------------------------|---|--|---|
| Processor Support | AMD Ryzen™ Zen4 7000 series Processors Single Socket LGA-1718 (Socket AM5) supported TDP up to 170W | Single Socket supported | Single Socket supported |
| Key Applications | <ul style="list-style-type: none"> Corporate - WINS, DNS, Print, Login Social Networking, Downloads Web Cache, CDN, Video Streaming Web/Collocation Services Cloud Computing | <ul style="list-style-type: none"> Designed for small and medium businesses Email/Firewall/Application Server Web/Hosting Application | <ul style="list-style-type: none"> Designed for small and medium businesses Email/Firewall/Application Server 2D/3D Content Creation |
| Outstanding Features | <ul style="list-style-type: none"> Up to 8x hot-pluggable node in 3U chassis UID LED Hot-swappable SAS/SATA3(Limited Support) HDDs High density, Enterprise performance, Cost effective, Multi-node UP server 1+1 Redundant 2200W Titanium Level high-efficiency power supplies 1 PCIe 5.0 (x8) Low-profile expansion slot per node | . | <ul style="list-style-type: none"> Remote management via IPMI with dedicated IPMI LAN port |
| Serverboard | SUPER● H13SRD-F | SUPER● H13SAE-MF | SUPER● H13SAE-MF |
| Chipset | AMD Knoll - Integrated I/O Controller Hub | AMD B650 | AMD B650 |
| System Memory (Max.) | 4 DIMM slots Up to 128 ECC UDIMM, DDR5-5200MHz | 4 DIMM slots Up to 192GB: 4x 48GBGB DRAM | 4 DIMM slots Up to 128GB: 4x 32GB DRAM |
| Expansion Slots | PCIe 5.0 x16 LP slot(s) PCIe 5.0 x8 MLP slot(s) | PCIe 5.0 x16 slot(s) | 2 PCIe 5.0 x16 slot(s) |
| Onboard Storage Controller | AMD AM5 | | |
| Connectivity | PCIe 5.0 MicroLP interfaces | 1x 1GbE RJ45 port(s) with Realtek RTL8211F PHY (dedicated IPMI) 2x 1GbE RJ45 port(s) with Intel® Ethernet Controller I210-AT | 1x 1GbE RJ45 port(s) with Realtek RTL8211F PHY (dedicated IPMI) 2x 1GbE RJ45 port(s) with Intel® Ethernet Controller I210-AT |
| VGA/Audio | 1 VGA port | 1 VGA port | 1 VGA port |
| Management | Intel Node Manager; IPMI 2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watch Dog | | |
| Drive Bays | 2x 3.5" hot-swap NVMe/SAS/SATA drive bays; | 1x 3.5" SATA drive bays; | 4x 3.5" SATA drive bays; |
| Power Supply | Redundant 2200W Titanium level (80%) | | 1000W Redundant Power Supplies with PMBus |
| Cooling System | 4x 8cm heavy duty fan(s) | 6x 40mmcm heavy duty fan(s) | 2x 9cm heavy duty fan(s) |
| Form Factor | 3U Rackmount Enclosure: 438 x 132 x 589mm (17.26" x 5.21" x 23.2") Package: 667 x 295.91 x 863.6mm (26.26" x 11.65" x 34") | 1U Rackmount Enclosure: 437 x 43 x 429mm (17.2" x 1.7" x 16.9") Package: 686 x 203 x 610mm (27" x 8" x 24") | Mini-Tower Rackmount Enclosure: 184 x 362 x 425mm (7.25" x 14.25" x 16.75") Package: 279 x 508 x 533mm (11" x 20" x 21") |

H12 TWIN SYSTEMS

TwinPro® - 2U 4 UP Nodes



BigTwin® - 2U 4 DP Nodes



BigTwin® - 2U 4 DP Nodes



| MODEL | AS -2014TP-HTR | AS -2124BT-HNTR** | AS -2124BT-HTR** |
|----------------------------|---|---|--|
| Processor Support | Single AMD EPYC™ 7003/7002 Series Processor* | Dual AMD EPYC™ 7003/7002 Series Processors | Dual AMD EPYC™ 7003/7002 Series Processors |
| Key Applications | <ul style="list-style-type: none"> Hyperscale and Hyperconverged Solutions Compute Intensive Application Enterprise Server Data Center HPC | <ul style="list-style-type: none"> Hyperscale and Hyperconverged Solutions Compute Intensive Application Enterprise Server Data Center HPC | <ul style="list-style-type: none"> Hyperscale and Hyperconverged Solutions Compute Intensive Application Enterprise Server Data Center HPC |
| Outstanding Features | <ul style="list-style-type: none"> Up to 3 3.5" SATA drives per node Up to 8 DIMMs per node Flexible SIOm options M.2 support 2 PCIe add-on cards per node | <ul style="list-style-type: none"> Up to 6 2.5" drives per node (4 NVMe + 2 SATA) or (6 SATA) Up to 16 DIMMs per node Flexible SIOm options M.2 support 2 PCIe add-on cards per node | <ul style="list-style-type: none"> Up to 6 2.5" SATA drives per node Up to 16 DIMMs per node Flexible SIOm options M.2 Support 2 PCIe add-on cards per node |
| Serverboard | SUPER● H12SST-PS | SUPER● H12DST-B | SUPER● H12DST-B |
| System Memory (Max.) | Up to 2TB ECC 3DS LRDIMM, up to DDR4-3200MHz; 8 DIMM slots | Up to 4TB ECC 3DS LRDIMM, up to DDR4-3200MHz; 16 DIMM slots | Up to 4TB ECC 3DS LRDIMM, up to DDR4-3200MHz; 16 DIMM slots |
| Expansion Slots | 2 PCIe 4.0 X16 (LP) 1 SIOm card support 4 M.2 SATA/PCIe slots 22110/2280/2260/2242 M-key | 2 PCIe 4.0 X16 (LP) 1 SIOm card support 1 M.2 SATA/PCIe slot 2280/2210 M-key | 2 PCIe 4.0 x16 (LP) 1 SIOm card support 1 M.2 SATA/PCIe slot 2280/2210 M-key |
| Onboard Storage Controller | SATA3 | NVMe and SATA3 | SATA3 |
| Connectivity | SIOm Network Card For Flexible Networking Options (not included, must add 1 per node) | SIOm Network Card For Flexible Networking Options (not included, must add 1 per node) | SIOm Network Card For Flexible Networking Options (not included, must add 1 per node) |
| VGA/Audio | Aspeed AST2500 BMC | Aspeed AST2500 BMC | Aspeed AST2500 BMC |
| Management | IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog | IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog | IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog |
| Drive Bays | 3 Hot-swap 3.5" SATA drive bays per node | 6 hot-swap 2.5" drive bays per node (4 NVMe + 2 SATA) or (6 SATA) | 6 hot-swap 2.5" SATA drive bays per node |
| Power Supply | Redundant 2000W Titanium Level (96%) (Full redundancy based on configuration and application load) | Redundant 2200W Titanium Level (96%) (Full redundancy based on configuration and application load) | Redundant 2200W Titanium Level (96%) (Full redundancy based on configuration and application load) |
| Cooling System | 4x 80mm heavy duty PWM fans | 4x 80mm heavy-duty PWM fans | 4x 80mm heavy-duty PWM fans |
| Form Factor | 2U (4-Node) Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5") | 2U (4-Node) Rackmount 447 x 88 x 730mm (17.6" x 3.47" x 28.75") | 2U (4-Node) Rackmount 447 x 88 x 730mm (17.6" x 3.47" x 28.75") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

** For complete system only and AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache Technology requires liquid cooling.

H12 FATTWIN®

(For Complete System Only)

8 Nodes, Front I/O



8 Nodes, Rear IO



4 Nodes, Rear IO



| MODEL | AS -F1114S-FT | AS -F1114S-RNTR | AS -F2014S-RNTR |
|----------------------------|--|---|---|
| Processor Support | Single AMD EPYC™ 7003/7002 Series Processor* | Single AMD EPYC™ 7003/7002 Series Processor* | Single AMD EPYC™ 7003/7002 Series Processor* |
| Key Applications | <ul style="list-style-type: none"> Hyperscale and Hyperconverged Solutions Cloud Computing Cluster Node Data Center HPC cluster computer nodes | <ul style="list-style-type: none"> Hyperscale / Hyperconverged HPC and Big Data Data Center Enterprise Applications Scale Out Storage Telco Data Center Virtualization Server | <ul style="list-style-type: none"> Hyperscale / Hyperconverged HPC and Big Data Data Center Enterprise Applications Scale Out Storage Telco Data Center Virtualization Server |
| Outstanding Features | <ul style="list-style-type: none"> 8 nodes in a 4U system 280W CPU support Supports up to 64 cores 2x LP PCIe x16 slots; 1x AIOM PCIe x16 slot per node Supports 2-4x 2.5" SATA drives per node Quad 2000W Titanium Level high-efficiency power supplies | <ul style="list-style-type: none"> Up to 6 hot-swap optional SATA/NVMe drives per node 4 onboard M.2 SATA/NVMe support per node Flexible AIOM module per node 1 PCIe add-on card per node Up to 8 DIMMs per node | <ul style="list-style-type: none"> Can support up to 8 SATA/NVMe drives per node Can support up to 10 2.5" SATA drives 4 onboard SATA/NVMe M.2 Support per node Flexible AIOM module per node 1 PCIe add-on cards per node Up to 8 DIMMs per node |
| Serverboard | SUPER● H12SSFF-AN6 | SUPER● H12SSFR-AN6 | SUPER● H12SSFR-AN6 |
| System Memory (Max.) | Up to 4TB ECC 3DS LRDIMM, up to DDR4-3200MHz; 16 DIMM slots | Up to 2TB ECC 3DS LRDIMM, up to DDR4-3200MHz; 8 DIMM slots | Up to 2TB ECC 3DS LRDIMM, up to DDR4-3200MHz; 8 DIMM slots |
| Expansion Slots | 1 PCIe 4.0 x16 (AIOM) 2 PCIe 4.0 x16 (LP) per node | FatTwin Rear IO: PCIe 4.0 x16 LP Riser and PCIe 4.0 x8 Internal RAID AOC | FatTwin Rear IO: PCIe 4.0 x16 LP Riser and PCIe 4.0 x8 Internal RAID AOC |
| Onboard Storage Controller | NVMe and SATA3 | NVMe and SATA3 | NVMe and SATA3 |
| Connectivity | AIOM Network Card For Flexible Networking Options (not included, must 1 per Node) | AIOM Network Card For Flexible Networking Options (not included, must add 1 per node) | AIOM Network Card For Flexible Networking Options (not included, must add 1 per node) |
| VGA/Audio | 1 VGA; Aspeed AST2600 BMC per node | 1 VGA, Aspeed AST2600 BMC per node | 1 VGA, Aspeed AST2600 BMC per node |
| Management | IPMI 2.0, KVM with dedicated LAN, SSM, SUM SuperDoctor® 5, Watch Dog | IPMI 2.0, KVM with dedicated LAN, SSM, SUM SuperDoctor® 5, Watch Dog | IPMI 2.0, KVM with dedicated LAN, SSM, SUM SuperDoctor® 5, Watch Dog |
| Drive Bays | 2-4x 2.5" SATA3/NVMe drive bays per node | 4 hot-swap 2.5" SATA with 2 hot-swap 2.5" SATA/NVMe drive bays per node | 8 Hot-swap 3.5" SATA drive bays per node |
| Power Supply | 2000W or above Redundant Power Supplies with PMBus | Redundant 2200W Titanium Level (96%) power supplies (Full redundancy based on configuration and application load) | Redundant 2200W Titanium Level (96%) (Full redundancy based on configuration and application load) |
| Cooling System | 8x 8cm 13.5k RPM rear fans per enclosure | 3x 4cm 17.6K RPM | 2x 80mm heavy duty PWM fans |
| Form Factor | 4U (8-node) Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29") | 4U (8-node) Rackmount 447 x 177 x 730mm (17.6" x 7" x 28.75") | 4U (4-node) Rackmount 447 x 177 x 730mm (17.6" x 7" x 28.75") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

H13 HYPER

(For Complete System Only)

1U Hyper



2U Hyper



2U Hyper



| MODEL | AS -1125HS-TNR | AS -2025HS-TNR | AS -2125HS-TNR |
|----------------------------|---|---|---|
| Processor Support | AMD EPYC™ 9004 Series Processors Dual Socket (Socket SP5) | AMD EPYC™ 9004 Series Processors Dual Socket (Socket SP5) | AMD EPYC™ 9004 Series Processors Dual Socket (Socket SP5) |
| Key Applications | <ul style="list-style-type: none"> • Software-defined Storage • Virtualization • Enterprise Server • Cloud Computing • AI Inference and Machine Learning | <ul style="list-style-type: none"> • Software-defined Storage • Virtualization • Enterprise Server • Cloud Computing • AI Inference and Machine Learning | <ul style="list-style-type: none"> • Software-defined Storage • Virtualization • Enterprise Server • Cloud Computing • AI Inference and Machine Learning |
| Outstanding Features | <ul style="list-style-type: none"> • Tool-less system design for easy maintenance | <ul style="list-style-type: none"> • Tool-less system design for easy maintenance | <ul style="list-style-type: none"> • Tool-less system design for easy maintenance |
| Serverboard | SUPER [®] H13DSH | SUPER [®] H13DSH | SUPER [®] H13DSH |
| Chipset | System On Chip | System On Chip | System on Chip |
| System Memory (Max.) | Up to 6TB 3DS ECC RDIMM DDR5-4800MHz in 24 DIMMs | Up to 6TB 3DS ECC RDIMM DDR5-4800MHz in 24 DIMMs | Up to 6TB 3DS ECC RDIMM DDR5-4800MHz in 24 DIMMs |
| Expansion Slots | 2 PCIe 5.0 x16 FH, 10.5"L and 1 PCIe 5.0 x16, FH, 6.6"L | Configurable PCIe slot options up to 8 PCIe 5.0 x8 or 4 PCIe 5.0 x16 FH, 10.5"L | Configurable PCIe slot options up to 8 PCIe 5.0 x8 or 4 PCIe 5.0 x16 FH, 10.5"L |
| Onboard Storage Controller | AMD SP5 | AMD SP5 | AMD SP5 |
| Connectivity | AIOM / OCP 3.0 | AIOM / OCP 3.0 | AIOM / OCP 3.0 |
| VGA/Audio | 1 VGA port | 1 VGA port | 1 VGA port |
| Management | IPMICFG; IPMIView for Linux/ Windows; IPMI 2.0; KVM with dedicated LAN; NMI; Redfish API; SPM; SSM; SUM; SuperDoctor [®] 5; Watch Dog | IPMICFG; IPMIView for Linux/ Windows; IPMI 2.0; KVM with dedicated LAN; NMI; Redfish API; SPM; SSM; SUM; SuperDoctor [®] 5; Watch Dog | IPMICFG; IPMIView for Linux/ Windows; IPMI 2.0; KVM with dedicated LAN; NMI; Redfish API; SPM; SSM; SUM; SuperDoctor [®] 5; Watch Dog |
| Drive Bays | 8x 2.5" hot-swap NVMe/SAS/SATA drives bays (Option for up to 12 drives); Optional RAID support via RAID Controller AOC | 12x 3.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID Controller AOC | 24x 2.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID Controller AOC |
| Power Supply | Redundant 1200W Titanium level (96%) | Redundant 1600W Titanium level (96%) | Redundant 1600W Titanium level (96%) |
| Cooling System | 8x heavy-duty fans w/ Optimal Fan Speed Control | 8x heavy-duty fans w/ optimal Fan Speed Control | 4x heavy-duty fans w/ Optimal Fan Speed Control |
| Form Factor | 1U Rackmount Enclosure: 437 x 43 x 747mm (17.2" x 1.7" x 29.4") Package: 605 x 206 x 1032mm (23.8" x 8.1" x 40.6") | 2U Rackmount Enclosure: 437 x 88.9 x 803mm (17.2" x 3.5" x 31.6") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6") | 2U Rackmount Enclosure: 437 x 88.9 x 760mm (17.2" x 3.5" x 29.9") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6") |

H13 HYPER-U

(For Complete System Only)

1U Hyper



2U Hyper



2U Hyper



| MODEL | AS -1115HS-TNR | AS -2015HS-TNR | AS -2115HS-TNR |
|----------------------------|---|---|---|
| Processor Support | AMD EPYC™ 9004 Series Processor Single Socket (Socket SP5) supported4 UPI | AMD EPYC™ 9004 Series Processor Single Socket (Socket SP5) supported4 UPI | AMD EPYC™ 9004 Series Processor Single Socket (Socket SP5) supported4 UPI |
| Key Applications | <ul style="list-style-type: none"> • Software-defined Storage • Virtualization • Enterprise Server • Cloud Computing • AI Inference and Machine Learning | <ul style="list-style-type: none"> • Software-defined Storage • Virtualization • Enterprise Server • Cloud Computing • AI Inference and Machine Learning | <ul style="list-style-type: none"> • Software-defined Storage • Virtualization • Enterprise Server • Cloud Computing • AI Inference and Machine Learning |
| Outstanding Features | <ul style="list-style-type: none"> • Tool-less system design for easy maintenance | <ul style="list-style-type: none"> • Tool-less system design for easy maintenance | <ul style="list-style-type: none"> • Tool-less system design for easy maintenance |
| Serverboard | SUPER● H13SSH | SUPER● H13SSH | SUPER● H13SSH |
| Chipset | System On Chip | System On Chip | System On Chip |
| System Memory (Max.) | 24 DIMM slots Up to 3TB: DDR5-4800MHz (12 DIMM slots, 1DPC) Up to 6TB: DDR5-4000MHz/ 3600MHz (24 DIMM slots, 2DPC) | 24 DIMM slots Up to 3TB: DDR5-4800MHz (12 DIMM slots, 1DPC) Up to 6TB: DDR5-4000MHz/ 3600MHz (24 DIMM slots, 2DPC) | 24 DIMM slots Up to 3TB: DDR5-4800MHz (12 DIMM slots, 1DPC) Up to 6TB: DDR5-4000MHz/ 3600MHz (24 DIMM slots, 2DPC) |
| Expansion Slots | 2 PCIe 5.0 x16 FH, 10.5"L and 1 PCIe 5.0 x16, FH, 6.6"L | Configurable PCIe slot options up to 8 PCIe 5.0 x8 or 4 PCIe 5.0 x16 FH, 10.5"L | Configurable PCIe slot options up to 8 PCIe 5.0 x8 or 4 PCIe 5.0 x16 FH, 10.5"L |
| Onboard Storage Controller | AMD SP5 | AMD SP5 | AMD SP5 |
| Connectivity | via AIOM | via AIOM | via AIOM |
| VGA/Audio | 1 VGA port | 1 VGA port | 1 VGA port |
| Management | IPMICFG; IPMIView for Linux/ Windows; SPM; SSM; SUM; SuperDoctor® 5; Watch Dog | IPMICFG; IPMIView for Linux/ Windows; SPM; SSM; SUM; SuperDoctor® 5; Watch Dog | IPMICFG; IPMIView for Linux/ Windows; SPM; SSM; SUM; SuperDoctor® 5; Watch Dog |
| Drive Bays | 8x 2.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID Controller AOC | 12x 3.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID Controller AOC | 24x 2.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID Controller AOC |
| Power Supply | Redundant 1200W Titanium level (96%) | Redundant 1600W Titanium level (96%) | Redundant 1600W Titanium level (96%) |
| Cooling System | 8x 4cm heavy duty fan(s) | 4x 8cm heavy duty fan(s) | 4x 8cm heavy duty fan(s) |
| Form Factor | 1U Rackmount Enclosure: 437 x 43 x 747mm (17.2" x 1.7" x 29.4") Package: 605 x 206 x 1032mm (23.8" x 8.1" x 40.6") | 2U Rackmount Enclosure: 437 x 88.9 x 803mm (17.2" x 3.5" x 31.6") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6") | 2U Rackmount Enclosure: 437 x 88.9 x 760mm (17.2" x 3.5" x 29.9") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6") |

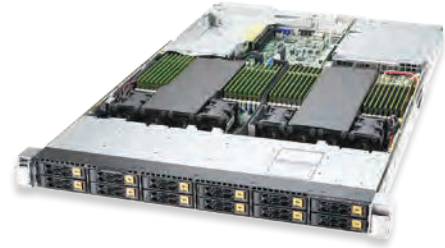
H12 ULTRA

(For Complete System Only)

1U Ultra, 8TB DDR4



1U Ultra, 12 NVMe



| MODEL | AS -1024US-TRT | AS -1124US-TNRP |
|----------------------------|---|---|
| Processor Support | Dual AMD EPYC™ 7003/7002 Series Processors* | Dual AMD EPYC™ 7003/7002 Series Processors* |
| Key Applications | <ul style="list-style-type: none"> Virtualization Cloud Computing High End Enterprise Server Optional 4 NVMe ready 32 DIMMs 3+1 PCIe add-on cards | <ul style="list-style-type: none"> Virtualization Cloud Computing High End Enterprise Server 32 DIMMs 3+1 PCIe add-on cards |
| Outstanding Features | <ul style="list-style-type: none"> 4x 3.5" SATA/SAS/NVMe drive bays 280W CPU support Redundant Titanium Level (96%) power supplies Maximum IO output in 1U platform | <ul style="list-style-type: none"> 12-Port NVMe Gen 4.0/3.0 support 280W CPU support Redundant Titanium Level (96%) power supplies Maximum IO output in 1U platform |
| Serverboard | SUPER● H12DSU-IN | SUPER● H12DSU-IN |
| System Memory (Max.) | Up to 8TB ECC DDR4 3200MHz SDRAM in 32 DIMMs | Up to 8TB ECC DDR4 3200MHz SDRAM in 32 DIMMs |
| Expansion Slots | 2 PCIe x16 (FH /9.5"L) slots 1 PCIe x16 slot (LP) 1 PCIe x16 slot (internal LP) | 2 PCIe x16 (FH /9.5"L) slots 1 PCIe x16 slot (LP) 1 PCIe x16 slot (internal LP) |
| Onboard Storage Controller | 4 SATA3 (6 Gbps) ports; Optional 4 SAS3 drives support VS additional option parts or, Optional 4 NVMe drives support vs addition NVMe trays required. | 12 hot-Swappable U.2 drives support; Optional 12 SAS3 /12SATA support with additional SAS/SATA Kit |
| Connectivity | Dual 10GBase-T RJ45 LAN ports via Intel Carlsville X710-AT2; 3 USB 3.0 ports (2 rear, 1 Type A) | Dual port 10G RJ45 & dual port 10G SFP+, Intel Carlsville X710-TM4; 4 USB 3.0 ports (1 front, 2 rear, 1 Type A) |
| VGA/Audio | 1 VGA; 1 ASPEED AST2500 BMC | 1 VGA; 1 ASPEED AST2500 BMC |
| Management | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port |
| Drive Bays | 4x hot-swap 3.5" drive bays support | 12x hot-swap 2.5" drives support |
| Power Supply | 1000W Redundant Titanium Level (96%+) power supplies (Full redundancy based on configuration and application load) | 1200W Redundant Titanium Level (96%) power supplies (Full redundancy based on configuration and application load) |
| Cooling System | 8 heavy-duty fans w/ Optimal Fan Speed Control | 8 heavy-duty fans w/ optimal Fan Speed Control |
| Form Factor | 437 x 43 x 754mm (17.2" x 1.7" x 29.7") | 1U Rackmount 437 x 43 x 724mm (17.2" x 1.7" x 28.5") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

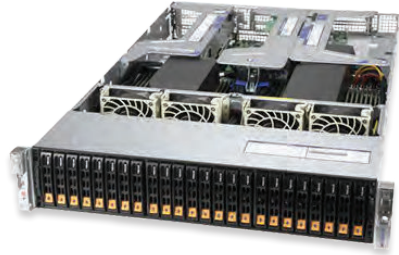
H12 ULTRA

(For Complete System Only)

2U Ultra, 8TB DDR4



2U Ultra, 24 NVMe



| MODEL | AS -2024US-TRT | AS -2124US-TNRP |
|----------------------------|---|--|
| Processor Support | Dual AMD EPYC™ 7003/7002 Series Processors* | Dual AMD EPYC™ 7003/7002 Series Processors* |
| Key Applications | <ul style="list-style-type: none"> Virtualization Cloud Computing High End Enterprise Server Hyperconverge Storage 32 DIMMs 5+1 PCIe add-on cards | <ul style="list-style-type: none"> Virtualization Cloud Computing High End Enterprise Server Hyperconverge Storage 32 DIMMs 1 PCIe add-on cards |
| Outstanding Features | <ul style="list-style-type: none"> 12x 3.5" SATA/SAS (SAS via AOC)/support up to 4 NVMe 280W CPU support 1600W redundant Titanium Level (96%) power supplies Maximum IO output in 2U platform | <ul style="list-style-type: none"> 24x 2.5" hot-swap NVMe drive bays 280W CPU support 1600W redundant Titanium Level (96%) power supplies Maximum IO output in 2U platform |
| Serverboard | SUPER● H12DSU-iN | SUPER● H12DSU-iN |
| System Memory (Max.) | Up to 8TB ECC DDR4 3200MHz SDRAM in 32 DIMMs | Up to 8TB ECC DDR4 3200MHz SDRAM in 32 DIMMs |
| Expansion Slots | 2 PCIe 4.0 x16 slots (FH, 10.5" L) 1 PCIe 4.0 x16 slot (FH, 9.5" L) 1 PCIe 4.0 x16 slot (LP) 1 PCIe 4.0 x8 slot (FH, 9.5" L, in x16 slot) 1 PCIe 4.0 x8 slot (internal LP, in x16 slot) | 1 PCIe 4.0 x16 slot (FH, 9.5" L) |
| Onboard Storage Controller | 8 SATA3 (6 Gbps) ports + 4 hybrid SATA/NVMe function ready for HDD slots 0~3 with additional NVMe HDD trays for NVMe drives; Optional 12 SAS3 drive support VS SAS card with cables | 24x Hot-Swappable U.2 drive bays support with optional up to 24x SAS3 drive bays support VS SAS card and cables |
| Connectivity | Dual port 10G RJ45, Intel Carlsville X710-AT2; 3 USB 3.0 ports (2 rear + 1 Type A) | Dual 10G RJ45 & Dual 10G SFP+ ports, Intel Carlsville X710-TM4 3 USB 3.0 ports (2 rear, 1 Type A) |
| VGA/Audio | 1 VGA; 1 ASPEED AST2500 BMC | 1 VGA; 1 ASPEED AST2500 BMC |
| Management | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port |
| Drive Bays | 12x hot-swap 3.5" drive bays support | 24x hot-swap 2.5" drive bays support |
| Peripheral Bays | 2x 2.5" peripheral drive bays with additional rear drive bay kits + cable | N/A |
| Power Supply | 1600W redundant Titanium Level (96%+) power supplies (Full redundancy based on configuration and application load) | 1600W redundant Titanium Level (96%) power supplies (Full redundancy based on configuration and application load) |
| Cooling System | 4x heavy-duty fans w/ optimal Fan Speed Control | 4x heavy-duty fans w/ optimal Fan Speed Control |
| Form Factor | 437 x 89 x 723mm (17.2" x 3.5" x 28.46") | 2U Rackmount 437 x 89 x 723mm (17.2" x 3.5" x 28.46") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

H13 CloudDC

(For Complete System Only)

1U CloudDC



1U CloudDC



2U CloudDC



| MODEL | AS -1015CS-TNR | AS -1115CS-TNR | AS -2015CS-TNR |
|----------------------------|--|---|--|
| Processor Support | AMD EPYC™ 9004 Series Processors Single Socket (Socket SP5) | AMD EPYC™ 9004 Series Processors Single Socket (Socket SP5) | AMD EPYC™ 9004 Series Processors Single Socket (Socket SP5) |
| Key Applications | <ul style="list-style-type: none"> • CDN, Edge Nodes • DNS & Gateway Servers, Firewall Application • Cloud Computing, Compact Server • Data Center Optimized, Value IaaS • Web Server, Firewall Application | <ul style="list-style-type: none"> • CDN, Edge Nodes • DNS & Gateway Servers, Firewall Application • Cloud Computing, Compact Server • Data Center Optimized, Value IaaS • Web Server, Firewall Application | <ul style="list-style-type: none"> • CDN, Edge Nodes • DNS & Gateway Servers, Firewall Application • Cloud Computing, Compact Server • Data Center Optimized, Value IaaS • Web Server, Firewall Application • Up to 12x NVMe/SATA/SAS hybrid tool-less drive bays • Optional hot-swappable 2.5" rear drive bays |
| Outstanding Features | <ul style="list-style-type: none"> • Up to 4x SATA/SAS/NVMe tool-less drive bays • 3.5" tool-less drive trays also support 2.5" drives • Dual AIOM slots for flexible networking (OCP3.0) • Compact server with tool-less drive trays • Balanced architecture in compact chassis (25.6") • 2 On-board Gen 3 M.2 NVMe 80mm/110mm (Boot) | <ul style="list-style-type: none"> • Up to 10x NVMe/SATA/SAS hybrid tool-less drive bays • Dual AIOM slots for flexible networking (OCP3.0) • Compact server with tool-less drive trays • Balanced architecture in compact chassis (23.5") • 2 On-board Gen 3 M.2 NVMe 80mm/110mm (Boot) | <ul style="list-style-type: none"> • Flexible expansion with up to 2x PCIe 5.0 x16 and 4x PCIe 5.0 x8 (convertible to 2x PCIe 5.0 x16) slots • Dual AIOM slots for flexible networking (OCP3.0) • Compact server with tool-less drive trays • Balanced architecture in compact chassis (25.6") • 3.5" tool-less drive trays also support 2.5" drives • 2 On-board Gen 3 M.2 NVMe 80mm/110mm (Boot) |
| Serverboard | SUPER [®] H13SSW | SUPER [®] H13SSW | SUPER [®] H13SSW |
| Chipset | System on Chip | System on Chip | System on Chip |
| System Memory (Max.) | Up to 3TB 3DS ECC RDIMM DDR5-4800MHz in 12 DIMMs | Up to 3TB 3DS ECC RDIMM DDR5-4800MHz in 12 DIMMs | Up to 3TB 3DS ECC RDIMM DDR5-4800MHz in 12 DIMMs |
| Expansion Slots | 2 Gen5 x16 FHHL slots | 2 Gen5 x16 FHHL slots | 2 Gen5 x16 FHHL slots 2 Gen5 x16 FHFL slots |
| Onboard Storage Controller | AMD SP5 | AMD SP5 | AMD SP5 |
| Connectivity | Dual AIOM/ OCP3.0, 2 USB 3.0 ports (2 rear) | Dual AIOM/ OCP3.0, 2 USB 3.0 ports (2 rear) | Dual AIOM/ OCP3.0, 2 USB 3.0 ports (2 rear) |
| VGA/Audio | 1 VGA; 1 ASPEED AST2600 BMC | 1 VGA; 1 ASPEED AST2600 BMC | 1 VGA; 1 ASPEED AST2600 BMC |
| Management | IPMI 2.0; KVM with dedicated LAN; NMI; Redfish API; SPM; SSM; SUM; SuperDoctor [®] 5; Watch Dog | IPMI 2.0; KVM with dedicated LAN; NMI; Redfish API; SPM; SSM; SUM; SuperDoctor [®] 5; Watch Dog | IPMI 2.0; KVM with dedicated LAN; NMI; Redfish API; SPM; SSM; SUM; SuperDoctor [®] 5; Watch Dog |
| Drive Bays | 4x 3.5" hot-swap NVMe/SATA/SAS hybrid drive bays; Optional RAID support via RAID controller AOC | 10x 2.5" hot-swap NVMe/SATA/SAS hybrid drive bays; Optional RAID support via RAID controller AOC | 12x 3.5" hot-swap NVMe/SATA/SAS hybrid drive bays; Optional RAID support via RAID controller AOC |
| Peripheral Bays | 2x 2.5" (optional) | N/A | N/A |
| Power Supply | Redundant 860W Platinum level (94%) | Redundant 860W Platinum level (94%) | Redundant 1200W Titanium level (96%) |
| Cooling System | 6x 4cm heavy duty fans | 6x 4cm heavy duty fans | 3x 8cm heavy duty fans |
| Form Factor | 1U Rackmount Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 605 x 197 x 878mm (23.8" x 7.8" x 34.6") | 1U Rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 605 x 197 x 822mm (23.8" x 7.8" x 32.4") | 2U Rackmount Enclosure: 437 x 89 x 648mm (17.2" x 3.5" x 25.5") Package: 678 x 290 x 876mm (26.7" x 11.4" x 34.5") |

H12 CLOUDDC

(For Complete System Only)

Cost Effective 1U



Cost Effective 2U



| MODEL | AS -1114CS-TNR | AS -2014CS-TR |
|----------------------------|--|---|
| Processor Support | Single AMD EPYC™ 7003/7002 Series Processor* | Single AMD EPYC™ 7003/7002 Series Processor* |
| Key Applications | <ul style="list-style-type: none"> Financial Services Cloud Computing Network Appliance Private Cloud Content Delivery Network (CDN) Deep Learning Inferencing | <ul style="list-style-type: none"> Financial Services Cloud Computing Network Appliance Private Cloud Content Delivery Network (CDN) Deep Learning Inferencing |
| Outstanding Features | <ul style="list-style-type: none"> Dual AIOM slots for flexible networking 2x PCIe 4.0 x16 FH/HL slots 860W redundant Platinum Level power supplies Tool-less drive trays and tool-less brackets 280W CPU support 16 DIMMs | <ul style="list-style-type: none"> Dual AIOM slots for flexible networking 4x PCIe 4.0 x16 (2 FH, 10.5"L) or 2x PCIe 4.0 x16 FH/HL + 4x PCIe 4.0 x8 FH/HL slots 920W redundant Platinum Level high-efficiency power supplies Tool-less drive trays and tool-less brackets 280W CPU support 16 DIMMs |
| Serverboard | SUPER [®] H12SSW-AN6 | SUPER [®] H12SSW-AN6 |
| System Memory (Max.) | Up to 4TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM, in 16 DIMMs slot | Up to 4TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM, in 16 DIMMs slot |
| Expansion Slots | 2 PCIe 4.0 x16 (FH/HL) | 4 PCIe 4.0 x16 (2 FH, 10.5"L) or, 2 PCIe 4.0 x16 (FH/HL) + 4 PCIe 4.0 x8(2 FH/HL, 2 FH/HL) |
| Onboard Storage Controller | 10x hot-swappable SATA drives bays support; Optional 10x SAS3/ NVMe support with additional SAS/NVMe kit | 12x 3.5" SATA /SAS (SAS via AOC)/NVMe drive bays with optional kit + 2x 2.5" (with optional kit) |
| Connectivity | Dual AIOM slots, 2 USB 3.0 ports (2 rear) | Dual AIOM slots, 2 USB 3.0 ports (2 rear) |
| VGA/Audio | 1 VGA; 1 ASPEED AST2600 BMC | 1 VGA; 1 ASPEED AST2600 BMC |
| Management | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port |
| Drive Bays | 10x hot-swap 2.5" drive bays support | 12x hot-swap 3.5" drive bays support |
| Peripheral Bays | N/A | 2x 2.5" Peripheral drive bays with additional rear drive bay kits + cable |
| Power Supply | 860W redundant Platinum Level high-efficiency power supplies | 920W redundant Platinum Level high-efficiency power supplies |
| Cooling System | 6x 40x40x56mm counter-rotation PWM fans | 3x 80x80x38mm middle cooling fans |
| Form Factor | 1U Rackmount 437 x 43 x 597mm (17.2" x 1.7" x 23.5") | 2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

H13 STORAGE SERVERS

(For Complete System Only)



| MODEL | ASG-1115S-NE316R | ASG-2115S-NE332R |
|----------------------------|---|---|
| Processor Support | AMD EPYC™ 9004 Series Processor (the latest AMD EPYC™ 9004 Series Processor with AMD 3D V-Cache™ Technology) Single Socket (Socket SP5) supported TDP up to 300W; 4 UPI | AMD EPYC™ 9004 Series Processor (the latest AMD EPYC™ 9004 Series Processor with AMD 3D V-Cache™ Technology) Single Socket (Socket SP5) supported TDP up to 300W; 4 UPI |
| Key Applications | <ul style="list-style-type: none"> In-Memory Computing Software-defined Storage NVMe Over Fabrics Solution Private & Hybrid Cloud Data Intensive HPC | <ul style="list-style-type: none"> In-Memory Computing Software-defined Storage NVMe Over Fabrics Solution Private & Hybrid Cloud Data Intensive HPC |
| Outstanding Features | <ul style="list-style-type: none"> Two PCIe 5.0 x16 slots & two AIOM connectors (OCP 3.0 SFF compliant) Supports 24 DIMMs with 2DPC, up to 6TB memory capacity with 24 DIMMs of 256GB 3DS RDIMM/RDIMM DDR5 ECC memory Single Socket SP5 4th Generation AMD EPYC 9004 Scalable processors. Up to 300W TDP. Redundant Titanium 1600W Power Supplies Composable Infrastructure Platform | <ul style="list-style-type: none"> Two PCIe 5.0 x16 slots & two AIOM connectors (OCP 3.0 SFF compliant) Supports 24 DIMMs with 2DPC, up to 6TB memory capacity with 24 DIMMs of 256GB 3DS RDIMM/RDIMM DDR5 ECC memory Single Socket SP5 4th Generation AMD EPYC 9004 Scalable processors. Up to 300W TDP. Redundant Titanium 2000W Power Supplies Composable Infrastructure Platform |
| Serverboard | SUPER [®] H13SSF | SUPER [®] H13SSF |
| Chipset | AMD SP5 | AMD SP5 |
| System Memory (Max.) | 24 DIMM slots Up to 6TB: 24x 256 GB DRAM 4800MHz ECC DDR5 RDIMM;LRDIMM | |
| Expansion Slots | 2 PCIe 5.0 x16 AIOM slot(s) 2 PCIe 5.0 x16 FH slot(s) | 2 PCIe 5.0 x16 AIOM slot(s) 2 PCIe 5.0 x16 FH slot(s) |
| Onboard Storage Controller | N/A | N/A |
| Connectivity | via AIOM | via AIOM |
| VGA/Audio | 1 VGA port | 1 VGA port |
| Management | IPMI 2.0; NMI; SUM; SuperDoctor [®] 5; Watch Dog | IPMI 2.0; NMI; SUM; SuperDoctor [®] 5; Watch Dog |
| Drive Bays | 16x E3.S Hot-swap NVMe (1T/2T) drive slots | |
| Power Supply | Redundant 1600W Titanium level (96%) | Redundant 2000W Titanium level (96%) |
| Cooling System | 8x 4cm heavy duty fan(s) | 4x 8cm heavy duty fan(s) |
| Form Factor | 1U Rackmount Enclosure: 438.4 x 43.6 x 773.25mm (17.2" x 1.7" x 30.4") Package: 604.774 x 199.898 x 1029.97mm (23.81" x 7.87" x 40.55") | 2U Rackmount Enclosure: 438.4 x 89.8 x 789.9mm (17.2" x 3.5" x 30.8") |

H13 SHORT-DEPTH FRONT I/O

(For Complete System Only)

Short-Depth AC



Short-Depth DC



| MODEL | AS -1115-FWTRT | AS -1115-FDWTRT |
|----------------------------|---|---|
| Processor Support | Single Socket AMD EPYC™ 8004 Series Processor up to 225W | Single Socket AMD EPYC™ 8004 Series Processor up to 225W |
| Key Applications | <ul style="list-style-type: none"> Virtualization Edge Cloud AI Computing vRAN/O-RAN/NEBS environment Telco 5G CDN/vCDN/Cloud CDN | <ul style="list-style-type: none"> Virtualization Edge Cloud AI Computing vRAN/O-RAN/NEBS environment Telco 5G CDN/vCDN/Cloud CDN |
| Outstanding Features | <ul style="list-style-type: none"> NEBS compliant design 3 PCIe 5.0 x16 expansion slots Supports double width GPU 2 On-board PCIe 3.0 x4 M.2 NVMe 80mm/110mm (Boot) | <ul style="list-style-type: none"> NEBS compliant design 3 PCIe 5.0 x16 expansion slots Supports double width GPU 2 On-board PCIe 3.0 x4 M.2 NVMe 80mm/110mm (Boot) |
| Serverboard | SUPER® H13SVW-NT | SUPER® H13SVW-NT |
| System Memory (Max.) | 6 DIMM slots, DDR5-4800MHz memory, support up to 576GB | 6 DIMM slots, DDR5-4800MHz memory, support up to 576GB |
| Expansion Slots | Slot 1: PCIe 5.0 x16 FHFL Slot 2: PCIe 5.0 x16 FHFL Slot 3: PCIe 5.0 x16 LP | Slot 1: PCIe 5.0 x16 FHFL Slot 2: PCIe 5.0 x16 FHFL Slot 3: PCIe 5.0 x16 LP |
| Onboard Storage Controller | System on Chip | System on Chip |
| Connectivity | 2x 10Gb RJ45 port(s) with Broadcom BCM57416 via AIOM | 2x 10Gb RJ45 port(s) with Broadcom BCM57416 via AIOM |
| VGA/Audio | 1 onboard VGA port | 1 onboard VGA port |
| Management | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port |
| Drive Bays | 2x 2.5" SATA/SAS/NVMe drive bays; 2x 2.5" NVMe hybrid; | 2x 2.5" SATA/SAS/NVMe drive bays; 2x 2.5" NVMe hybrid; |
| Power Supply | 2x 800W Redundant AC Platinum Level power supplies | 2x 600W Redundant DC power supplies |
| Cooling System | 6x (40cm x 40cm x 56 mmcm) heavy duty fan(s) | 6x (40cm x 40cm x 56 mmcm) heavy duty fan(s) |
| Form Factor | 1U Rackmount Enclosure: 436.88 x 44.5 x 429.3mm (17.2" x 1.7" x 16.9") Package: 685 x 203 x 609mm (27" x 8" x 24") | 1U Rackmount Enclosure: 436.88 x 44.5 x 429.3mm (17.2" x 1.7" x 16.9") Package: 685 x 203 x 609mm (27" x 8" x 24") |

H12 WIO / STORAGE

(For Complete System Only)

2U UP WIO



High Capacity Storage



| MODEL | AS -2114S-WN24RT | ASG-1014S-ACR12N4H |
|----------------------------|---|---|
| Processor Support | Single AMD EPYC™ 7003/7002 Series Processor*; TDP up to 280W | Single AMD EPYC™ 7003/7002 Series Processor* TDP up to 240W |
| Key Applications | <ul style="list-style-type: none"> • Virtualization • Hyperconverge Storage • Cloud Computing • All Flash Storage | <ul style="list-style-type: none"> • Object Storage • Scale-Out Density • Database Applications • Hadoop & Ceph storage solutions |
| Outstanding Features | <ul style="list-style-type: none"> • 24-Port NVMe SSD Support • Up to 4TB DDR4 ECC RDIMM • Dual 10GBaseT LAN Ports • 2x M.2 Support by default • 2 SATA DOMs Support with Embedded Power | <ul style="list-style-type: none"> • Up to 4TB ECC DDR4 • 4x 2.5" 7mm hot-swap NVMe drive bays • 3x PCIe 4.0 x16 slots (1x slot occupied by storage controller) • Pull-out drawer storage bay w/internal cable arm design |
| Serverboard | SUPER● H12SSW-NTR | SUPER● H12SSW-NTR |
| System Memory (Max.) | Up to 4TB 3DS ECC RDIMM/LRDIMM; DDR4 up to 3200MHz, in 16 DIMM slots | Up to 4TB 3DS ECC RDIMM/LRDIMM; DDR4 up to 3200MHz, in 16 DIMMs |
| Expansion Slots | 1 PCIe 4.0 x16 (FH/HL) | 2 PCIe 4.0 x16 (FHHL); 1 PCIe 4.0 x8 (LP) |
| Onboard Storage Controller | 24 Hot-Swappable U.2 NVMe drive support | NVMe drive bays via CPU SAS3/SATA3 drive bays via Broadcom 3916 RAID controller |
| Connectivity | 2 10GBase-T Ethernet via Broadcom BCM57416 Controller; 5 USB 3.0 ports (4 rear, 1 Type A) | 2 10GBase-T Ethernet via Broadcom BCM57416 Controller; 2 USB 2.0 port(s) (2 Front_USB) 4 USB 3.0 port(s) (4 Rear_USB) |
| VGA/Audio | 1 VGA 1 Aspeed AST2500 BMC | 1 VGA; 1 ASPEED AST2500 BMC |
| Management | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port |
| Drive Bays | 24 Hot-Swappable U.2 NVMe drive support | 12x 3.5" SAS/SATA drive bays; 4x 2.5" 7mm NVMe drive bays |
| Power Supply | 1200W Redundant Power Supplies Titanium Level (96%) (Full redundancy based on configuration and application load) | 800W redundant Platinum Level high-efficiency power supplies |
| Cooling System | 3 heavy duty fans w/ Optimal Fan Speed Control | 6x 40x40x56mm counter-rotation PWM fans |
| Form Factor | 2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8") | 1U Rackmount 447 x 43 x 940mm (17.6" x 1.7" x 37") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

H12 SUPERBLADE®

(For Complete System Only)



| MODEL | SBA-4114S-C2N | SBA-4114S-T2N | SBA-4119SG |
|----------------------------|--|---|---|
| Processor Support | Single AMD EPYC™ 7003/7002 Series Processor*; TDP up to 280W | Single AMD EPYC™ 7003/7002 Series Processor*; TDP up to 280W | Single AMD EPYC™ 7003/7002 Series Processor*; TDP up to 280W |
| Key Applications | <ul style="list-style-type: none"> • Resource saving and high density • Data center • HPC • EDA | <ul style="list-style-type: none"> • Resource saving and high density • Data center • HPC • EDA | <ul style="list-style-type: none"> • Resource saving and high density • Data center • HPC • Cloud Gaming, Inference |
| Outstanding Features | <ul style="list-style-type: none"> • 2x hot-plug 2.5" NVMe/SAS3/SATA3 drive bays • 2 NVMe/SATA M.2 • 2x 25G on board • Flexible AIOM module per node | <ul style="list-style-type: none"> • 2x hot-plug 2.5" NVMe/SATA3 drive bays • 2 NVMe/SATA M.2 • 2x 25G on board • Flexible AIOM module per node | <ul style="list-style-type: none"> • 1 NVMe/SATA M.2 • 2 PCIe 4.0 x16 slots • 2x 25G on board |
| Serverboard | MBD-BH12SSI-M25 | MBD-BH12SSI-M25 | MBD-BH12SSI-M25 |
| System Memory (Max.) | Up to 2TB DDR4-3200MHz RDIMM | Up to 2TB DDR4-3200MHz RDIMM | Up to 2TB DDR4-3200MHz RDIMM |
| Expansion Slots | N/A | N/A | 2 PCIe 4.0 x16 |
| Onboard Storage Controller | Broadcom 3108 | AMD SP3 | AMD SP3 |
| Connectivity | 25G Ethernet/100G EDR/200G HDR; Optional AIOM Network Card | 25G Ethernet/100G EDR/200G HDR; Optional AIOM Network Card | 25G Ethernet/100G EDR/200G HDR |
| VGA/Audio | N/A | N/A | N/A |
| Management | IPMI 2.0, KVM over IP, Virtual Media over LAN | IPMI 2.0, KVM over IP, Virtual Media over LAN | IPMI 2.0, KVM over IP, Virtual Media over LAN |
| Drive Bays | 2x hot-plug 2.5" NVMe/SAS3/SATA3 drive bays; 2x M.2 NVMe/SATA3 | 2x hot-plug 2.5" NVMe/SATA3 drive bays; 2x M.2 NVMe/SATA3 | 1x M.2 NVMe/SATA3 |
| Power Supply | N/A | N/A | N/A |
| Cooling System | Passive HS for CPU | Passive HS for CPU | Passive HS for CPU |
| SuperBlade Enclosures | 820C 820H 820J 820L | 820C 820H 820J 820L | 820C 820H 820J 820L |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

H12 SUPERBLADE®

(For Complete System Only)

Up to 20 hot-plug server blades



Rear View

Up to 20 hot-plug server blades



Rear View

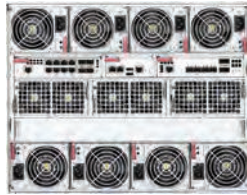
| MODEL | SBE-820C | SBE-820J |
|-------------------------|---|---|
| Server Blade | Up to 20 hot-plug server blades | Up to 20 hot-plug server blades |
| Module Support | Supports: <ul style="list-style-type: none"> SBA-4114S-C2N SBA-4114S-T2N SBA-4119SG | Supports: <ul style="list-style-type: none"> SBA-4114S-C2N SBA-4114S-T2N SBA-4119SG |
| LED | <ul style="list-style-type: none"> Fault LED Power LED | <ul style="list-style-type: none"> Fault LED Power LED |
| InfiniBand Switch | 1x 100G EDR IB or OPA switch | N/A |
| Gigabit Ethernet Switch | Up to 2 hot-plug 25G Ethernet Switches | Up to 4 hot plug 25G Ethernet switch |
| Management Module | 1 hot-plug management module providing remote KVM and IPMI 2.0 functionalities | 2 hot-plug management modules providing remote KVM and IPMI 2.0 functionalities |
| Power Supply | 4/6/8 hot-swap 2200W power supplies, up to N+N redundancy, 4 pcs of 1200W BBP, 3 optional cooling fan modules(PWS-DF005-2F) | 4/6/8 hot-swap 2200W power supplies, up to N+N redundancy, 4 pcs of 1200W BBP, 3 optional cooling fan modules(PWS-DF005-2F) |
| Cooling Design | Front to back | Front to back |
| Dimensions (HxWxD) | 356 x 447 x 812.8mm (14" x 17.6" x 32") | 356 x 447 x 812.8mm (14" x 17.6" x 32") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

H12 SUPERBLADE®

(For Complete System Only)

Up to 20 hot-plug server blades



Rear View

Up to 20 hot-plug server blades



Rear View

| MODEL | SBE-820L | SBE-820H |
|-------------------------|--|---|
| Server Blade | Up to 20 hot-plug server blades | Up to 20 hot-plug server blades |
| Module Support | Supports: <ul style="list-style-type: none"> SBA-4114S-C2N SBA-4114S-T2N SBA-4119SG | Supports: <ul style="list-style-type: none"> SBA-4114S-C2N SBA-4114S-T2N SBA-4119SG |
| LED | <ul style="list-style-type: none"> Fault LED Power LED | <ul style="list-style-type: none"> Fault LED Power LED |
| InfiniBand Switch | N/A | 1x 200G HDR IB switch |
| Gigabit Ethernet Switch | Up to 2 hot-plug 10G Ethernet Switches | Up to 2 hot-plug 25G Ethernet Switches |
| Management Module | 1 hot-plug CMM (Central Management Modules) providing remote KVM and IPMI 2.0 functionalities | 1 hot-plug management modules providing remote KVM and IPMI 2.0 functionalities |
| Power Supply | 4/6/8pcs hot-swap 2200W power supplies, up to N+N redundancy, 3 optional cooling fan modules (PWS-DF005-2F) | 4/6/8 hot-swap 2200W power supplies, up to N+N redundancy, 4 pcs of 1200W BBP, 3 optional cooling fan modules(PWS-DF005-2F) |
| Cooling Design | Front to back | Front to back |
| Dimensions (HxWxD) | 356 x 447 x 812.8mm (14" x 17.6" x 32") | 356 x 447 x 812.8mm (14" x 17.6" x 32") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

H12 MAINSTREAM

2U UP

2U DP



| MODEL | AS -2014S-TR | AS -2024S-TR | AS -3014TS-i | AS -5014A-TT |
|----------------------------|---|---|---|--|
| Processor Support | Single AMD EPYC™ 7003/7002 Series Processor; TDP up to 280W | Dual AMD EPYC™ 7003/7002 Series Processors | Single AMD EPYC™ 7003/7002 Series Processors*; TDP up to 280W | AMD Ryzen™ Threadripper™ PRO 3000WX Series Processor, up to 64 Cores |
| Key Applications | <ul style="list-style-type: none"> Backup storage Web or Database Servers Compact Network Appliance | <ul style="list-style-type: none"> Data processing & Storage Cloud Computing Hosting & Application delivery Cloud and Virtualization needs Content Delivery Network (CDN) 6 PCIe Gen4 expansion slots for next generation AOC | <ul style="list-style-type: none"> Entry-Level Workstation Video and Music Production Office Applications | <ul style="list-style-type: none"> Media and Entertainment Content Creation Product Design and Engineering Simulation AI and Deep Learning |
| Outstanding Features | <ul style="list-style-type: none"> 12x 3.5" hot-swap drive bays Up to 2TB DDR4 ECC RDIMM 2x 1GbE LAN 2x M.2 Support | <ul style="list-style-type: none"> Tool-less Drive Trays and Tool-less Brackets 920W Redundant Platinum Level High-Efficiency Power Supplies 12x 3.5/2.5" Hot-swap drive bays with NVMe support | <ul style="list-style-type: none"> 4x 3.5" internal SATA HDD Bays Up to 2TB DDR4 ECC RDIMM 2x 1GbE LAN 2x M.2 Support | <ul style="list-style-type: none"> 5U Rackmountable / Tower 6 PCIe 4.0 x16 slots M.2 Support 10GbBase-T LAN port, 1x 1GbE LAN port |
| Serverboard | SUPER● H12SSL-i | SUPER● H12DSI-N6 | SUPER● H12SSL-i | SUPER● M12SWA-TF |
| Chipset | System on Chip (SoC) | System on Chip (SoC) | System on Chip (SoC) | AMD WRX80 |
| System Memory (Max.) | Up to 2TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM in 8 DIMM slots | Up to 4TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM in 16 DIMM slots | Up to 2TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM, in 8 DIMM slots | Up to 2TB ECC DDR4 3200-MHz Memory, in 8 DIMM slots |
| Expansion Slots | 5 PCIe 4.0 x16 LP slots 2 PCIe 4.0 x8 LP slots | 3 PCIe 4.0 x16 LP slots 3 PCIe 4.0 x8 LP slots | 5 PCIe 4.0 x16 (FH) 2 PCIe 4.0 x8 (FH) | 6 PCIe 4.0 x16 slots M.2 Interface: 4 PCIe 4.0 x4, RAID 0, 1, 5 & 10 M.2 Form Factor: 2280, 22110 |
| Onboard Storage Controller | SP3 | SP3 | SP3 | M.2 Key: M-Key 4 SATA3 (6Gbps) ports; RAID 0, 1, 5, 10 |
| Connectivity | Dual Gigabit Ethernet via Broadcom BCM5720 Controller; 5 USB 3.0 ports (4 rear, 2 via header) | Dual Gigabit Ethernet via Broadcom BCM5720 Controller 2 USB 2.0 and 2 USB 3.0 ports in the rear | Dual Gigabit Ethernet via Broadcom BCM5720 Controller; 5 USB 3.0 ports (4 rear, 2 via header) | 10GbBase-T LAN port, 1x 1GbE LAN port (shared with IPMI) |
| VGA/Audio | 1 VGA 1 Aspeed AST2500 BMC | 1 VGA; 1 ASPEED AST2600 BMC | 1 VGA; 1 Aspeed AST2500 BMC | 1 VGA port (dedicated for IPMI); 7.1 HD Audio |
| Management | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Intel® Node Manager, IPMI 2.0, SSM, SPM, SUM, SuperDoctor® 5, Watchdog |
| Drive Bays | 12 Hot-Swappable 3.5"/ 2.5" SATA/NVMe drive bays; Optional 2x 2.5" SATA/NVMe drive support with optional kits | 12x hot-swap 3.5/2.5" SATA/NVMe drive bays; 4 NVMe and 8 SATA default configuration" | 4x internal 3.5" SATA/NVMe drive bays; 4x 2.5" SATA/NVMe drive bays | 4x internal fixed 3.5"/2.5" SATA/NVMe drive bays; 2x front fixed 2.5" SATA/NVMe drive bays |
| Power Supply | 920W Redundant Power Supplies Platinum Level (94%) (Full redundancy based on configuration and application load) | 920W redundant Platinum Level High-Efficiency power supplies | 900W redundant Gold Level power supplies | 2000W Platinum Level power supply |
| Cooling System | 3 heavy duty fans w/ Optimal Fan Speed Control | 3 heavy duty fans w/ Optimal Fan Speed Control | 2 system fans w/ Optimal Fan Speed control | 1x 12cm rear exhaust fan, 3x 12cm front cooling fans (optional), 3x 12cm top cooling fans (optional); Optional high-performance closed-loop water cooling for CPU |
| Form Factor | 437 x 89 x 648mm (17.2" x 3.5" x 25.5") | 437 x 89 x 648mm (17.2" x 3.5" x 25.5") | Mid-Tower 193 x 424 x 525mm (7.6" x 16.7" x 20.68") | 5U Rackmountable / Tower 222 x 535 x 573 mm (21.06" x 8.74" x 22.56") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

H13 WIO

WIO-1U



WIO-1U



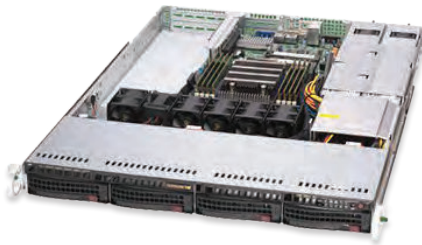
WIO-2U



| MODEL | AS -1015SV-WTRT | AS -1115SV-WTRT | AS -2015SV-WTRT |
|----------------------------|---|---|---|
| Processor Support | AMD EPYC™ 8004 series Processors Single Socket SP6 supported | AMD EPYC™ 8004 series Processors Single Socket SP6 supported | AMD EPYC™ 8004 series Processors Single Socket SP6 supported |
| Key Applications | <ul style="list-style-type: none"> Virtualization Edge/Cloud Computing Services Database/Storage Firewall Applications Data Center Optimized | <ul style="list-style-type: none"> Virtualization Edge/Cloud Computing Services Database/Storage Firewall Applications Data Center Optimized | <ul style="list-style-type: none"> Virtualization Edge/Cloud Computing Services Database/Storage Firewall Applications Data Center Optimized |
| Outstanding Features | <ul style="list-style-type: none"> PCIe 5.0 NVMe drives supported Maximum I/O. Support 3 x16 expansion slots in 1U form factor Flexible I/O expansion Cost optimized H13 solution | <ul style="list-style-type: none"> PCIe 5.0 NVMe drives supported Maximum I/O. Support 3 x16 expansion slots in 1U form factor Flexible I/O expansion Cost optimized H13 solution | <ul style="list-style-type: none"> PCIe 5.0 NVMe drives supported Maximum I/O. Support up to 2 PCIe Gen 5 x16 expansion slots, and 2 PCIe Gen 5 x8 expansion slots Flexible I/O expansion Cost optimized H13 solution |
| Serverboard | SUPER [®] H13SVW-NT | SUPER [®] H13SVW-NT | SUPER [®] H13SVW-NT |
| System Memory (Max.) | System On Chip | System On Chip | System On Chip |
| Expansion Slots | Slot 1: PCIe 5.0 x16 FHFL Slot 2: PCIe 5.0 x16 FHFL Slot 3: PCIe 5.0 x16 LP | Slot 1: PCIe 5.0 x16 FHFL Slot 2: PCIe 5.0 x16 FHFL Slot 3: PCIe 5.0 x16 LP | 2 PCIe 5.0 x16 FHFL slot(s) 2 PCIe 5.0 x8 LP slot(s) |
| Onboard Storage Controller | | | |
| Connectivity | 2x 10Gb RJ45 port(s) with Broadcom BCM57416 via AIOM | 2x 10Gb RJ45 port(s) with Broadcom BCM57416 via AIOM | 2x 10Gb RJ45 port(s) with Broadcom BCM57416 via AIOM |
| VGA/Audio | 1 onboard VGA port | 1 onboard VGA port | 1 onboard VGA port |
| Management | | | |
| Drive Bays | 4x 3.5" hot-swap SATA/SAS/NVMe drive bays; | 10x 2.5" hot-swap SATA/SAS/NVMe drive bays; 6x 2.5" NVMe hybrid; | 12x 3.5" hot-swap SATA/SAS/NVMe drive bays; 6x 3.5" NVMe hybrid; |
| Peripheral Bays | | | |
| Power Supply | None | None | None |
| Cooling System | 6x (40cm x 40cm x 56 mmcm) heavy duty fan(s) | 6x (40cm x 40cm x 56 mmcm) heavy duty fan(s) | 3x (80cm x 80cm x 38 mmcm) heavy duty fan(s) |
| Form Factor | 1U Rackmount Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7") | 1U Rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 597 x 197 x 800mm (23.5" x 7.75" x 31.5") | 2U Rackmount Enclosure: 437 x 89 x 650mm (17.2" x 3.5" x 25.6") Package: 673 x 292 x 864mm (26.5" x 11.5" x 34") |

H12 WIO

1U UP WIO



1U 10NVMe, UP WIO



1U UP WIO

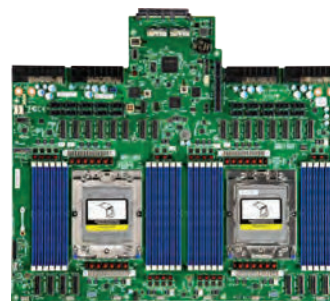
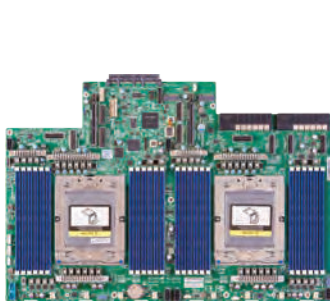


| MODEL | AS -1014S-WTRT | AS -1114S-WN10RT** | AS -1114S-WTRT |
|----------------------------|---|---|---|
| Processor Support | Single AMD EPYC™ 7003/7002 Series Processor* TDP up to 240W | Single AMD EPYC™ 7003/7002 Series Processor* TDP up to 280W | Single AMD EPYC™ 7003/7002 Series Processor* TDP up to 240W |
| Key Applications | <ul style="list-style-type: none"> Database Processing & Storage Data Center FireWall Applications | <ul style="list-style-type: none"> Virtualization Cloud Computing All Flash Storage | <ul style="list-style-type: none"> Database Processing & Storage Data Center FireWall Applications |
| Outstanding Features | <ul style="list-style-type: none"> Support up to 3 PCIe cards Up to 2TB DDR4 ECC RDIMM Dual 10GBaseT LAN ports 2x M.2 support by default 2 SATA DOMs support with embedded power | <ul style="list-style-type: none"> 10-Port NVMe SSD support Up to 4TB DDR4 ECC RDIMM Dual 10GBaseT LAN ports 2x M.2 Support by default 2 SATA DOMs support with embedded power 10 Gen4/ Gen3 U.2 NVMe SSD support | <ul style="list-style-type: none"> Support up to 3 PCIe cards Up to 2TB DDR4 ECC RDIMM Dual 10GBaseT LAN Ports 2x M.2 Support by default 2 SATA DOMs Support with Embedded Power |
| Serverboard | • SUPER [®] H12SSW-NT | SUPER [®] H12SSW-NTR | • SUPER [®] H12SSW-NT |
| System Memory (Max.) | Up to 2TB 3DS ECC DDR4-3200MHz RDIMM/LRDIMM, in 8 DIMM slots | Up to 4TB 3DS ECC RDIMM/LRDIMM; DDR4 up to 3200MHz, in 16 DIMM slots | Up to 2TB 3DS ECC RDIMM/LRDIMM; DDR4 up to 3200MHz, in 8 DIMM slots |
| Expansion Slots | 2 PCIe 4.0 x16 (FH/HL) slots 1 PCIe 4.0 x16 (LP) slot | 2 PCIe 4.0 x16 (FH/HL) slots 1 PCIe 4.0 x16 (LP) slot | 2 PCIe 4.0 x16 (FH/HL) slots 1 PCIe 4.0 x16 (LP) slot |
| Onboard Storage Controller | 4 Hot-Swappable 3.5" SATA drive support; Optional 4 U.2 NVMe (PCIe Gen 3) drive support vs additional NVMe cables required | 10 Hot-Swappable U.2 NVMe drive support; Optional 10 SATA3 drive support vs additional SATA cables required | 10 Hot-Swappable 2.5" SATA drive support; Optional 2 U.2 NVMe (PCIe Gen 3) drive support vs additional NVMe cables required |
| Connectivity | 2 10GBase-T Ethernet via Broadcom BCM57416 Controller; 7 USB 3.0 ports (4 rear, 2 front, 1 Type A) | 2 10GBase-T Ethernet via Broadcom BCM57416 Controller; 7 USB 3.0 ports (4 rear, 2 front, 1 Type A) | 2 10GBase-T Ethernet via Broadcom BCM57416 Controller; 7 USB 3.0 ports (4 rear, 2 front, 1 Type A) |
| VGA/Audio | 1 VGA 1 Aspeed AST2500 BMC | 1 VGA 1 Aspeed AST2500 BMC | 1 VGA 1 Aspeed AST2500 BMC |
| Management | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port; Software Out of Band License key (SFT-OOB-LIC) included for OOB BIOS management | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port | Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port; Software Out of Band License key (SFT-OOB-LIC) included for OOB BIOS management |
| Drive Bays | 4 Hot-Swappable 3.5" SATA drive support; Optional 4 U.2 NVMe (PCIe Gen 3) drive support vs additional NVMe cables required | 10 Hot-Swappable U.2 NVMe drive support; Optional 10 SATA3 drive support vs additional SATA cables required | 10 Hot-Swappable 2.5" SATA drive support; Optional 2 U.2 NVMe (PCIe Gen 3) drive support vs additional NVMe cables required |
| Peripheral Bays | Optional to support 1x Slim DVD-ROM Drive | N/A | N/A |
| Power Supply | 500W Redundant Power Supplies Platinum Level (94%) (Full redundancy based on configuration and application load) | 750W Redundant Power Supplies Platinum Level (94%) (Full redundancy based on configuration and application load) | 500W Redundant Power Supplies Platinum Level (94%) (Full redundancy based on configuration and application load) |
| Cooling System | 4 heavy duty fans w/ Optimal Fan Speed Control, Additional 1 heavy duty fan support w/ Optimal Fan Speed Control | 6 heavy duty fans w/ Optimal Fan Speed Control | 4 heavy duty fans w/ Optimal Fan Speed Control, Additional 1 heavy duty fan support w/ Optimal Fan Speed Control |
| Form Factor | 1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6") | 437 x 43 x 597mm (17.2" x 1.7" x 23.5") | 437 x 43 x 597mm (17.2" x 1.7" x 23.5") |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

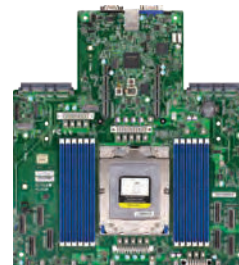
** For complete system only

H13 MOTHERBOARDS



| MODEL | H13DSH | H13DSG-O-CPU |
|----------------------------|---|---|
| Processor | AMD EPYC™ 9004 Series Processors | AMD EPYC™ 9004 Series Processors |
| Chipset | System on Chip | System on Chip |
| Form Factor | Proprietary, 17" x 11.5" (43.18cm x 29.21cm) | Proprietary, 17" x 14.7" (43.18cm x 37.34cm) |
| Memory Capacity & Slots | Up to 6TB 3DS ECC RDIMM DDR5-4800MHz in 24 DIMMs | Up to 6TB 3DS ECC RDIMM DDR5-4800MHz in 24 DIMMs |
| Expansion Slots | 1 PCIe 5.0 x16 AIOM / OCP 3.0 2 PCIe 5.0 x16 (in x16 slot) M.2 Interface: 2 PCIe 3.0 x4 Form Factor: 2280/22110 M.2 Key: M-Key | 1 PCIe 5.0 x16 AIOM / OCP 3.0 M.2 Interface: 1 PCIe 3.0 x4 Form Factor: 2280/22110 M.2 Key: M-Key |
| Onboard Storage Controller | N/A | Asmedia ASM1061 |
| Onboard LAN | N/A | N/A |
| Onboard VGA | 1 Aspeed AST2600 BMC port(s) | N/A |
| USB Ports | 2 USB 3.1 Gen1 ports via header | 1 USB 2.0 port via header |
| Other Onboard I/O Devices | TPM 2.0 header 4 MCIO (PCIe 5.0 x8/SATA3) ports 6 MCIO (PCIe 5.0 x8) ports | TPM 2.0 header 20 MCIO (PCIe 5.0 x8) ports |
| Manageability | SuperDoctorR 5, SPM, SUM, SSM, Watchdog, IPMICFG, IPMIView for Linux/Windows, SMCIPMITool, IPMI 2.0, KVM with dedicated LAN | SuperDoctorR 5, SPM, SUM, SSM, Watchdog, IPMICFG, IPMIView for Linux/Windows, SMCIPMITool, IPMI 2.0, KVM with dedicated LAN |
| PC Health Monitoring | VBAT, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, VRM temperature, CPU thermal trip support, 1.8V standby | VBAT, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, VRM temperature, CPU thermal trip support, 1.8V standby |
| Thermal Control | 8x 6-pin fan headers (up to 8 fans) | 10x 4-pin fan headers (up to 10 fans) |
| Other Features | RoT | RoT |
| BIOS | AMI 32MB SPI Flash EEPROM | AMI 32MB SPI Flash EEPROM |

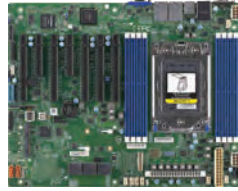
H13 MOTHERBOARDS



| MODEL | H13SST-G H13SST-GC | H13SSW |
|----------------------------|---|---|
| Processor | AMD EPYC™ 9004 Series Processors | AMD EPYC™ 9004 Series Processors |
| Chipset | System on Chip | System on Chip |
| Form Factor | Proprietary GrandTwin, 8.53" x 12.42" (21.67cm x 31.55cm) | Proprietary, 12.29" x 13.4" (31.22cm x 34.04cm) |
| Memory Capacity & Slots | Up to 3TB 3DS ECC RDIMM DDR5-4800MHz in 12 DIMMs | Up to 3TB 3DS ECC RDIMM DDR5-4800MHz in 12 DIMMs |
| Expansion Slots | M.2 Interface: 2 SATA/PCIe 5.0 x4 Form Factor: 2280 M.2 Key: M-Key | 1 PCIe 5.0 x16 Right Riser Slot 1 PCIe 5.0 x16 Left Riser Slot 2 PCIe 5.0 x16 AIOM / OCP 3.0 M.2 Interface: 2 PCIe 3.0 x2 Form Factor: 2280/22110 M.2 Key: M-Key |
| Onboard Storage Controller | -GC: Broadcom 3808 SAS3 (12 Gbps) controller for 8 SAS3 (12 Gbps) ports | N/A |
| Onboard LAN | N/A | N/A |
| Onboard VGA | 1 Aspeed AST2600 BMC port(s) | 1 VGA port(s) 1 Aspeed AST2600 BMC port(s) |
| USB Ports | N/A | 2 USB 2.0 port(s) via header 2 USB 3.1 Gen1 ports |
| Other Onboard I/O Devices | 1 MCIO (PCIe 5.0 x8/SATA3) ports 4 MCIO (PCIe 5.0 x8) ports -GC: 8 SAS3 ports via SlimSAS | 1 COM Port (1 Serial Port) TPM 2.0 header 2 MCIO (PCIe 5.0 x8/SATA3) ports 6 MCIO (PCIe 5.0 x8) ports |
| Manageability | SuperDoctor® 5, SPM, SUM, SSM, Watchdog, IPMICFG, IPMIView for Linux/Windows, SMCIPMITool, IPMI 2.0, KVM with dedicated LAN | SuperDoctor® 5, SPM, SUM, SSM, Watchdog, IPMICFG, IPMIView for Linux/Windows, SMCIPMITool, IPMI 2.0, KVM with dedicated LAN |
| PC Health Monitoring | VBAT, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, VRM temperature, CPU thermal trip support, 1.8V standby | VBAT, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, VRM temperature, CPU thermal trip support, 1.8V standby |
| Thermal Control | 1x 4-pin fan header (up to 1 fan) | 6x 4-pin fan headers (up to 6 fans) |
| Other Features | RoT | RoT |
| BIOS | AMI 32MB SPI Flash EEPROM | AMI 32MB SPI Flash EEPROM |

H12 MOTHERBOARDS

ATX Mainstream



EATX Mainstream



| MODEL | H12SSL-i H12SSL-C H12SSL-CT H12SSL-NT | H12DSi-N6 H12DSi-NT6 |
|----------------------------|--|---|
| Processor | Single AMD EPYC™ 7003/7002 Series Processor* | Dual AMD EPYC™ 7003/7002 Series Processors* |
| Chipset | System on Chip | System on Chip |
| Form Factor | ATX 12" x 9.6" | EATX 12" x 13.05" |
| Memory Capacity & Slots | 2TB ECC Registered, DDR4-3200MHz SDRAM in 8 DIMMs | 4TB ECC Registered, DDR4-3200MHz SDRAM in 16 DIMMs |
| Expansion Slots | 5 PCIe 4.0 x16 2 PCIe 4.0 x8 M.2 Interface: 2 PCIe 4.0 x4 M.2 Form Factor: 22110, 2280 M.2 Key: M-Key | 3 PCIe 4.0 x16 3 PCIe 4.0 x8 M.2 Interface: 1 PCIe 4.0 x4 M.2 Form Factor: 22110, 2280 M.2 Key: M-Key |
| Onboard Storage Controller | -C: Broadcom 3008 SAS3 (12 Gbps) controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10 -CT: Broadcom 3008 SAS3 (12 Gbps) controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10 | 10 SATA3 (6 Gbps) ports |
| Onboard LAN | -i: Dual LAN with Broadcom BCM5720L Gigabit Ethernet Controller -C: Dual LAN with Broadcom BCM5720L Gigabit Ethernet Controller -CT: Dual LAN with Broadcom BCM57416 10GBase-T Ethernet Controller -NT: Dual LAN with Broadcom BCM57416 10GBase-T Ethernet Controller | -N6: Dual LAN with Broadcom BCM5720L Gigabit Ethernet Controller -NT6: Dual LAN with Broadcom BCM57416 10GBase-T Ethernet Controller |
| Onboard VGA | 1 VGA; Aspeed AST2500 BMC | 1 VGA; Aspeed AST2600 BMC |
| USB Ports | 6 USB 3.0 ports (4 rear + 2 headers) | 2 USB 2.0 ports (2 rear) 4 USB 3.0 ports (2 rear + 2 headers) |
| Other Onboard I/O Devices | 1 COM Ports SATA DOM power connector TPM 1.2/ 2.0 header -i: 1 PCIe 4.0 NVMe x4 Internal Port -NT: 2 PCIe 4.0 NVMe x4 Internal Ports | 1 COM Ports SATA DOM power connector TPM 1.2/ 2.0 header 4 PCIe 4.0 NVMe x4 Internal Ports |
| Manageability | IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog | IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5 |
| PC Health Monitoring | +3.3V, +5V, +5V standby, 3.3V standby, Monitors CPU voltages, Supports system management utility, VBAT | +12V, +3.3V, +5V, +5V standby, Chassis intrusion header, CPU temperature, LAN temperature, Memory temperature, Memory Voltages, Monitors CPU voltages |
| Thermal Control | 7x fan header, 4-pin type of fan header, 7 fans with tachometer status monitoring, Dual Cooling Zone, Pulse Width Modulated (PWM) fan connectors, Status monitoring for speed control | 8x fan header, 4-pin type of fan header, Dual Cooling Zone, Fan speed control, Overheat LED indication, PWM fan speed control |
| Other Features | ACPI power management, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, UID | ACPI power management, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, UID, WOL |
| BIOS | AMI 256Mb Flash EEPROM | AMI 256Mb Flash EEPROM |

* AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer.

SYSTEM MANAGEMENT SOFTWARE

Leverage Supermicro's Management Software Suite to Meet Your IT Infrastructure Challenges

With a comprehensive range of high-end software solutions, Supermicro gives IT administrators the tools to optimize the management of IT systems and increase the utilization of computing and storage infrastructure. Whether you are looking to manage individual systems, optimize server lifecycle processes, or streamline operations for an entire data center, Supermicro has the right software to help you accomplish your goals.



- Obtain valuable insights in your infrastructure
- Monitor the health of servers and critical components
- Get proactive alerts



- Maintain system uptime to meet SLAs
- Early symptom detection to prevent component failure
- Remote management and troubleshooting



- Protect your IT infrastructure from external threats
- Centralized patch and BIOS management
- Extensive security features

System Management Software Suite Bundles

Supermicro's System Management Software Suite consists of a set of specialized applications. These are available in the following bundles.

| Suite Bundle | Standard | Basic | Advanced | Enterprise |
|----------------------|---|---|---|--|
| Description | Covers all core functionality to effectively set up, manage, and monitor your Supermicro systems. These features are available to all Supermicro users. | Extends the core functionality and makes system management easier with additional features, such as remote BIOS management and system updates. | Delivers a broad set of tools to help administrators improve the performance, up-time, and monitoring of Supermicro systems. | Offers an extensive platform to manage large data centers and coordinate automated lifecycle management, software-defined infrastructure, and more in a single pane of glass. |
| License | <ul style="list-style-type: none"> • No license required | <ul style="list-style-type: none"> • SFT-OOB-LIC | <ul style="list-style-type: none"> • SFT-DCMS-SINGLE | <ul style="list-style-type: none"> • SFT-DCMS-SINGLE + • SFT-SDDC-SINGLE |
| Key Features* | <ul style="list-style-type: none"> • Secure remote console (KVM/HTML5) • System temperature monitoring • System power thresholds & alerts • Component monitoring • Email alerting • Remote configuration • Offline diagnostics • Crash dump • License management | <ul style="list-style-type: none"> • Remote BMC management • Remote BIOS management • Out-of-Band systems checks • TPM Provisioning • Mount/Unmount ISO images from Samba/HTTP • Basic Redfish APIs • CIM management • SysLog | <ul style="list-style-type: none"> • Remote OS deployment • Auto-discovery • Power capping • RAID monitoring and configuration • HDD monitoring • Advanced Redfish APIs • FW update policy • System lock down • Crash screen/video capture | <ul style="list-style-type: none"> • 3rd Party vendor support • POD & Rack-level management • SDI Lifecycle management • Manage Composable Dissaggregated Infrastructure • Zero-touch provisioning for network configuration • Single pane of glass for data center deployment • Rich analytics & telemetry • User defined role-based access control |

* For detailed information, please check with your Supermicro sales representative or refer to Supermicro website: <https://www.supermicro.com/en/solutions/management-software>

World Class Total IT Solutions

Rack Plug and Play

*Rack Scale Solutions/ Design/
Production/Validation/
Logistics and Service, The
capacity of 3000 Integrated
Rack Solutions per month,
including up to 1000 Liquid
Cooled Racks per month*

*Flexible AC Power
(120/208/230/480VAC,
Single/3-phase)
48VDC Power*

*10/25/40/100/200/400 Gb/s
Network Testing
Environments*

*Air Cooling/Free Air Cooling/
Liquid Cooling*

*Turnkey Data Center
Solutions within two weeks*





Global Expansion

Providing Greater Economies of Scale and Accelerated Support to Data Center, Cloud Computing, AI, Enterprise IT, HPC, 5G, Hyperscale, and Embedded Solutions Customers Worldwide



Worldwide Headquarters
San Jose, California, USA



America

- Supermicro's Headquarters expansion: Over 1.5 million square foot **Green Computing Park** in San Jose, California signals the company's increasing leadership in the IT industry
- One of the largest high-tech R&D, manufacturing, and business hubs in Silicon Valley
- East Coast Sales and Service Office



APAC

Supermicro's **Asia Science and Technology Park** is a key milestone in the company's growth as a true global leader in the development of advanced, power saving computing technologies



Silicon Valley

Expanded manufacturing, command center



EMEA

Supermicro's system integration facility and services in The Netherlands serves the dynamic, rapidly growing EMEA market with localized supply and time-to-market advantages

Supermicro Worldwide

Worldwide Headquarters

Super Micro Computer, Inc.
980 Rock Avenue, San Jose, CA 95131 USA
Tel: +1-408-503-8000
Fax: +1-408-503-8008
General Info: Marketing@Supermicro.com
Tech Support: Support@Supermicro.com
Webmaster: Webmaster@Supermicro.com

European Branch

Super Micro Computer, B.V.
Het Sterrenbeeld 28, 5215 ML,
's-Hertogenbosch, The Netherlands
Tel: +31-73-640-0390
Fax: +31-73-641-6525
General Info: Sales_Europe@supermicro.com
Support: [Support@supermicro.com](mailto:Support_Europe@supermicro.com)

Taiwan Office

Super Micro Computer, Inc.
3F., No.150, Jian 1st Rd., Zhonghe Dist.,
New Taipei City 235, Taiwan (R.O.C.)
Tel: +886-2-8226-3990
Fax: +886-2-8226-3992
Support: Support@Supermicro.com.tw

Beijing, China Office

Supermicro Technology (Beijing) Co., Ltd
Suite 701, Tower D, Jiahua Building,
No.9, Shangdi 3rd Street,
Haidian District, 100085,
Beijing, China
Tel: +86-10-62969165
E-mail: Sales-CN@supermicro.com

Japan Office

Supermicro Japan
21F Shibuya Infoss Tower, 20-1,
Sakuragaoka-cho, Shibuya-Ku, Tokyo,
150-0031 Japan
Tel: +81-3-5728-5196
Fax: +81-3-5728-5197
Sales inquiry: Sales_Inquiry_JP@Supermicro.com
Tech Support: Support_Japan@Supermicro.com

U.S. East Coast Office

Super Micro Computer, Inc.
525 Washington Blvd, 20th Floor
Jersey City, NJ 07310 USA
General Info: Marketing@Supermicro.com

U.K. Sales Office

Super Micro Computer, B.V.
77 New Cavendish Street,
The Harley Building,
London, W1W 6XB, UK
Tel: +31-73-640-0390 Ext. 2800
General Info: Sales_Europe@supermicro.com
Support: [Support@supermicro.com](mailto:Support_Europe@supermicro.com)

Supermicro Science & Technology Park

Super Micro Computer, Inc.
No.1899, Xingfeng Rd., Bade Dist.,
Taoyuan City 334, Taiwan (R.O.C.)
Tel: +886-2-8226-3990
Fax: +886-3-362-8266
Support: Support@Supermicro.com.tw

Shanghai, China Office

Super Micro Computer, Inc.
Room 702, No 398, North Caoxi Road,
HuiZhi Building, Xuhui District,
Shanghai, China 200030
Tel: +86-21-61152558
Tech Support: +86-21-61152556
E-mail: Sales-CN@supermicro.com
Support: Support-CN@supermicro.com

Korea Office

Super Micro Computer Holding B.V.
#1001, Trade Tower, 511, Yeongdong-daero,
Gangnam-gu, Seoul, Korea, 06164
Tel: +82-2-554-0045
Fax: +82-2-554-0146
Sales Inquiry: Sales-Asia@supermicro.com

Better

Broadest Portfolio of
Versatile Systems



Faster

Maximum I/O and Lowest Latency



Greener

Reduced Environmental
Impact and Lower TCO



Worldwide Headquarters

Super Micro Computer, Inc.
980 Rock Ave.
San Jose, CA 95131, USA
Tel: +1-408-503-8000
Fax: +1-408-503-8008
E-mail: Marketing@Supermicro.com

EMEA Headquarters

Super Micro Computer, B.V.
Het Sterrenbeeld 28, 5215 ML,
's-Hertogenbosch, The Netherlands
Tel: +31-73-640-0390
Fax: +31-73-641-6525
E-mail: Sales_Europe@Supermicro.com
Tech Support: Support_Europe@Supermicro.com

APAC Headquarters

Super Micro Computer, Taiwan Inc.
3F, No. 150, Jian 1st Rd., Zhonghe Dist.,
New Taipei City 235, Taiwan
Tel: +886-2-8226-3990
Fax: +886-2-8226-3991
E-mail: Marketing@Supermicro.com.tw

www.supermicro.com

©Super Micro Computer, Inc. Specifications subject to change without notice. All other brands and names are the property of their respective owners. All logos, brand names, campaign statements and product images contained herein are copyrighted and may not be reprinted and/or reproduced, in whole or in part, without express written permission by Supermicro® Corporate Marketing.



MKT-0002-09/2023-R57