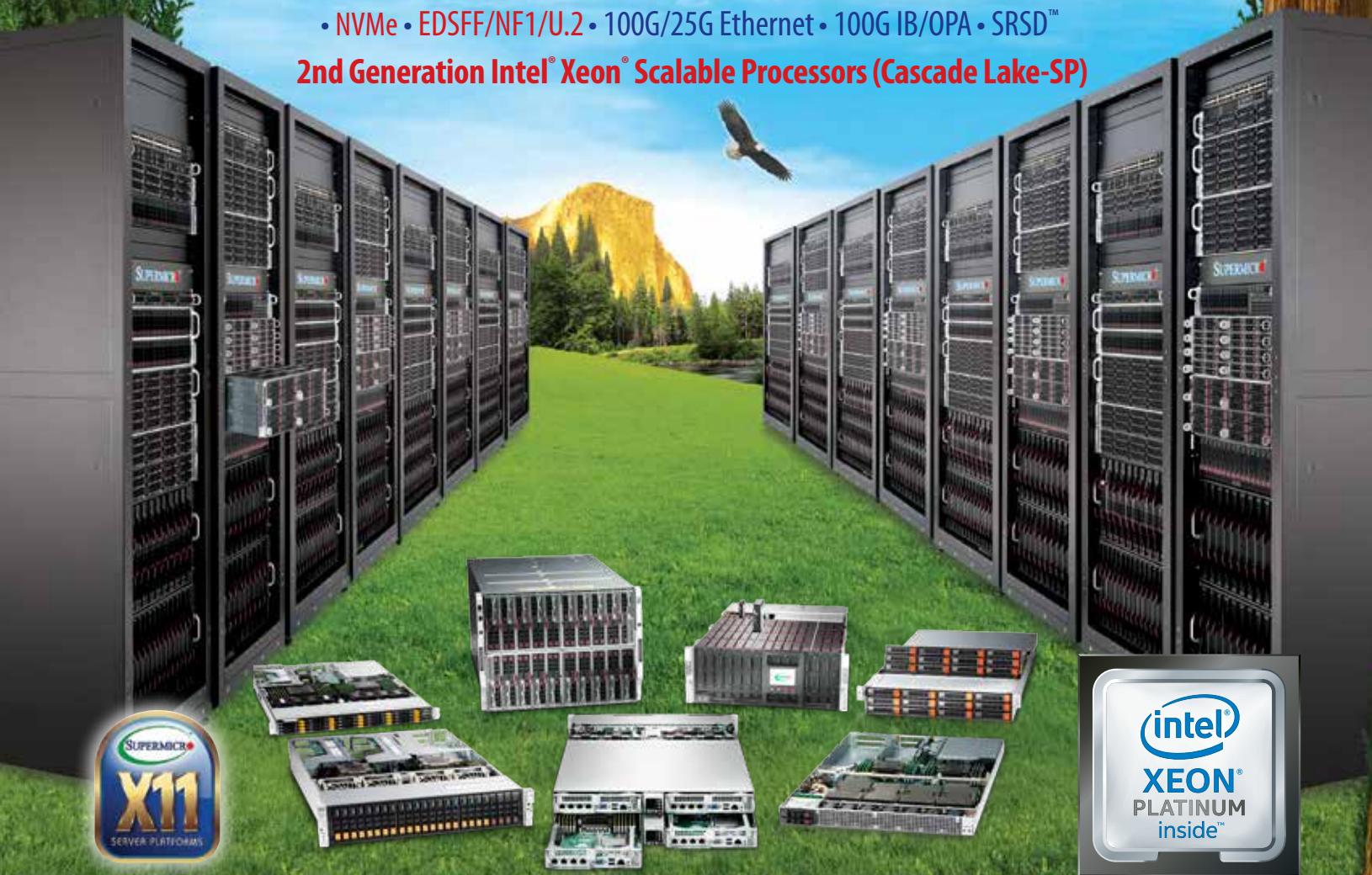




# Mission Critical Server Solutions

• NVMe • EDSFF/NF1/U.2 • 100G/25G Ethernet • 100G IB/OPA • SRSD™

2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP)



## All-Flash NVMe Server Innovations

Up to 1PB capacity with 32 hot-swap EDSFF/NF1/U.2/Ruler NVMe drives



SYS-1029P-N32R / SYS-1029P-NR32R / SSG-1029P-NER32L / SSG-1029P-NMR36L

- 1U/32 All-Flash NVMe server
- Dual Drawer/Tray with a total of 32 NF1/U.2/Ruler NVMe SSDs
- Up to 6TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 24 DIMM slots; or, up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
- 2 PCI-E 3.0 x16 slots; 2x 10GbE-T ports, dual M.2 boot drives
- Dual Intel® Xeon® Scalable Processors up to 205W TDP
- Redundant 1600W Platinum Level power supplies
- IPMI management with dedicated LAN

## 4U Inferencing Engine

Up to 20 single-width GPUs, and 24 hot-swap 3.5" drive bays in 4U



SYS-6049GP-TRT

- Supports up to 20 single-width GPUs; 24x 3.5" Hot-swap drive bays
- Dual 2nd Generation Intel® Xeon® Scalable Processors to 205W TDP
- Up to 6TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 24 DIMM slots; or, up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
- Optimized cooling with no GPU pre-heat
- 2x 10GbE-T ports via Intel® X540
- 4x 2000W (2+2) redundant Titanium Level (96%+) power supplies

## Disaggregated Resource Saving Architecture

SuperBlade®-6U

20/14/10 hot-swap DP or UP nodes  
in 8U/6U



SBI-6429P-C3N  
(2S Blade)  
SBI-6419P-C3N  
(1S Blade)

### Future Proof Disaggregated Compute and Storage Modules, Enclosure, Power, Networking, and Management

- Highest Performance – Up to 205W Intel® Xeon® Scalable Processors
- Maximum Memory Capacity – 24 DIMMs (2S), 12 DIMMs (1S)
- 14 Blades – 14x 2S or 14x 1S with 2x 25G/10G switches, 1 CMM
- 10 Blades – 10x 2S or 10x 1S with 4x 25G/10G switches, 2 CMM
- Redundant (N+1/N+N) Platinum (96% efficiency) AC power supplies
- Redundant (N+1/N+N) DC power supplies
- Battery Backup Power (BBP) modules
- Free Air Cooling

# X11 Cascade Lake Solutions

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



Supermicro has tested and validated the Intel® Xeon® Scalable Processors on all our X11 server, storage, blade, and serverboard platforms.

The 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake) features

- 70W to 205W TDP • Up to 28 cores per socket • Up to 6 ch. DDR4 per CPU • 2933MHz two DIMMs per channel\*
- UPI: 2-3 channels per CPU (Up to 10.4GT/s) • PCI-E: 48 lanes per CPU
- Supports Intel® Optane™ DC Persistent Memory (Cascade Lake)

## **NEW!** Intel® Xeon® Processor Scalable Family (*Cascade Lake/Skylake*) Servers

Ultra	GPU/Coprocessor	SuperStorage	WIO
Mainstream	Max I/O	DCO	BigTwin™ /TwinPro/Twin
FatTwin™	8-Way/4-Way	SuperBlade®	SuperWorkstation

### Supermicro Supports the 2nd Generation Intel® Xeon® Scalable Processors

The 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake) and Intel® Optane™ DC Persistent Memory (Apache Pass) bring frequency and architecture improvements and support higher memory bandwidth and capacities. The 2nd Generation Scalable processors not only provide higher frequencies, but also provide Intel® Deep Learning Boost (VNNI) to accelerate AI inferencing and Intel® Speed Select Technology to optimize performance at boot time. Intel® Optane™ DC Persistent Memory brings a new class of memory to Supermicro systems enabling big and affordable memory with native persistence for higher application performance and availability.

Supermicro has been testing and validating the new processors on all our X11 server, storage, workstation and Building Block Solutions.



\*2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro

# X11 High-Density NVMe Systems

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



- Extremely High-Density and High-Performance All-Flash Servers
- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake)
- Supports Intel® Optane™ DC Persistent Memory
- Industry Standard EDSFF/U.2 NVMe drives, and NF1/Ruler NVMe drives



## 1U 32 U.2 NVMe

### Key Features

- IOPS Intensive Storage
- Industry Standard All-Flash NVMe drives
- Supports 32 Hot-Swap U.2 SSD form factor drive trays
- Up to 205W Intel® Xeon® Scalable Processor with 3 UPI
- 24 DIMM support with optional Intel® Optane™ DC Persistent Memory
- Intel® Quick Assist Technology
- Redundant 1600W Titanium Level high-efficiency power supplies

## 1U 32 EDSFF E1.L (Long)

### Key Features

- IOPS Intensive Storage
- Industry Standard All-Flash NVMe drives
- Supports E1.L form factor
- Up to 205W Intel® Xeon® Scalable Processor with 3 UPI
- 24 DIMM support with optional Intel® Optane™ DC Persistent Memory
- Intel® Quick Assist Technology
- Redundant 1600W Titanium Level high-efficiency power supplies

## 1U 32 EDSFF E1.S (Short)

### Key Features

- IOPS Intensive Storage
- Industry Standard All-Flash NVMe drives
- Supports E1.S form factor
- Up to 205W Intel® Xeon® Scalable Processor with 3 UPI
- 24 DIMM support with optional Intel® Optane™ DC Persistent Memory
- Intel® Quick Assist Technology
- Redundant 1600W Titanium Level high-efficiency power supplies



## 1U 32 NF1 + 4 M.2 Drives

### Key Features

- Up to 32 NF1 SSDs (4-16TB capacity per drive) and 4 SATA M.2 drive slots
- Up to 10 million IOPS in 1U
- Front-loading bays with optimized air-flow
- Hot-swap and Power Loss Protection
- All flash NVMe drives
- Supports new NF1 form factor
- SKL (up to 205W), 3 UPI designed for up to 10.4 GT/s[nid:9987]
- 24 DIMM support
- Intel® Quick Assist Technology
- Redundant 1600W Titanium Level high-efficiency power supplies



# X11 Ultra

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



- All-Flash Support Up to 24 NVMe hot-swap 2.5" Drives in 2U
- A Full Range of Processors Up to 205 watt TDP CPUs
- Full Memory Support 6TB in 24 DIMMs
- High Flexibility Variety of networking options
- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake)
- Supports Intel® Optane™ DC Persistent Memory

## 1U Ultra

### SYS-1029U: 2.5" Drive Bays

- TR4: 4x GbE
- TR4T: 4x 10GbE-T
- TRT: 2x 10GbE-T
- TRTP: 2x 10GSFP+
- TRTP2: 2x GbE, 2 10GSFP+
- TR25M: 2x Mellanox 25GbE
- TN10RT: 2x 10GbE-T, 10 NVMe



### SYS-1029U-TN10RT

10 NVMe | 24 DDR4 DIMMs | 2x 10GbE-T  
Titanium Level, 96% Efficiency Power Supplies

### SYS-6019U: 3.5" Drive Bays

- TR4: 4x GbE
- TR4T: 4x 10GbE-T
- TRT: 2x 10GbE-T
- TRTP: 2x 10GSFP+
- TRTP2: 2x GbE, 2 10GSFP+
- TR25M: 2x Mellanox 25GbE
- TN4RT: 2x 10GbE-T, 4 NVMe



### SYS-6019U-TN4RT

4 NVMe | 24 DDR4 DIMMs | 4x 10GbE-T  
Titanium Level, 96% Efficiency Power Supplies

## 2U Ultra

### SYS-2029U: 2.5" Drive Bays

- TR4: 4x GbE
- TR4T: 4x 10GbE-T
- TRT: 2x 10GbE-T
- TRTP: 2x 10GSFP+
- TR25M: 2x Mellanox 25GbE
- TN24R4T: 4x 10GbE-T, 24 NVMe



### SYS-2029U-TN24R4T

24 NVMe | 24 DDR4 DIMMs | 4x 10GbE-T  
Titanium Level, 96% Efficiency Power Supplies

### SYS-6029U: 3.5" Drive Bays

- TR4: 4x GbE
- TR4T: 4x 10GbE-T
- TRT: 2x 10GbE-T
- TRTP: 2x 10GSFP+
- TR25M: 2x Mellanox 25GbE



### SYS-6029U-TR25M

24 DDR4 DIMMs | 2x 25G  
Titanium Level, 96% Efficiency Power Supplies

## Highest Performance Ultra SuperServers

Supermicro Ultra SuperServers are designed to deliver the highest performance, flexibility, scalability and serviceability to demanding IT environments, and to power mission-critical Enterprise workloads.

With support for the 2nd Generation Intel® Xeon® processor Scalable family CPUs which boast incredible benefits over previous generations. Brand new advancements in Intel® Xeon® architecture include Intel® UltraPath Interconnect (UPI) and Cross Bar technologies which provide direct communication between two CPUs in a dual socket server to catapult performance and dramatically reduce latency.

Available in 1U and 2U form factors, Ultra SuperServers support up to: **6TB** 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 24 DIMM slots; or, **6TB** Intel® Optane™ DC Persistent Memory in memory mode (**Cascade Lake only**); SATA3 with optional SAS3 and NVMe support for increased storage bandwidth; a variety of Ultra Riser options including built-in 1G, 10GbE-T, 10G SFP+, 40G and 25G Ethernet options; support for add-on SAS3 HW/SW RAID controllers and additional PCI-E 3.0 slots. The range is the perfect fit for diverse workloads and applications and can be easily reconfigured for multiple Enterprise and Data Center applications in Virtualization, Big Data, Analytics and Cloud Computing.



# X11 GPU

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



2/4/6/8/10/16/20 GPUs/Coprocessors in 1U/2U/4U/10U Form Factors

Supports up to: 56 Cores per Server • 205W TDP CPUs • 6TB DDR4-2933MHz in 24 DIMMs

Supports: 10GBase-T • Redundant Titanium Level (96%) Power Supplies

Supports Intel® Optane™ DC Persistent Memory (Cascade Lake)



## SYS-9029GP-TNVRT (HGX-2 Platform)

10U System with 16 GPUs using NVLink and NVSwitch



### SYS-6049GP-TRT

- 20 Single Width GPUs
- 20 single width NVIDIA® T4 GPUs
- Dual Intel® Xeon® Scalable Processors (Cascade Lake/Skylake), up to 205W TDP, Dual Root Architecture
- 24x 3.5" Hot Swap drive bays
- 4 Redundant 2000W (2+2) Titanium Level Power Supplies
- 24 DIMM Slots DDR4
- 8 heavy duty fans



### SYS-1029GQ-TVRT

- 4 GPUs in 1U
- Dual Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)
- 4 NVIDIA® Tesla® V100 with NVLink® in a 1U
- 2x 2.5" Hot Swap NVMe/SAS3/ SATA3 Drive Bays
- 12 DIMM Slots DDR4
- 7 Internal Fans

## Maximum Acceleration and Cost Effective Scalability for AI, Deep Learning and HPC Applications

Supermicro GPU systems offer a broad portfolio to suit the most demanding workloads requiring GPU co-processing capabilities. From systems optimized for AI learning environments, inference systems, or HPC applications; Supermicro offers choice in the right system for your needs combined with the flexibility of near limitless configuration options; unlike fixed configuration alternatives.

With support for the 2nd generation Intel® Xeon® processors, Intel® Optane™ DC Persistent Memory, and multiple options for NVMe, SAS or SATA drives the Supermicro GPU systems provide the optimal foundation for maximum performance with the latest in GPU technologies.

To provide the highest performance and lowest latency, NVIDIA® NVLink® and/or NVSwitch® connect multiple NVIDIA® Tesla® V100 GPUs in GPU systems optimized for learning, with a 10U HGX-2 system providing up to 16 V100 GPUs, a 4U system providing up to 8 V100 GPUs, and a 1U system providing up to 4 V100 GPUs. Systems optimized for inferencing are composed of NVIDIA® Tesla® T4 GPUs, with a 4U system providing up to 20 T4 GPUs. Additional models support single or dual PCI-E root complex for high performance optimization.

With a broad line of GPU systems supporting 1, 2, 4, 8, 16 or 20 GPUs across form factors ranging from a dense 1U system through the most powerful 10U system; supporting Scientific Research, 3D Rendering, HPC, Virtual Desktops or AI/Deep Learning is all possible with the highest performing systems available.



# X11 SuperBlade®

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



- UP, DP and MP platforms supporting new generation Intel® Xeon® Scalable Processors
- 100G EDR InfiniBand, 100G Intel® Omni-Path Architecture or 1G, 10G, 25G Ethernet
- Hot-swap U.2 NVMe SSD and HW SAS3 RAID support
- Redundant 2200W Titanium Level (96%+ efficiency) digital power supplies
- 1200W Battery Backup Power (BBP™) modules
- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake)
- Supports Intel® Optane™ DC Persistent Memory



## 6U SuperBlade - Up to 10/14x 1S/2S Nodes

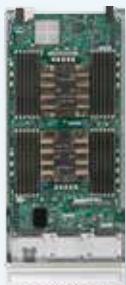
Single or Dual Intel® Xeon® Scalable Processors supported

12 DIMM slots



SBI-6419P-C3N/T3N  
SBI-6119P-C3N/T3N

24 DIMM slots



SBI-6429P-C3N/T3N  
SBI-6129P-C3N/T3N

### Disaggregated Resource Saving Architecture



## 8U SuperBlade - Up to 20x 2S/10x 4S Nodes



Dual or Quad Intel® Xeon® Scalable Processors supported

100G\* networking,  
NVMe/SAS3/SATA3



SBI-4129P-C2N/T3N

100G\* networking,  
8 NVMe/SAS3/SATA3



SBI-8149P-C4N/T8N

\*100G: EDR InfiniBand or Intel® Omni-Path Architecture

## 4U SuperBlade - Up to 14x 2S Nodes

Dual Intel® Xeon® Scalable Processors supported

NVMe/SATA3

SBI-4429P-T2N

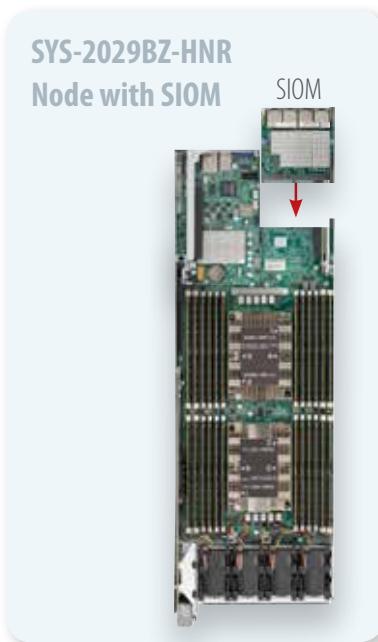
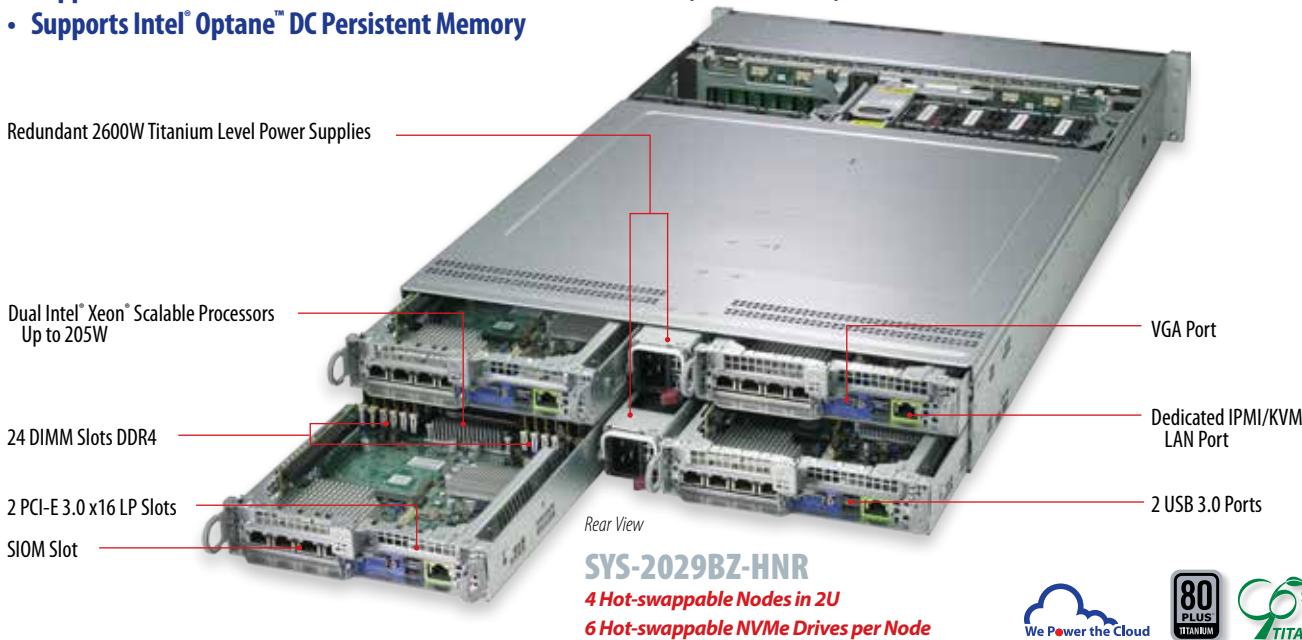


# X11 3 UPI BigTwin™

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



- Resource Saving Architectures
- 50% increased bandwidth between CPU-to-CPU (10-30% improvement in performance depending on applications)
- Full utilization of Platinum and Gold CPU features (3UPI)
- 4x on-tray fans with each node for redundant N+1 cooling
- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake)
- Supports Intel® Optane™ DC Persistent Memory



## Supermicro X11 BigTwin™ Solutions

The Supermicro Twin SuperServer® systems are a family of high-density 2U hot-plug node servers available with a variety of memory capacities, HDD technologies, PCI-E alternatives, networking capabilities, and GPU support options. Support for the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) enables a host benefits to each generation of the Twin architecture with up to: 6TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 24 DIMM slots; or, 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only), flexible networking options of up to 100G, and integrated Ultra Path Interconnect technology for lower latency and extra bandwidth.

The BigTwin™ is the 5th generation of the breakthrough Twin architecture which extends the compute and storage capabilities of Supermicro's 2U TwinPro and 1U Twin family SuperServer systems. Offering up to 24 All-Flash NVMe or Hybrid HDDs, 2 low-profile PCI-E x16 slots and 1 SIOM slot for maximum networking flexibility, the BigTwin™ is optimized for today's demanding IT requirements.

# X11 SuperStorage®

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



**New!** Highest Performance and Storage Density

- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake)
- Supports Intel® Optane™ DC Persistent Memory
- Supports up to: 56 Cores per Server, 205W TDP CPUs, 6TB DDR4-2933MHz in 24 DIMMs, NVMe, SAS 3.0, Quad 10G Base-T LAN, Redundant Titanium Level Power Supplies

## Top-Loading



SSG-5049P-E1CR45H/L  
SSG-6049P-E1CR45H/L  
SSG-6049P-E1CR60H/L  
SSG-6048R-E1CR90L

## Simply Double



SSG-2029P-E1CR48H/L  
SSG-6029P-E1CR24H/L

## SBB



SSG-2029P-DN2R24L

## General Purpose



**1U**

SSG-6019P-ACR12L  
SSG-5019D8-TR12P



**2U**

SSG-2029P-ACR24H/L  
SSG-2029P-E1CR24H/L  
SSG-6029P-E1CR12T  
SSG-6029P-E1CR12H/L  
SSG-6029P-E1CR16T



**3U**

SSG-6039P-E1CR16H/L



**4U**

SSG-5049P-E1CTR36L  
SSG-6049P-E1CR24H/L  
SSG-6049P-E1CR36H/L

## High Performance Storage Servers

### The Foundation of a Flexible and Efficient Enterprise

New generation X11 Supermicro SuperStorage systems feature the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), delivering the performance to drive Software Defined Storage to the next level. The Supermicro SuperStorage systems offer a no compromise storage platform with flexible market entry points from 2U, 3U, and 4U form factors using 2.5" or 3.5" drive bays for SAS3/SATA3 and NVMe storage media. SuperStorage servers support up to: 6TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 24 DIMM slots; or, 6TB Intel® Optane™ DC Persistent Memory in memory mode (**Cascade Lake only**), PCI-E 3.0 slots, NVMe, flexible networking options such as Supermicro's SIOM cards and IPMI 2.0 with KVM and Redfish Support on a dedicated LAN port.

With Industry leading software compatibility Supermicro SuperStorage solutions present a number of key benefits to customers working with CPU and Capacity Intensive Storage applications, from the lowest-latency flash to massive scalability, there is an optimized model for every storage workload.



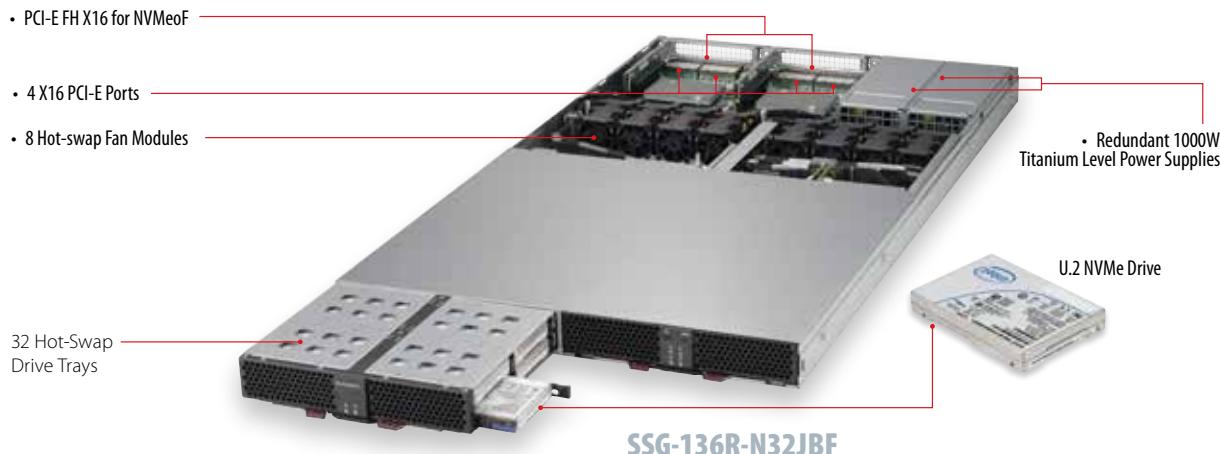
# 1U 32 NVMe JBOF

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



## New! Density-Optimized 1U JBOF

- 32 NVMe SSDs in 1U • U.2 or Intel® Ruler Form-Factors
- Up to 8 Hosts or NVMeoF on JBOF • Redundant Titanium Level Power Supplies
- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP)
- Supports Intel® Optane™ DC Persistent Memory



## Petabyte Scale All-Flash NVMe Storage

**High Density & High Capacity** - 1U 32 hot-swap NVMe drives x 32TB = 1 PB

**Serviceability** - Hot-swap fan modules and power supplies

& Hot-swap SSDs & Tool-Less Drive Trays

**Accessibility** - Remote system on/off and system management

& Remote power cycling for each individual SSD

**Redundancy** - Redundant Power Supplies and Fans

**Performance** - High throughput up to 64 GB/s data transfer rate



### Host Interface Card - AOC-SLG3-4X4P

- Low profile standard Gen 3.0 PCI-E x16
- Performance 16GB/s
- Power consumption: 24W
- Dimensions (L x H): 6.1" x 2.71"



### External PCI-E X8 Cable

- 8 mini-SAS HD x8 cable per JBOF
- Meets PCI-E External Cable Spec 0.7
- Multiple lengths: 1m, 2m, and 3m



## Petabyte Scale 1U JBOF

With a total of 32 hot-swap NVMe drives in a 1U system, Supermicro's new NVMe solution will provide all-NVMe capacity at petabyte scale in 1U of rack space as the company will support 32TB NVMe drives in the near future. NVMe technology was developed to unleash the best possible latency and provide faster CPU to data storage performance for advanced computing.

The new 1U all-NVMe Storage JBOF system supports disaggregate storage into shared pools that are rapidly becoming the preferred hardware infrastructure for demanding Big Data analytics applications such as autonomous driving and real-time financial fraud detection. Up to 8 hosts can be directly connected to the 1U pooled NVMe storage.

Alternatively, for customers who want to deploy an NVMe over Fabric (NVMeoF) solution, hundreds of hosts can be connected to the pooled high-performance NVMe storage over Ethernet. In addition, Supermicro is developing a 1U 32 drive all-NVMe Storage Server with dual 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) and 24 DIMMs. Supermicro 1U all-NVMe Storage Servers and JBOF solutions help maximize high-performance storage resource utilization and reduce the datacenter footprint resulting in lower TCO.

# X11 8-Way/4-Way

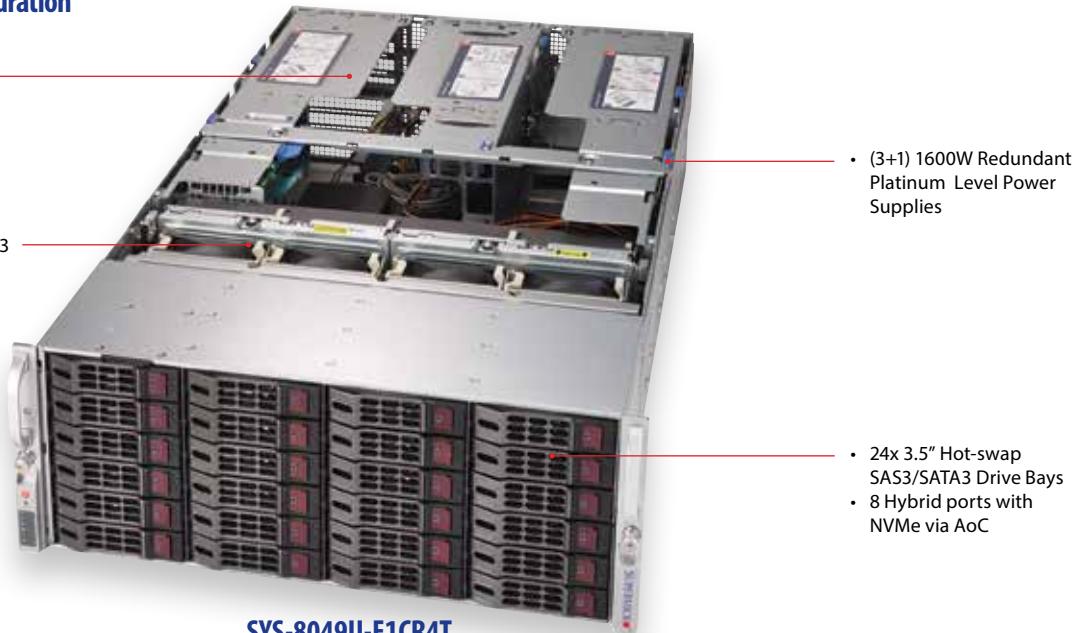
Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



## For SYS-8049U:

- Up to 12TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 48 DIMM slots; or, up to 12TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only), Support Apache Pass (AEP) DIMMs
- Up to 16 PCI-E 3.0 slots (included 6 PCI-E x16 & 10 PCI-E x8 PCI-E slots)
- Up to 24 x 3.5" SAS3 included 8 hybrid ports support U.2 NVMe via AoC
- Optional 6 GPUs Configuration

- 6 PCI-E 3.0 x16 Slots
- 10 PCI-E 3.0 x8 Slots



SYS-8049U-E1CR4

7U 8-Way



SYS-7089P-TR4

4U 4-Way



SYS-8049U-E1CR4

2U 4-Way



SYS-2049U-TR4

## For Enterprise Mission Critical Applications and Advanced Analytics, Database, Virtualization, and Scale-Up HPC Workloads, with up to:

- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Socket P (LGA 3647) supported, CPU TDP support 205W, 3UPI up to 10.4GT/s; Supports Intel® Optane™ DC Persistent Memory
- SYS-7089P: Up to 24TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM in 96 DIMM slots; or, up to 24TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
- SYS-2049U/8049U: Up to 12TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 48 DIMM slots; or, up to 12TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
- 23 PCI-E 3.0 expansion slots, 32 U.2 NVMe or 8 GPUs support (SYS-7089P)
- 16 PCI-E 3.0 expansion slots, 8 U.2 NVMe, and 6 GPUs support (SYS-8049U)
- 11 PCI-E 3.0 expansion slots, 4 U.2 NVMe, and 2 GPUs support (SYS-2049U)
- 4x 10GbE ports with Intel® X550 10GbE controller (SYS-7089P)
- Redundant Titanium Level high-efficiency (96%+) power supplies
- Total Solution with Server Management Utilities including IPMI 2.0

# X11 Entry-Class Systems

Intel® Xeon® E-2100  
Processors Supported  
(Coffee Lake)



Supermicro servers, blades and towers have been workload optimized for the most powerful and cost-effective entry level systems to date.

The new Entry-Class X11 systems include:

- Up to 95W Intel® Xeon® E-2100 Processor • Up to 6 cores per processor • Up to 128GB DDR4 2666 MHz memory
- Up to two M.2 NVMe connectors supporting Intel® Optane™ memory • Flexible I/O, networking and expansion options

## General Purpose Servers



Mainstream



WIO

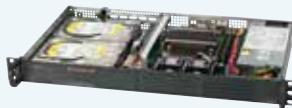


MicroBlade



MicroCloud

## Purpose Built Servers



Mainstream



1U SuperServer



IoT/Embedded



SuperServer Tower

## Powerful & Cost-Effective Entry-Class Systems

The new generation X11 Supermicro Entry-Class systems are designed to optimize the latest processor and memory technologies from Intel® while offering a breadth of workload-optimized systems to suit your environment, with many choices in features and form factor. Never before has there been such powerful systems in this class of server, now offering up to 6 cores, 128GB of memory and Intel® Optane™ memory support.

Mainstream 1U rackmount servers are optimized for a variety of applications and offer flexible choice in expansion as well as 4 hot-swap 3.5" SATA drive bays and single or 1+1 redundant Platinum-level power supplies. The 1U WIO SuperServer is optimized for a wide variety of I/O options and expandability, including up to three high speed PCI-E 3.0 expansion cards.

For high-density cost-effective blade environments, the MicroBlade offers a 3U enclosure supporting up to 14 hot-pluggable nodes while the 6U enclosure can support up to 28 hot-pluggable nodes. The MicroCloud is a high-density multi-node system with up to 8 hot-pluggable nodes in a 3U enclosure with two 2.5"/3.5" front accessible hot-swap drives per node. Both MicroBlade and MicroCloud systems are well suited to Cloud and Container deployments.

The purpose-built rackmount systems are designed for appliance or embedded environments. With short-depth form factors, models with 4 or 8 onboard 1Gb LANs, front I/O models and rear I/O models there is certain to be a model optimized for your particular needs. In addition, the tower servers offer a whisper-quiet enterprise-class tower as well as a MicroServer tower configuration.

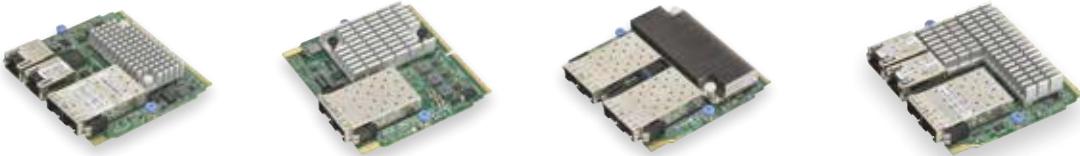
# SIOM (Super I/O Module)

Most Flexible, Cost-optimized Server I/O

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



**25G**  
SIOM  
Networking  
Adapters



Model	AOC-MH25G-b2S2G	AOC-M25G-i2S	AOC-M25G-m4S	AOC-MH25G-m2S2T
Description	Dual-port 25GbE & Dual-port GbE	Dual-port 25GbE	Quad-port 25GbE	Dual-port 25GbE & Dual-port 10GbE
Port	2 SFP28 & 2 RJ45 ports	2 SFP28 ports	4 SFP28 ports	2 SFP28 & 2 RJ45 ports
Speed	25Gb/port 1Gb/port	25Gb/port	25Gb/port	25Gb/port, 10Gb/port
Controller	Broadcom® BCM57414 Intel® i350	Intel® XXV710	Mellanox® ConnectX-4 Lx EN	Mellanox® ConnectX-4 Lx EN Intel® X550
Dimension (LxW) (without end brackets)	3.428" x 3.622" (8.71 x 9.2cm)	3.428" x 3.622" (8.71 x 9.2cm)	3.428" x 3.622" (8.71 x 9.2cm)	3.622" x 3.428" (9.2 x 8.708cm)
Compatible Motherboards	Supermicro® Motherboards with SIOM slot			
Compatible Servers	Supermicro® Servers with SIOM slot			

**SIOM**  
Networking  
Adapters



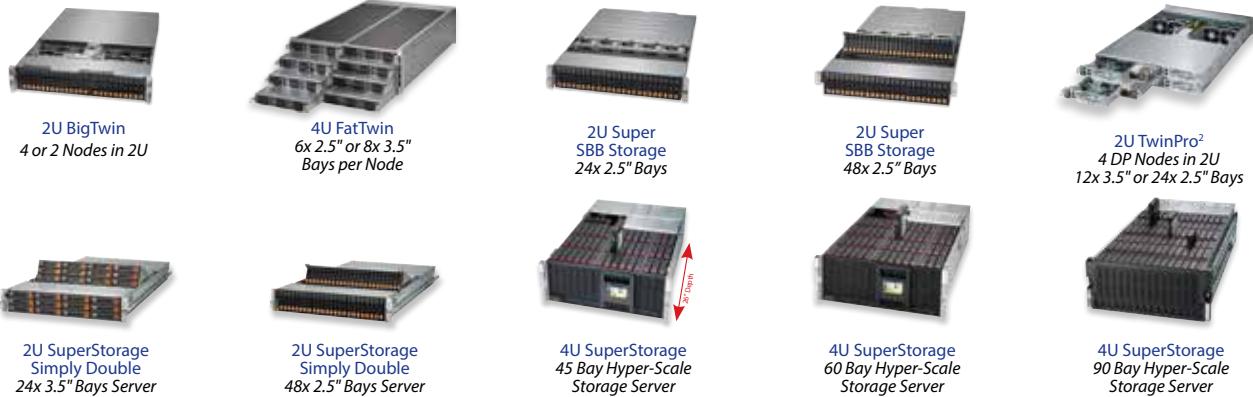
Model	AOC-MGP-i2	AOC-MGP-i4	AOC-MTGN-i2S	AOC-MTG-i4S	AOC-MTG-b2T	AOC-MTG-i2T
Description	Dual-port GbE	Quad-port GbE	Dual-port 10GbE	Quad-port 10GbE	Dual-port 10GbE	Dual-port 10GbE
Port	2 RJ45 ports	4 RJ45 ports	2 SFP+ ports	4 SFP+ ports	2 RJ45 ports	2 RJ45 ports
Speed	1Gb/port	1Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port
Controller	Intel® i350	Intel® i350	Intel® 82599ES	Intel® XL710	Broadcom® BCM57416	Intel® X550
Dimension (LxW) (without end brackets)	3.622" x 3.428" (9.2 x 8.708cm)					
Compatible Motherboards	Supermicro® Motherboards with SIOM slot					
Compatible Servers	Supermicro® Servers with SIOM slot					

**SIOM**  
Networking  
Adapters



Model	AOC-MTG-i4T	AOC-MHIBE-m1CG	AOC-MHIBF-m2Q2G	AOC-MHIBF-m1Q2G	AOC-MHFI-i1C
Description	Quad-port 10GbE	Single-port InfiniBand EDR or 100GbE & Single-port GbE	Dual-port IB FDR & Dual-port GbE	Single-port IB FDR & Dual-port GbE	Single-port Host Fabric Interface
Port	4 RJ45 ports	1 QSFP28 & 1 RJ45 port	2 QSFP & 2 RJ45 ports	1 QSFP & 2 RJ45 ports	1 QSFP28 port
Speed	10Gb/port	100Gb/port	56Gb/port, 1Gb/port	56Gb/port, 1Gb/port	100Gb/port
Controller	Intel® X550	Mellanox® ConnectX-4 VPI Intel® i210	Mellanox® ConnectX-3 Pro Intel® i350	Mellanox® ConnectX-3 Pro Intel® i350	Intel® Omni Path HFI ASIC
Dimension (LxW) (without end brackets)	3.622" x 3.428" (9.2 x 8.708cm)	3.428" x 3.622" (8.71 x 9.2cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)
Compatible Motherboards	Supermicro® Motherboards with SIOM slot	Supermicro® X11 Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot
Compatible Servers	Supermicro® Servers with SIOM slot	Supermicro® X11 Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot

## Supported Server and Storage Systems



# Supermicro® Global SKUs

Supermicro® provides full integration, fulfillment and support services for customers in the Americas, Asia-Pacific (APAC), Europe, Middle East and Africa (EMEA) regions. Logistics and support for each region is processed through advanced operations centers in San Jose, CA (HQ), Taiwan (TW) and the Netherlands (NL). Products listed below are available in all of our branches across the globe.

Supermicro's global operations centers offer customers TTM advantages with streamlined processing, accelerated delivery as well as cost savings with reduced shipping charges and dedicated support within local time zones. Consult with your local Supermicro Sales Representative to optimize fulfillment and support of your Supermicro products through our worldwide logistics and service centers.



SYS-1029U-TR4 / TRT / TR4T / TRTP / TRTP2	SYS-2028TP-DTR / DTTR / DTFR	SYS-1029P-WTRT	SSG-6049P-E1CR36H / E1CR36L
SYS-6019U-TR4 / TRT / TR4T / TRTP / TRTP2	SYS-2028TP-HC1R / HC1TR / HC1FR	SYS-1019P-WTR	SSG-6027R-E1R12N
SYS-6029U-TR4 / TRT / TR4T / TRTP	SYS-2028TP-HTR / HTTR / HTFR	SYS-6019P-WTR	SSG-6047R-E1R36N
SYS-2029U-TR4 / TRT / TR4T / TRTP	SYS-2028TP-H72R / H72FR	SYS-5019P-WTR	SYS-6027TR-HTRF
SYS-1028U-TR+ / TR 4+ / TR4T+ / TRT+	SYS-6018R-MTR(R)	SYS-5019P-M	SYS-2027TR-H71RF
SYS-6018U-TR+ / TR4+ / TR4T+ / TRTP+ / TRTP2	SYS-6018R-TDW	SYS-6029P-TR	SYS-2027TR-HTRF
SYS-2028U-TR+ / TR4+ / TR4T+ / TRTP+ / TRTP2	SYS-6018R-WTR(T)	SYS-7049P-TR	SYS-2027GR-TRF
SYS-6028U-TR+ / TR4+ / TR4T+ / TRTP+ / TRTP2	SYS-6028R-TTR	SYS-5019S-L	SYS-6027R-TRF
SYS-5018D-MTF	SYS-6028R-WTR(T)	SYS-5019S-M	SYS-7039A-I
SYS-1029QG-TRT	SYS-6028TP-HC1R / HC1TR / HC1FR	SYS-5019S-MR	SYS-7049A-T
SYS-1029GP-TRT / TRT2	SYS-6028TP-HTTR / HTTR / HTFR	SYS-5019S-WR	SYS-7037A-I
SYS-1028GR-TR	SYS-6028TR-D72R / DTR	SYS-5015A-EHF-D525	SYS-7047GR-TRF
SYS-1028R-TDW	SYS-6028TR-HTTR / HTFR	SYS-5017C-MTF	SYS-7048GR-TR
SYS-1028R-WTR / WTR	SYS-7038A-I	SYS-1027GR-TRF	
SYS-2029BT-HNCOR / HNR	SYS-7048A-T	SYS-1027R-WRF	
SYS-2028GR-TR	SYS-5018R-M	SYS-6017R-NTF	FatTwin™
SYS-2029TP-HTR	SYS-5018R-MR	SYS-6017R-TDF	SYS-F619P2-RT
SYS-6029TP-HTR	SYS-5018R-WR	SYS-6017R-WRF	SYS-F617R3-FT
SYS-2028TP-DNCR	SYS-6019P-MT	SSG-6049P-E1CR45H / E1CR45L	SYS-F618R3-FT
SYS-2028TP-DNCTR	SYS-1029P-MTR	SSG-6049P-E1CR60H / E1CR60L	SYS-F628R3-R72B+
SYS-2028TP-DNCFR	SYS-1029P-WTR	SSG-6029P-E1CR12H / E1CR12L / E1CR12T	SYS-F628R3-R72B+

Global SKUs are identified by the Global SKU logo (see above) in this document, and Global SKU part numbers are highlighted in green text throughout.

## Featured Products and Solutions

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### Ultra & WIO

#### New! X11 System - 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) Supported

Ultra	
1029UX-LL3, 1029UX-LL1, 1029UX-LL2-S16, 1029UX-TN10RT, 1029U-TR4, 1029U-TR4T, 1029U-TRT, 1029U-TRTP, 1029U-TRTP2, 1029U-TR25M, 1029U-E1CR4, 1029U-E1CR4T, 1029U-E1CRT, 1029U-E1CRTP, 1029U-E1CRTP2, 1029U-E1CR25M .....	19-20
6019U-TN4RT, 6019U-TN4R4T, 6019U-TR4, 6019U-TR4T, 6019U-TRT, 6019U-TRTP, 6019U-TRTP2, 6019U-TR25M, 1029UZ-TN20R25M .....	21-22
1029UZ-TN20R25M, 2029U-TN24R4T .....	22-26
2029U-E1CR4, 2029U-E1CR4T, 2029U-E1CRT, 2029U-E1CRTP, 2029U-E1CR25M, 2029U-TR4, 2029U-TR4T, 2029U-TRT, 2029U-TRTP, 2029U-TR25M .....	23
6029U-TR4, 6029U-TR4T, 6029U-TRT, 6029U-TRTP, 6029U-TR25M .....	23
2029UZ-TN20R25M, 6029U-E1CR4, 6029U-E1CRT, 6029U-E1CRTP, 6029U-E1CR25M, 6029U-E1CR4T .....	24
6029U-TR4, 6029U-TRT, 6029U-TRTP, 6029U-TR25M, 6029U-TR4T, 1019P-WTR .....	25
WIO	
5019C-WR, 5019S-W4TR, 5019P-WT, 5019P-WTR .....	26
6019P-WT, 6019P-WTR, 6019P-WT8, 1029P-WT, 1029P-WTR, 1029P-WTRT .....	27-28
6029P-WTR, 6029P-WTRT, 5029P-WTR .....	29

#### X10 Generation Systems - Intel® Xeon® Processor E5-2600 v4/v3 product families support

Ultra	
1028U-E1CR4+, 1028U-E1CRTP+, 1028U-TR4+, 1028U-TRT+, 1028U-TR4T+ .....	30
1028U-TN10RT+, 1028U-TNRP+, 1028U-TNRT+, 1028U-TNRT4+, 6018U-TR4+, 6018U-TR4T+, 6018U-TRTP+, 2028U-E1CNRT+, 2028U-E1CNR4T+ .....	31-32
2028U-TNRT+, 2028U-TNRT4+, 2028U-TN24R4T+, 2028U-TR4+, 2028U-TRTP+, 2028U-TR4T+, 6028U-TNRT+, 6028U-TNRT4+ .....	33-34
6028U-TR4+, 6028U-TRT+, 6028U-TRTP+, 6028U-TR4T+, 6028UX-TR4 .....	35
WIO	
1018R-WC0R, 5018R-WR, 6018R-WTR, 6018R-WTRT, 1028R-WC1R, 1028R-WC1RT .....	36-37
1028R-WMR, 1028R-WMRT, 1028R-WTR, 1028R-WTRT, 1028R-WTNR, 1028R-WTNRT, 5028R-WR .....	38-39
6028R-WTR, 6028R-WTRT .....	40

**Storage****New! X11 Storage - 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) Supported**

1029P-NE32R, 1029P-NER32L, 1029P-NR32R, 1029P-N32R, 1029P-NMR36L .....	.43-44
136R-N32JBF, 136R-NR32JBF .....	.45
2029P-ACR24H, 2029P-ACR24L, 2029P-E1CR24H, 2029P-E1CR24L .....	.46
2029P-DN2R24L, 2029P-DN2RR32L, 2029P-DN2R48L, 2029P-E1CR48H, 2029P-E1CR48L, 5029P-E1CTR12L .....	.47-48
6029P-E1CR12H, 6029P-E1CR12L, 6029P-E1CR12T, 6029P-E1CR16T, 6029P-E1CR24H, 6029P-E1CR24L .....	.49-50
6039P-E1CR16H, 6039P-E1CR16L, 5049P-E1CTR36L .....	.51
5049P-E1CR45H, 5049P-E1CR45L, 6049P-E1CR24H, 6049P-E1CR24L .....	.52
6049P-E1CR36H, 6049P-E1CR36L, 6049P-E1CR45H, 6049P-E1CR45L, 6049P-E1CR60H, 6049P-E1CR60L .....	.53-54

## Cold Storage SuperServer, Intel® Atom® processor C2750

5018A-AR12L .....	.55
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## X10 Generation Systems- Intel® Xeon® Processor D product family support

5018D2-AR12L, 5018D4-AR12L, 5018D8-AR12L .....	.55
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## X10 Generation Systems - Intel® Xeon® Processor E5-2600 v4/v3 product families support

2028R-ACR24H, 2028R-ACR24L, 2028R-DE2CR24L, 2028R-DN2R20L, 2028R-DN2R24L, 2028R-DN2R40L .....	.56-57
2028R-DN2R48L, 2028R-E1CR24H, 2028R-E1CR24L, 2028R-E1CR24N, 2028R-E1CR48N, 2028R-E1CR48L .....	.58-59
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6028R-E1CR24L, 6038R-E1CR16H, 6038R-E1CR16L, 6038R-E1CR16N, 5048R-E1CR36L, 6048R-E1CR24H, 6048R-E1CR24L, 6048R-E1CR24N .....	.62-63
6048R-DE2CR24L, 6048R-E1CR36H, 6048R-E1CR36L, 6048R-E1CR36N, 6048R-E1CR45L, 6048R-E1CR60L, 6048R-E1CR60N .....	.64-65
6048R-E1CR72L, 6048R-E1CR90L .....	.66

## SBB JBOD

927R-E2CJB, 927R-E2CJB, 947R-E2CJB .....	.67
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**GPU****New! X11 GPU - 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) Supported**

1019GP-TT, 5019GP-TT, 1029GP-TR, 2029GP-TR .....	.70
4029GP-TVRT, 4029GP-TXRT, 4029GP-TRT, 4029GP-TRT2, 4029GP-TRT3 .....	.71-72
6049GP-TRT, 7049GP-TR, 7049GP-TRT, 9029GP-TNVRT .....	.73-74
4028GP-TRT2 .....	.77

## X10 GPU Systems – Intel® Xeon® Processor E5-2600 v4/v3 product families support

1018GR-T, 5018GR-T ..44	.74
1028GQ-TR, 1028GQ-TRT, 1028GQ-TXR, 1028GQ-TXRT, 1028GQ-TVVRT .....	.75
1028GR-TR, 1028GR-TRT, 2028GR-TR, 2028GR-TRT, 2028GR-TRH, 2028GR-TRHT .....	.76
4028GR-TR, 4028GR-TRT, 4028GR-TR2, 4028GR-TRT2, 4028GR-TXR, 4028GR-TXRT, 4028GR-TVVRT, 7048GR-TR .....	.80

## Intel® Xeon® Phi™ x200 processor support

5038K-i .....	.80
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**BigTwin™ / TwinPro™ / Twin / FatTwin™****New! X11 BigTwin - 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) Supported**

2029BT-DNCOR, 2029BT-DNR, 2029BT-HNCOR, 2029BT-HNC1R, 2029BT-HNR, 2029BT-HNTR, 2029BT-HTR, 2029BZ-HNR, 6029BT-DNCOR, 6029BT-HNCOR .....	.83-86
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## X11 Generation TwinPro™ Systems - Intel® Xeon® Processor E5-2600 v4/v3 product families support

2028BT-HNCOR+, 2028BT-HNC1R+, 2028BT-HNR+, 2028BT-HNTR+, 2028BT-HTR+ 6028BT-HNCOR+ .....	.87-89
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**New! X11 TwinPro - 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) Supported**

1029TP-DCOR, 1029TP-DC1R, 1029TP-DTR, 2029TP-HCOR, 2029TP-HC1R, 2029TP-HTR, 6029TP-HCOR, 6029TP-HC1R .....	.90-92
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## X10 Generation Twin Systems - Intel® Xeon® Processor E5-2600 v4/v3 product families support

## 1U TwinPro - 2 hot-swap nodes in 1U w/ 2.5" HDDs

1028TP-DTFR, 1028TP-DC0FR, 1028TP-DC1FR, 1028TP-DTR, 1028TP-DC0R, 1028TP-DC1R, 1028TP-DTTR, 1028TP-DC0TR, 1028TP-DC1TR .....	.93
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2U TwinPro<sup>2™</sup> - 4 hot-swap nodes in 2U w/ 2.5" or 3.5" HDDs

2028TP-HCOR, 2028TP-HCOFR, 2028TP-HCOTR, 2028TP-HTFR, 2028TP-HTR, 2028TP-HTTR .....	.94-95
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2028TP-HCOR, 2028TP-HC1R, 2028TP-HTR, 2028TP-HCOTR, 2028TP-HC1TR, 2028TP-HTTR, 2028TP-HCOFR, 2028TP-HC1FR, 2028TP-HTFR .....	.97
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6028TP-HCOTR, 6028TP-HC1TR, 6028TP-HTTR .....	.100
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2U TwinPro<sup>2™</sup> - 2 hot-swap nodes in 2U w/ up to 4 NVMe per Node

2028TP-DCOR, 2028TP-DC1R, 2028TP-DECIR, 2028TP-DTR, 2028TP-DC0FR, 2028TP-DECFR, 2028TP-DC0TR, 2028TP-DC1TR, 2028TP-DTTR .....	.96
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2028TP-DNCR, 2028TP-DNCFR, 2028TP-DNCTR .....	.98
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6028TP-DNCR, 6028TP-DNCFR .....	.100
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6028TP-HCOR, 6028TP-HC1R, 6028TP-HTR, 6028TP-HCOFR, 6028TP-HTFR .....	.99
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6028TP-DNCR, 6028TP-DNCFR, 6028TP-DNCTR .....	.100-101
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2U TwinPro<sup>2™</sup> with SiOM support

2028TP-HCOR-SIOM, 2028TP-HC1R-SIOM, 2028TP-HTTR-SIOM .....	.99
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6028TP-HCOR-SIOM, 6028TP-HC1R-SIOM, 6028TP-HTTR-SIOM .....	.101
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## 1U Twin 6018TR-T, 6018TR-TF, 1028TR-T, 1028TR-TF .....

## 2U Twin 2028TR-H72FR, 2028TR-HTFR, 6028TR-HTR, 6028TR-HTTF .....

**BigTwin™ / TwinPro™ / Twin / FatTwin™ continued...****New! X11 FatTwin™ Systems - 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) Supported**

F619H6-FT, F619P2-FT, F619P2-RC0, F619P2-RTN, F619P2-RC1, <b>F619P2-RT</b> , F619P3-FT, F629P3-RC0B, F629P3-RC1B, F629P3-RTBN, <b>F629P3-RTB</b> .....	104-106
<b>X10 FatTwin™ Systems - Intel® Xeon® Processor E5-2600 v4/v3 product families support</b>	
HADOOP, 4-Node: F618H6-FT+ , F618H6-FTL+, F618H6-FTPT+, F618H6-FTPTL+ .....	107
8-Node, Front I/O: F618R2-FC0, F618R2-FT, F618R2-F72+, F618R2-FT+, F618R2-FTPT+, F618R2-R72+, F618R2-RT+, F618R2-R72PT+, F618R2-RTPT+ .....	108-109
8-Node, Rear I/O: F618R2-RC1+, F618R2-RTN+, F618R2-RCOPT+, F618R2-RC1PT+, F618R2-RTPTN+ .....	110
4-Node, GPU Supported: F628G2-FC0+, F628G2-FCOPT+, F628G2-FT+, F628G2-FTPT+, F628G3-FC0+, F628G3-FCOPT+, F628G3-FT+, F628G3-FTPT+ .....	111-112
4-Node, Front I/O: F628R2-FC0, F628R2-FC0+, F628R2-FCOPT+, F628R2-FT+, F628R2-FTPT+, F628R2-RT+, F628R2-RTB+, F628R2-RTBPT+, F628R3-FC0, F628R3-FC0+, F628R3-FCOPT+, F628R3-FT, F628R3-FTPT+, F628R3-R72B+, F628R3-R72BPT+ .....	113-115
4-Node, Rear I/O: F628R3-RC0B+, F628R3-RC1B+, F628R3-RC0BPT+, F628R3-RC1BPT+, F628R3-RTBN+, F628R3-RTBPTN+ .....	116
2DP Nodes, Front I/O: F648G2-FC0+, F648G2-FCOPT+, F648G2-FT+, F648G2-FTPT+ .....	117

**DCO/UP / Mainstream / Multi I/O / EX DP****New! X11 Systems - 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) Supported****X11 Data Center-Optimized**

1029P-MT, <b>1029P-MTR</b> , 6019P-MT, 6019P-MTR .....	120, 125
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**X11 Mainstream**

5019P-M, 5019P-MR, 5019P-MT, 5019P-MTR, 2029P-C1R, 2029P-C1RT, <b>6029P-TR</b> , 6029P-TRT, <b>7049P-TR</b> , 7049P-TRT .....	121, 122, 125, 126, 128
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**X11 Multi I/O**

2029P-TXRT, 6039P-TXRT .....	126, 127
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**X10 Generation Systems****X10 Data Center-Optimized - Intel® Xeon® Processor E5-2600 v4/v3 processor series**

1028R-TDW, 6018R-MD, 6018R-MDR, 6018R-TD, 6018R-TD8, 6018R-TDW, 6018R-TDTP, 6018R-TDTPT .....	129, 132, 133, 134
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**X10 IoT/Embedded**

1019S-M2, 1028R-MCT, 1028R-MCTR, 5019S-TN4, 1019S-MP, 6018R-MT, 6018R-MTR, 6028R-TDWNR .....	119, 124, 127, 129, 132, 136
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**Short-Depth - Intel® Xeon® Processor E5-2600 v4/v3 processor series**

1028R-MCT, 1028R-MCTR, 6018R-MT, 6018R-MTR, 6028R-TDWNR .....	129, 132, 136
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**X10 Mainstream - DP**

2029P-C1R, 2029P-C1RT, 6029P-TR, 6029P-TRT, 7049P-TR, 7049P-TRT, 2028R-C1R, 2028R-C1RT, 2028R-C1R4+, 2028R-C1RT4+, 6028R-TR, 6028R-TRT, 7048R-C1R 7048R-C1R4+ 7048R-C1RT, 7048R-C1RT4+ 7048R-TR 7048R-TRT .....	125, 126, 128, 134, 135, 137, 138
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**X10 Mainstream - UP**

1019S-MCOT, 5019C-L 5019C-FL, 5019C-M 5019C-MR 5019P-M, 5019P-MR, 5019P-MT, 5019P-MTR, 5019S-M-G1585L, 5019S-MR-G1585L, 5019S-L, 5019S-M, 5019S-ML, 5019S-MN4, 5019S-MR 5019S-TN4, 5019S-WR, 5039C-I, 1018D-73MTF, 5018A-MLHN4, 5018A-MLTN4, 5018D-MF, 5018D-MTF, 5018D-MTRF, 5018D-MTLN4F .....	119, 120, 121, 122, 123, 124, 125, 127, 129, 130, 131
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**X10 Multi I/O**

1019S-WR, 1018R-WR, 2028R-C1R, 2028R-C1RT, 2028R-C1R4+, 2028R-C1RT4+, 2028R-TXR, 6038R-TXR, 6048R-TXR .....	128, 134, 135, 136
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**8/4-Way MP****New! X11 Systems - 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP) Supported**

7089P-TR4T (8-Way), 8049U-E1CR4T (4-Way), 2049U-TR4 (4-Way) .....	140
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**X10 Generation**

7088B-TR4FT (8-Way), 2028U-RTR4, 8048B-TR4F, 8028B-COR4FT, 8048B-TR4F, 8048B-COR4FT, 8028B-TR3F, 8028B-COR3FT, 8048B-TR4FT, 4048B-TR4FT, 8048B-TRFT, 4048B-TRFT .....	141-146
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**MicroCloud****New! X11 Generation MicroCloud - Intel® Xeon® E Processor supported**

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# X11 Ultra Servers

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



- All-Flash Support Up to 24 NVMe hot-swap 2.5" Drives in 2U
- A Full Range of Processors Up to 205 watt TDP CPUs
- Full Memory Support 6TB in 24 DIMMs
- High Flexibility Variety of networking options

## 1U 20 NVMe

### Features:

- Virtualization, Cloud Computing, High End Enterprise Server, SDS
- Dual Socket P (LGA 3647) support: Intel® Xeon® Scalable Processors
- 3 UPI up to 10.4GT/s
- 24 DIMMs; up to 6TB ECC 3DS LRDIMM or RDIMM DDR4-2933MHz
- 20 Hot-swap 2.5" 7mm drive bays; up to 20 NVMe (CPU1: 8 NVMe + 2 NVMe/SAS/SATA3 hybrid, CPU2: 10 NVMe)
- Up to 2 PCI-E 3.0 x8 (FH, FL)



SYS-1029UZ-TN20R25M

20 directly attached hot-swap NVMe SSDs

## Ultra Servers



SYS-2029UZ-TN20R25M



SYS-6029UZ-TR4+



SYS-1029UX-LL1/LL2/LL3-S16



SYS-1029U-TN10RT

# X11 WIO Servers

- Up to 28 Cores per CPU
- Up to 3TB DDR4 2933MHz ECC R/LR DIMM memory in 12 DIMM slots
- Up to 205W per node
- Up to 6 PCI-E 3.0 slots and 1 Add-On-Module for SAS3 storage controller
- Single/Redundant high efficiency (96%) power supplies



SYS-1029P-WTRT



SYS-1029P-WTR



SYS-6019P-WT8



SYS-5029P-WTR



SYS-1019S-WR

# SUPERSERVER NAMING GUIDE

**SYS - 1 0 2 9 WT - WTR**

## Servers with 2.5" Hard Drives

Character	Representation	Options
1st	Form Factor	1 = 1U 2 = 2U 3 = 3U 4 = 4U 5 = 5U
2nd	Reserved Digit	
3rd	Number of processor slots	1 = Single processor slot 2 = Dual processor slots 4 = Quad processor slots 8 = Oct processor slots (8 way server)
4th	System Generation	5 = X7 Series 6 = X8 Series 7 = X9 Series 8 = X10 Series 9 = X11 Series
5th	Chipset	A = Atom B = Boxboro (X8) B = Brickland (X10) C = Clarksboro (X7) B = Bigby/Skt B2 C = Cougar Point(X9) G = GPU I = Foxhollow(X7) M = Mukilteo R = Romley / Socket R (X9 / X10) ST = Storage Server T = Tylersburg(X7) xT = x: platform (ex: T-Twin, G-GPU) U = Ultra
6th	HDD Interface	3 = SAS (Intel) 6 = SAS2 (Intel) 70 = SAS2 (Broadcom® 2008) 71 = SAS2 (Broadcom® 2108) 72 = SAS2 (Broadcom® 2208) 73 = SAS2 (Broadcom® 2308) 73J = SAS2 (Broadcom® 2308 IT mode) C0 = <b>SAS3</b> (Broadcom® 3008) 12Gb C1 = <b>SAS3</b> (Broadcom® 3108) 12Gb A = Workstation D = Short-Depth E = Extension Slot with Riser H = Hot Swap, Six GPUs L = Low Cost M = Mini-Chassis P = Internal slot NT = SATA without UIO T = SATA U = UIO W = WIO N = <b>NVMe</b>
7th	Power Redundancy	R = Redundant power supply E = Expansion Slot
8th	Additional	+ = 18(X8)/24(X9)/32(X9 Quad) DIMM memory F = On board BMC (IPMI) T = 10 Gigabit Ethernet 2 = 2nd Generation GPU 4 = 4 Independent LAN ports

**SYS - 6 0 2 8 R - C1 R 4+**

## Servers with 3.5" Hard Drives

Character	Representation	Options
1st	Number of processor slots	5 = Single processor slot 6 = Dual processor slots 7 = Dual processor slots (Tower) 8 = Quad processor slots (4 way Server)
2nd	Reserved Digit	
3rd	Form Factor	1 = 1U 2 = 2U 3 = 3U 4 = 4U
4th	System Generation	5 = X7 Series 6 = X8 Series 7 = X9 Series 8 = X10 Series 9 = X11 Series
5th	Chipset	A = Atom B = Boxboro (X8) B = Bigby/Skt B2(X9) B = Brickland (X10) C = Clarksboro (X7) C = Cougar Point(X9) G = GPU I = Foxhollow(X7) M = Mukilteo P = Pxx PR = X9 Twin Pro R = Romley/Socket R(X9/X10) S = Skylake ST = Storage Server T = Tylersburg TP = X10 Twin Pro TR = Twin R Socket xT = x: platform (ex: T-Twin, G-GPU); T: Tylersburg U = Ultra UT = EXDP Twin Pro UX = Hyperspeed
6th	HDD Interface	3 = Intel® SAS 6 = Intel® SAS2 70 = SAS2 (Broadcom® 2008) 71 = SAS2 (Broadcom® 2108) 72 = SAS2 (Broadcom® 2208) 73 = SAS2 (Broadcom® 2308) 73J = SAS2 (Broadcom® 2308 IT mode) C0 = <b>SAS3</b> (Broadcom® 3008) 12Gbps C1 = <b>SAS3</b> (Broadcom® 3108) 12Gbps A = Workstation D = Desktop, Short-Depth E = Extension Slot with Riser H = Hot Swap L = Low Cost M = Mini-Chassis P = Internal slot NT = SATA without UIO T = SATA U = UIO W = WIO N = <b>NVMe</b> X = 11 Slots, Max IO
7th	Power Redundancy	R = Redundant Power Supply E = Expansion Slot
8th	Additional	+ = 18(X8)/24(X9)/32(X9 Quad) DIMM memory slots F = On board BMC (IPMI, no longer used with X10) P = 10G SFP+ T = 10 Gigabit Ethernet 4 = 4 Independent LAN ports



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**1U X11 Ultra**  
*Low Latency*



**NEW!**

**1U X11 Ultra**  
*Low Latency*



**NEW!**

**1U X11 Ultra**  
*10x 2.5" NVMe Drive Bays*



MODEL	SYS-1029UX-LL3-S16	SYS-1029UX-LL1-S16 SYS-1029UX-LL2-S16	SYS-1029U-TN10RT
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Financial Analysis</li> <li>• Business Critical Applications</li> <li>• Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Analysis</li> <li>• Business Critical Applications</li> <li>• Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>• Virtualization</li> <li>• Cloud Computing</li> <li>• High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Hyper-Speed Hardware Acceleration</li> <li>• Low Latency &amp; Jitter Optimized</li> <li>• 8x 2.5" SAS/SATA drive bays</li> <li>• 2x 2.5" NVMe drive bay support</li> <li>• Optimized cooling</li> <li>• Plantium level redundant power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Hyper-Speed Hardware Acceleration</li> <li>• Low Latency &amp; Jitter Optimized</li> <li>• 8x 2.5" SAS/SATA drive bays</li> <li>• 2x 2.5" NVMe drive bay support</li> <li>• Optimized cooling</li> <li>• Plantium level redundant power supply</li> </ul>	<ul style="list-style-type: none"> <li>• 24 DIMM sockets</li> <li>• 2 PCI-E 3.0 (x16)</li> <li>• Dual 10G BaseT</li> <li>• 1000W Titanium Level Power Supply</li> <li>• 2 SATA DOMs Support with Embedded Power</li> </ul>
Serverboard	SUPERMICRO® X11DPU-XLL	SUPERMICRO® X11DPU-XLL	SUPERMICRO®
Chipset	Intel C621 Chipset	Intel C621 Chipset	Intel® C621 Chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).
Expansion Slots	2 PCI-E 3.0 x16(Full Height, 10.5" Length) 1 PCI-E 3.0 x8 (Low Profile) 1 PCI-E 3.0 x8 (Internal SAS3 integrated 3108)	2 PCI-E 3.0 x16(1x Full Height, 10.5" Length; 1x Full Height, 10" Length) 1 PCI-E 3.0 x8 (Low Profile) 1 PCI-E 3.0 x8 (Internal SAS3 integrated 3108)	2 PCI-E 3.0 x16 (2 FH, 10.5" L)
Onboard Storage Controller	Broadcom® 3108 controller for 8 SAS3 ports	Broadcom® 3108 controller for 8 SAS3 ports	Intel® C621 SATA3 (6 Gbps) controller
Connectivity	4x Gigabit Ethernet ports via AOC-UR-I4G	4x Gigabit Ethernet ports via AOC-UR-I4G	2 10GbE-T Ethernet via Intel® X540 Ethernet Controller 5 USB 3.0 ports (2 Rear, 2 Front, 1 Type A) 1 Serial Port
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2500 BMC	2 VGA ports (1 rear, 1 onboard) 1 Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SUM; SuperDoctor® 5; Watchdog;	IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5
Drive Bays	8x SATA/SAS3 Hot-swap 2.5" HDD bays (SAS3 3108) 2x NVME Hot-swap 2.5" HDD bays	8x SATA/SAS3 Hot-swap 2.5" HDD bays (SAS3 3108) 2x NVME Hot-swap 2.5" HDD bays	10 Hot-Swappable 2.5" drive bays: 6 NVMe ports (NVMe from CPU1) 4 NVMe/SAS3 hybrid ports for optional SAS3/SATA3 (NVMe from CPU 2)
Peripheral Bays	N/A	N/A	N/A
Power Supply	750W High-efficiency (Platinum level) digital power supply	750W High-efficiency (Platinum level) digital power supply	Redundant 1000W Titanium Level Power Supply
Cooling System	8 heavy duty fans w/ Optimal Fan Speed Control	8 heavy duty fans w/ Optimal Fan Speed Control	8 Heavy Duty fans w/ Optimal Fan Speed Control, 1 Air Shroud
Form Factor	437 x 43 x 706mm (17.2" x 1.7" x 27.8")	437 x 43 x 706mm (17.2" x 1.7" x 27.8")	432 x 43 x 706mm (17.2" x 1.7" x 27.8")



NEW!

**1U X11 Ultra**  
*10x 2.5" Drive Bays*


NEW!

**1U X11 Ultra**  
*10x 2.5" Drive Bays, SAS3 Expander*


MODEL	SYS-1029U-TR4 SYS-1029U-TR4T SYS-1029U-TRT	SYS-1029U-TRTP SYS-1029U-TRTP2 SYS-1029U-TR25M	SYS-1029U-E1CR4 SYS-1029U-E1CR4T SYS-1029U-E1CRT	SYS-1029U-E1CRTP SYS-1029U-E1CRTP2 SYS-1029U-E1CR25M
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>		<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	
Outstanding Features	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>		<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	
Serverboard	SUPERMICRO® X11DPU		SUPERMICRO® X11DPU	
Chipset	Intel® C621 chipset		Intel® C621 chipset	
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).		Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	
Expansion Slots	2 PCI-E 3.0 x16 (FH, 10.5" L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)		2 PCI-E 3.0 x16 (FH, 10.5" L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)	
Onboard Storage Controller	Intel® C621 SATA controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;		Intel® C621 SATA3 (6Gb/s) controller	
Connectivity	<p>-TR4: 4 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port</p> <p>-TR4T: 4 10GBase-T Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRT: 2x 10GBase-T Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRTP: 2 10G SFP+ Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRTP2: 2 10G SFP+ Ethernet; 2 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TR25M: 2 25G SFP28 Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>		<p>-E1CR4: 4 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-E1CR4T: 4 10GBase-T Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-E1CRT: 2x 10GBase-T Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-E1CRTP: 2 10G SFP+ Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-E1CRTP2: 2 10G SFP+ Ethernet; 2 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-E1CR25M: 2 25G SFP28 Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>	
VGA/Audio	Aspeed AST2500 BMC		Aspeed AST2500 BMC	
Management	<p>-TR4: Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5</p> <p>-TR4T/TRT/TRTP/TRTP2/TR25M: Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;</p>		Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	
Drive Bays	<p>-TR4: 10 hot-swap 2.5" drive support</p> <p>-TR4T/TRT/TRTP/TRTP2/TR25M: 10 hot-swap 2.5" drive bays; 10 SAS3 ports support via AOC</p>		10 hot-swap 2.5" drive bays; 10 SAS3 ports support via Expander and AOC	
Peripheral Bays	N/A		N/A	
Power Supply	750W Redundant Platinum Level Power Supply		750W Redundant Platinum Level Power Supply	
Cooling System	8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud		8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud	
Form Factor	437 x 43 x 707mm (17.2" x 1.7" x 27.82")		437 x 43 x 707mm (17.2" x 1.7" x 27.82")	

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

**NEW!**

### 1U X11 Ultra 4x 3.5" NVMe Drive Bays



**NEW!** GLOBAL SKU

### 1U X11 Ultra 4x 3.5" Drive Bays



MODEL	SYS-6019U-TN4RT SYS-6019U-TN4R4T	SYS-6019U-TR4 SYS-6019U-TR4T SYS-6019U-TRT	SYS-6019U-TRTP SYS-6019U-TRTP2 SYS-6019U-TR25M
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 3.5" drive bays</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>4 3.5" drive bays</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>4 3.5" drive bays</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPER● X11DPU	SUPER● X11DPU	SUPER● X11DPU
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).
Expansion Slots	2 PCI-E 3.0 x16 (FH, 10.5" L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)	2 PCI-E 3.0 x16 (FH, 10.5" L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)	2 PCI-E 3.0 x16 (FH, 10.5" L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)
Onboard Storage Controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller
Connectivity	<p><b>-TN4RT:</b> 2x 10GBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TN4R4T:</b> 4x 10GBase-T Ethernet ports via AOC-UR-i4XTF; Intel® X710 + X557 10GBase-T; 1x Realtek RTL8211E PHY (dedicated IPMI); 2 VGA ports (1 rear, 1 onboard); 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>	<p><b>-TR4:</b> 4 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TR4T:</b> 4 10GBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TRT:</b> 2x 10GBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TRTP:</b> 2 10G SFP+ Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TRTP2:</b> 2 Gigabit Ethernet ports; 2 10G SFP+ Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TR25M:</b> 2 25G SFP28 Ethernet Ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>	<p><b>-TR4:</b> 4 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TR4T:</b> 4 10GBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TRT:</b> 2x 10GBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TRTP:</b> 2 10G SFP+ Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TRTP2:</b> 2 Gigabit Ethernet ports; 2 10G SFP+ Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TR25M:</b> 2 25G SFP28 Ethernet Ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	4 hot-swap 3.5" drive support; 4 NVMe/SATA3 ports	4 hot-swap 3.5" drive support	4 hot-swap 3.5" drive support
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 750W Platinum Level Power Supply	Redundant 750W Platinum Level Power Supply	Redundant 750W Platinum Level Power Supply
Cooling System	8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud	8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud	8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud
Form Factor	437 x 43 x 737mm (17.2" x 1.7" x 29")	437 x 43 x 737mm (17.2" x 1.7" x 29")	437 x 43 x 737mm (17.2" x 1.7" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



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### 2U X11 Ultra

24x 2.5" NVMe Drive Bays



MODEL	SYS-1029UZ-TN20R25M	SYS-2029U-TN24R4T
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support Up to 255W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Virtualization</li> <li>• Cloud Computing</li> <li>• High Density Enterprise Server</li> <li>• Software Defined Storage</li> <li>• 165W CPU support</li> <li>• 24 DIMM sockets</li> <li>• Up to 2 PCI-E Add-on cards</li> <li>• Dual 25G SFP28</li> <li>• 1600W Titanium Level Power Supply</li> <li>• 2 SATA DOMs Support with Embedded Power</li> </ul>	<ul style="list-style-type: none"> <li>• Virtualization</li> <li>• Hyperconverge Storage</li> <li>• Cloud Computing</li> <li>• High End Enterprise Server</li> <li>• 24x 2.5" hot-swap NVMe drive bays</li> <li>• 24 DIMM support</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>• 4 x 10GbE-T Ports</li> </ul>
Serverboard	SUPER● X11DPU-Z+	SUPER● X11DPU
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).
Expansion Slots	Up to 2 PCI-E 3.0 x8(FH, FL); For 20 NVMe configuration, only 1 PCI-E 3.0 x8 is available For 18 NVMe configuration, 2 PCI-E 3.0 x8 will be available	2 PCI-E 3.0 x16(FH, 10.5" L); 1 PCI-E 3.0 x8(LP)
Onboard Storage Controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller
Connectivity	2 25G SFP28 Ethernet, 3 USB 3.0 ports (2 Rear, 1 Type A), 2 USB 2.0 ports (Front), 1 Serial Port	4 10GbE-T ports with Intel® X550 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC;	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	20 Hot-Swappable 2.5" 7mm drive bays: 8 NVMe ports and 2 SAS/SATA3/NVMe Hybrid Ports from CPU1 and 10 NVMe ports from CPU2	24 Hot-swap 2.5" NVMe Drive Bays; Optional 20 NVMe + 4 NVMe/SAS3; 2x 2.5" 2 Rear Hot-swap 2.5" Drive Bays (2x SATA3 ports default)
Peripheral Bays	N/A	N/A
Power Supply	1600W Titanium Level Power Supply	1600W Redundant Power Supplies with PMBus
Cooling System	8 Heavy Duty fans w/ Optimal Fan Speed Control, 2 Air Shroud	4 Heavy duty 8cm PWM fans
Form Factor	437 x 43 x 706mm (17.2" x 1.7" x 27.8")	437 x 89 x 705mm (17.2" x 3.5" x 27.76")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



## 2U X11 Ultra

24x 2.5" Drive Bays, SAS3 Expander



MODEL	<b>SYS-2029U-E1CR4</b> <b>SYS-2029U-E1CR4T</b> <b>SYS-2029U-E1CRT</b> <b>SYS-2029U-E1CRTP</b> <b>SYS-2029U-E1CR25M</b>	<b>SYS-2029U-TR4</b> <b>SYS-2029U-TR4T</b> <b>SYS-2029U-TRT</b> <b>SYS-2029U-TRTP</b> <b>SYS-2029U-TR25M</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>24x 2.5" hot-swap drive bays</li> <li>SAS3.0 (12Gbps) support</li> <li>Optional NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>24x 2.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>
Outstanding Features		
Serverboard	SUPERMICRO X11DPU	SUPERMICRO X11DPU
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).  -E1CR4/E1CRT/E1CRTP/E1CR25M: 1 PCI-E 3.0 x16(FH, 10.5" L); 5 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(internal LP) -E1CR4T: 2 PCI-E 3.0 x16(FH, 10.5" L); 4 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP)	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).  -TR4/TRT/TRTP/TR25M: 1 PCI-E 3.0 x16(FH, 10.5" L); 5 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(internal LP) -TR4T: 2 PCI-E 3.0 x16(FH, 10.5" L); 4 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP)
Expansion Slots		
Onboard Storage Controller	One of the following storage Add-on cards required: AOC-S3108L-H8iR (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)  -E1CR4: 4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CR4T: 4 10GbE-T ports with Intel® XL710 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CRT: 2x 10GbE-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CRTP: 2 10G SFP+ ports with Intel® 82599ES Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CR25M: 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	Intel® C621 SATA3 (6Gb/s) controller  -TR4: 4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -TR4T: 4 10GbE-T ports with Intel® XL710 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -TRT: 2x 10GbE-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -TRTP: 2 10G SFP+ ports with Intel® 82599ES Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -TR25M: 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port
Connectivity		
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	24 Hot-swap 2.5" Drive Bays; 24 SAS3 ports support via Expander and AOC; Optional drive support: 20 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	24 Hot-swap 2.5" Drive Bays; 14 SATA3 ports by default; Optional drive support: 20 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays
Peripheral Bays	N/A	N/A
Power Supply	1000W Redundant Power Supplies with PMBus	1000W Redundant Power Supplies with PMBus
Cooling System	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans
Form Factor	437 x 89 x 705mm (17.2" x 3.5" x 27.76")	437 x 89 x 705mm (17.2" x 3.5" x 27.76")

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12x 3.5" Drive Bays**NEW!**  
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12x 3.5" Drive Bays

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MODEL	SYS-2029UZ-TN20R25M	SYS-6029U-E1CR4 SYS-6029U-E1CRT SYS-6029U-E1CRTP SYS-6029U-E1CR25M	SYS-6029U-E1CR4T
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support Up to 255W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>12x 3.5" hot-swap drive bays</li> <li>SAS3.0 (12Gbps) support</li> <li>24 DIMM support</li> <li>Optional NVMe support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>12x 3.5" hot-swap drive bays</li> <li>SAS3.0 (12Gbps) support</li> <li>24 DIMM support</li> <li>Optional NVMe support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>20 Port NVMe port direct connect</li> <li>24 DIMM sockets</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>Dual 25G SFP28</li> </ul>	<ul style="list-style-type: none"> <li>20 Port NVMe port direct connect</li> <li>24 DIMM sockets</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>Dual 25G SFP28</li> </ul>	<ul style="list-style-type: none"> <li>20 Port NVMe port direct connect</li> <li>24 DIMM sockets</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>Dual 25G SFP28</li> </ul>
Serverboard Chipset	SUPER● X11DPU-Z+ Intel® C621 chipset Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz;	SUPER● X11DPU Intel® C621 chipset Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz;	SUPER● X11DPU Intel® C621 chipset Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz;
System Memory (Max.)*	Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent	Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent	Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent
Expansion Slots	1 PCI-E 3.0 x8 (LP)	1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(FH, 10.5"); 1 PCI-E 3.0 x8(FH, 10.5"); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(internal)	2 PCI-E 3.0 x16(FH, 10.5"); 4 PCI-E 3.0 x8(FH, 10.5"); 1 PCI-E 3.0 x8(LP)
Onboard Storage Controller	Intel® C621 SATA3 (6Gb/s) controller	One of the following storage Add-on cards required: AOC-S3108L-H8iR-16DD (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA) -E1CR4: 4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CRT: 2x 10GbE-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CRTP: 2 10GbE-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CR25M: 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	One of the following storage Add-on cards required: AOC-S3108L-H8iR-16DD (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)
Connectivity	2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	4 10GbE-T ports with Intel® XL710 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	
VGA/Audio	Aspeed AST2500 BMC Intel® Node Manager; Redfish API; IPMI2.0;	Aspeed AST2500 BMC Intel® Node Manager; Redfish API; IPMI2.0;	Aspeed AST2500 BMC Intel® Node Manager; Redfish API; IPMI2.0;
Management	KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	24 Hot-swap 2.5" Drive Bays; 20 NVMe + 4 SAS3/SATA	12 Hot-swap 3.5" Drive Bays; 12 SAS3 ports support via Expander and AOC; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	12 Hot-swap 3.5" Drive Bays; 12 SAS3 ports support via Expander and AOC; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1600W Redundant Power Supplies with PMBus	1000W Redundant Power Supplies with PMBus	1000W Redundant Power Supplies with PMBus
Cooling System	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans
Form Factor	437 x 89 x 705mm (17.2" x 3.5" x 27.76")	437 x 89 x 723mm (17.2" x 3.5" x 28.46")	437 x 89 x 723mm (17.2" x 3.5" x 28.46")

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12x 3.5" Drive Bays



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1U Flexible 1/O, Storage Array



MODEL	SYS-6029U-TR4 SYS-6029U-TRT SYS-6029U-TRTP SYS-6029U-TR25M	SYS-6029U-TR4T	SYS-1019P-WTR
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake). Single Socket P (LGA 3647) supported, CPU TDP support 205W
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>12x 3.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>12x 3.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>DataCenter Applications</li> <li>Data Center</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>12x 3.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>12x 3.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>1 PCI-E x8 3.0 slots</li> <li>2 PCI-E x16 3.0 slots</li> <li>2x 10 Gigabit Ethernet Ports</li> <li>2x NVMe w/AOC( option)</li> </ul>
Serverboard Chipset	SUPERMICRO® X11DPU Intel® C621 chipset Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots;	SUPERMICRO® X11DPU Intel® C621 chipset Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots;	SUPERMICRO® X11SPW-TF Intel® C622 chipset Up to 384GB Registered ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots
System Memory (Max.)*	Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	
Expansion Slots	1 PCI-E 3.0 x16(FH, 10.5" L); 5 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(internal LP)	2 PCI-E 3.0 x16(FH, 10.5" L); 4 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP)	2 PCI-E 3.0 x16(FHFL), 1 PCI-E 3.0 x8(LP)slot
Onboard Storage Controller	Intel® C621 SATA3 (6Gb/s) controller  -TR4: 4GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port  -TRT: 2x 10GBase-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port  -TRTP: 2 10G SFP+ ports with Intel® 82599ES Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port  -TR25M: 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 LX Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	Intel® C621 SATA3 (6Gb/s) controller  -TR4: 4GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port  -TRT: 2x 10GBase-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port  -TRTP: 2 10G SFP+ ports with Intel® 82599ES Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port  -TR25M: 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 LX Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;  Dual LAN with 10GBase-T with Intel® X722 + X557
Connectivity			
VGA/Audio	Aspeed AST2500 BMC Intel® Node Manager; Redfish API; IPMI2.0;	Aspeed AST2500 BMC Intel® Node Manager; Redfish API; IPMI2.0;	Aspeed AST2500 BMC Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Management	KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	
Drive Bays	12 Hot-swap 3.5" Drive Bays; 12 SATA3 ports by default; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	12 Hot-swap 3.5" Drive Bays; 12 SATA3 ports by default; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	10x 2.5" hot-swap SAS/SATA drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	1000W Redundant Power Supplies with PMBus	1000W Redundant Power Supplies with PMBus	1U 500W Redundant Single Output power supply W/PMbus 54.5mm width
Cooling System	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans	5x 40x56mm counter-rotation PWM fan
Form Factor	437 x 89 x 723mm (17.2" x 3.5" x 28.46")	437 x 89 x 723mm (17.2" x 3.5" x 28.46")	1U Rackmount 25 x 43 x 597mm (17.2" x 1.7" x 23.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 Mainstream**  
 UP

**X11 WIO**  
 UP, Quad LAN

**X11 UP WIO**  
 1U Flexible I/O, Flexible Array


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MODEL	SYS-5019C-WR	SYS-5019S-W4TR	SYS-5019P-WT SYS-5019P-WTR (shown)
Processor Support	8th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® Processor E-2100 series. Socket LGA 1151 supported, CPU TDP support Up to 95W TDP	Intel® 6th/7th Generation Core™ i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5. Socket H4 (LGA 1151) supported, CPU TDP support 80W	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake). Single Socket P (LGA 3647) supported, CPU TDP support 205W
Key Applications	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Application and data serving</li> <li>• Appliance Server</li> <li>• Hosting &amp; Application delivery</li> </ul>	<ul style="list-style-type: none"> <li>• Application and data serving</li> <li>• Appliance Server</li> </ul>	<ul style="list-style-type: none"> <li>• Database Processing &amp; Storage</li> <li>• DataCenter Applications</li> <li>• FireWall Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2x PCI-E 3.0 x8(FHFL) or 1x PCI-E 3.0 x16(FHFL), 1x PCI-E 3.0 x4 (x8) (LP) add-on card slot</li> <li>• 1+1 Redundant 500W high-efficiency power</li> <li>• Up to 4 hot-swap 3.5" drives</li> </ul>	<ul style="list-style-type: none"> <li>• 1 x16 or 2 X 8 PCI-E slots</li> <li>• 4x 10GbE-T ports</li> </ul>	<ul style="list-style-type: none"> <li>• 1 PCI-E x8 3.0 slots</li> <li>• 2 PCI-E x16 3.0 slots</li> <li>• 2x 10 Gigabit Ethernet Ports</li> <li>• <b>-WTR:</b> Redundant Power</li> </ul>
Serverboard	SUPERMICRO® X11SCW-F	SUPERMICRO® X11SSW-4TF	SUPERMICRO® X11SPW-TF
Chipset	Intel® C246 chipset	Intel® C236 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	Up to 384GB Registered ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots
Expansion Slots	2 PCI-E 3.0 x8(FHFL) or 1 PCI-E 3.0 x16(FHFL), 1 PCI-E 3.0 x4(x8) (LP)	1 PCI-E 3.0 x16 Left Riser Slot	2 PCI-E 3.0 x16(FHFL), 1 PCI-E 3.0 x8(LP)slot
Onboard Storage Controller	Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C236 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with Intel® Ethernet Controller I210-AT	Quad LAN with Intel® X540 10GbE-T Ethernet Controller	Dual LAN with 10GbE-T with Intel® X722 + X557
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2400 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap drive bay	4x 3.5" hot-swap SAS/SATA	<b>-WT:</b> 4x 3.5" Hot-swap SATA3 bays <b>-WTR:</b> 4x 3.5" hot-swap SAS/SATA
Peripheral Bays	1x Slim DVD-ROM Drive(option)	1x slim DVD-ROM drive bay(option)	1x slim DVD-ROM drive bay(option)
Power Supply	1U 500W Redundant Single Output power supply W/PMbus 54.5mm width	1U 500W Redundant Single Output power supply W/PMbus 54.5mm width	<b>-WT:</b> 1U 600W platinum efficiency multiple output power supply w/PMbus <b>-WTR:</b> 1U 500W Redundant Single Output power supply W/PMbus 54.5mm width
Cooling System	Total 5x 4cm heavy duty counter-rotating with optimal fan speed control; fans for AOC cooling	Total 4x 40x56mm counter-rotation PWM fan	Total 5x 40x56mm counter-rotation PWM fan;, Chassis default 4x counter-rotation PWM fan + additional 1x counter-rotation PWM fan
Form Factor	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")	1U Rackmount 437 x 43 x 635mm (17.2" x 1.7" x 25.6")	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 WIO**  
1U 4x 3.5" Drive Bays



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**X11 WIO**  
1U 4x 3.5" Drive Bays  
Redundant Power



**X11 WIO**  
1U 8x 3.5" + 2x 2.5" Drive Bays



MODEL	SYS-6019P-WT	SYS-6019P-WTR	SYS-6019P-WT8
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login</li> <li>Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login</li> <li>Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login</li> <li>Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Supports 3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>4x 3.5" SAS3/SATA3 drive bays</li> <li>Support 1 Slim DVD-ROM and 1 COM &amp; 2 USB3.0 ports module</li> </ul>	<ul style="list-style-type: none"> <li>Supports 3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>4x 3.5" SAS3/SATA3 drive bays</li> <li>Support 1 Slim DVD-ROM and 1 COM &amp; 2 USB3.0 ports module</li> </ul>	<ul style="list-style-type: none"> <li>Supports 3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>8x 3.5" &amp; 2x 2.5" Fixed SATA3 drive bays in 1U</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> </ul>
Serverboard	SUPERMICRO® X11DDW-L	SUPERMICRO® X11DDW-L	SUPERMICRO® X11DDW-L
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
Expansion Slots	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller
Onboard Storage Controller	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports
VGA/Audio	Onboard VGA	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SATA3/SAS3 drive bays	4x 3.5" hot-swap SATA3/SAS3 drive bays	8x 3.5" fixed SATA drive bays, 2x 2.5" fixed SATA drive bays
Peripheral Bays	Optional 1x slim DVD-ROM drive bay	Optional 1x slim DVD-ROM drive bay	N/A
Power Supply	600W high-efficiency (Platinum Level) multiple output power supply w/pmbus	Redundant 700/750W High-efficiency (Platinum Level) power supply	650w high-efficiency (Platinum Level) multi-output power supply
Cooling System	4x 40x56mm counter-rotation PWM fan	4x 40x56mm counter-rotation PWM fan	6x 40x56mm counter-rotation PWM fan
Form Factor	437 x 43 x 650mm (17.2" x 1.7" x 25.6")	437 x 43 x 650mm (17.2" x 1.7" x 25.6")	437 x 43 x 813mm (17.2" x 1.7" x 32")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

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**X11 WIO**  
1U 8x2.5" Drive Bays  
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1U 8x2.5" Drive Bays  
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MODEL	SYS-1029P-WT	SYS-1029P-WTR	SYS-1029P-WTRT
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate - WINS, DNS, Print, Login</li> <li>Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate - WINS, DNS, Print, Login</li> <li>Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate - WINS, DNS, Print, Login</li> <li>Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>8x 2.5" SAS3/SATA3 drive bays</li> <li>Supports 1 Slim DVD-ROM</li> </ul>	<ul style="list-style-type: none"> <li>3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>8 2.5" SAS3/SATA3 drive bays</li> <li>Optional Slim DVD-ROM</li> </ul>	<ul style="list-style-type: none"> <li>3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>10x 2.5" SAS3/SATA3 drive bays (2 SATA3/SAS3/NVMe hybrid ports)</li> <li>Dual 10GbE LAN Ports</li> </ul>
Serverboard	SUPERMICRO® X11DDW-L	SUPERMICRO® X11DDW-L	SUPERMICRO® X11DDW-NT
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
Expansion Slots	2 PCI-E 3.0 x16 (FHH) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	2 PCI-E 3.0 x16 (FHH) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	2 PCI-E 3.0 x16 (FHH) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller
Onboard Storage Controller	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 10GbE LAN ports, 1 dedicated IPMI port, 4 rear USB3.0 ports, 2 front USB 3.0 ports
VGA/Audio	Onboard VGA	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" hot-swap SATA3/SAS3 drive bays	8x 2.5" hot-swap SATA3/SAS3 drive bays	10x 2.5" hot-swap SATA3/SAS3 drive bays, 2x 2.5" hot-swap NVMe/SAS3/SATA3 hybrid drive bays
Peripheral Bays	Optional 1x slim DVD-ROM drive bay	Optional 1x slim DVD-ROM drive bay	N/A
Power Supply	600W high-efficiency (Platinum Level) multiple output power supply w/pmbus	Redundant 700/750W High-efficiency (Platinum Level) power supply	Redundant 700/750W high-efficiency (Platinum Level) power supply
Cooling System	4x 40x56mm counter-rotation PWM fan	4x 40x56mm counter-rotation PWM fan	4x 40x56mm counter-rotation PWM fan
Form Factor	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")	437 x 43 x 597mm (17.2" x 1.7" x 23.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



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**X11 WIO**  
7 PCI-E 3.0



**X11 WIO**  
7 PCI-E 3.0, Dual 10GBaseT LAN



**X11 UP WIO**  
2U 4 Full-Height PCI-E Slots



MODEL	SYS-6029P-WTR	SYS-6029P-WTRT	SYS-5029P-WTR
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake). Single Socket P (LGA 3647) supported, CPU TDP support 205W
Key Applications	<ul style="list-style-type: none"> <li>• Web Server</li> <li>• FireWall Applications</li> <li>• Corporate- WINS, DNS, Print, Login</li> <li>• Gateway, provisioning servers</li> <li>• Compact Network Appliance</li> <li>• Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>• Web Server</li> <li>• FireWall Applications</li> <li>• Corporate- WINS, DNS, Print, Login</li> <li>• Gateway, provisioning servers</li> <li>• Compact Network Appliance</li> <li>• Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>• Database Processing &amp; Storage</li> <li>• Connectivity/Storage Computer Nodes</li> <li>• Data Warehouse</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Supports 6 PCIe and 1 Mezzanine cards</li> <li>• 1 NVMe M.2 Support</li> <li>• Supports 1x Slim DVD-ROM and 1 COM &amp; 2 USB3.0 ports module</li> <li>• 8x 3.5" SAS3/SATA3 drive bays</li> <li>• Dedicated IPMI port</li> </ul>	<ul style="list-style-type: none"> <li>• Supports 5 PCIe and 1 Mezzanine cards</li> <li>• 1 NVMe M.2 Support</li> <li>• Dual 10GBaseT LAN Ports</li> <li>• Redundant 1200W Titanium Level Power Supply</li> <li>• Dedicated IPMI port</li> <li>• Optional 4x 2.5" NVMe SSD</li> </ul>	<ul style="list-style-type: none"> <li>• 8x 3.5" Hot-swap SATA3 bays w/ RAID</li> <li>• 2x 10 Gigabit Ethernet Ports</li> </ul>
Serverboard	SUPERMICRO® X11DDW-L	SUPERMICRO® X11DDW-NT	SUPERMICRO® X11SPW-TF
Chipset	Intel® C621 chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 384GB Registered ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots
Expansion Slots	4 PCI-E 3.0 x8(FHHL)slots, 2 PCI-E 3.0 x8(LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	1 PCI-E 3.0 x16(FHHL)slot, 4 PCI-E 3.0 x8(2 FHHL, 2 LP)slots, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	4 PCI-E 3.0 x8(FHFL), 1 PCI-E3.0 x8(LP)slot
Onboard Storage Controller	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 10GBaseT LAN ports, 1 dedicated IPMI port, 4 rear USB3.0 ports	Dual LAN with 10GBase-T with Intel® X557
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	8x 3.5" hot-swap SATA3/SAS3 drive bays	12x 3.5" hot-swap SATA3/SAS3 drive bays (4x NVMe/SAS3/SATA3 hybrid drive bays)	8x 3.5" hot-swap SAS/SATA drive bay with SCPIo 2x 3.5" fixed drive bay
Peripheral Bays	1x optional slim DVD-ROM drive bay	N/A	1x slim DVD-ROM drive bay(option) 1x COM port tray 2x USB 3.0 ports
Power Supply	Redundant 800/1000W high-efficiency (Titanium Level) power supply	Redundant 1200W high-efficiency (Titanium Level) power supply	1U 500W Redundant Single Output Power Supply W/PMBus, Platinum level
Cooling System	3x 80mm heavy duty fans with PWM fan speed control	3x 80mm heavy duty fans with PWM fan speed control	3x 8cm (7000 RPM) hot-swap PWM cooling fan;
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")	2U Rackmount 432 x 89 x 635mm (17.2" x 3.5" x 25.6")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**1U Ultra**  
10 SAS3 Drive Bays, Expander

**1U Ultra**  
10 SAS3 Drive Bays, Expander

**1U Ultra**  
Quad LAN



MODEL	SYS-1028U-E1CR4+	SYS-1028U-E1CRTP+	SYS-1028U-TR4+ SYS-1028U-TRT+ SYS-1028U-TR4T+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>10x 2.5" SAS/SATA drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>10x 2.5" SAS/SATA drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>10x 2.5" SAS/SATA drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPERMICRO® X10DRU-i+	SUPERMICRO® X10DRU-i+	SUPERMICRO® X10DRU-i+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16(FH, 10.5")L; 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(FH, 10.5")L; 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(FH, 10.5")L; 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)
Onboard Storage Controller	One of the following storage Add-on cards required: AOC-S3108L-H8iR-16DD (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)	One of the following storage Add-on cards required: AOC-S3108L-H8iR-16DD (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port	2 10G SFP+; 2 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port	<p>-TR4+: 4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port</p> <p>-TRT+: 2 10GbE-T Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port</p> <p>-TR4T+: 4 10GbE-T Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port</p>
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	10 hot-swap 2.5" drive support via Expander	10 hot-swap 2.5" drive support via Expander	10 hot-swap 2.5" drive support
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 750W Platinum Level (94%)+ Power Supplies with PMBus	Redundant 750W Platinum Level (94%)+ Power Supplies with PMBus	Redundant 750W Platinum Level (94%)+ Power Supplies with PMBus
Cooling System	5 heavy duty fans w/ Optimal Fan Speed Control; Optional 3 additional fans, 1 Air Shroud	6 heavy duty fans w/ Optimal Fan Speed Control; Optional 2 additional fans, 1 Air Shroud	4 heavy duty fans w/ Optimal Fan Speed Control; Optional 4 additional fans, 1 Air Shroud
Form Factor	1U Rackmount 437 x 43 x 707mm (17.2" x 1.7" x 27.82")	1U Rackmount 437 x 43 x 707mm (17.2" x 1.7" x 27.82")	1U Rackmount 437 x 43 x 724mm (17.2" x 1.7" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**1U Ultra**  
10 NVMe, 2.5" Drives

**1U Ultra**  
2 NVMe, 2.5" Drives

**1U Ultra**  
2 NVMe, 2.5" Drives



MODEL	SYS-1028U-TN10RT+	SYS-1028U-TNRTP+	SYS-1028U-TNRT+ SYS-1028U-TNR4T+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>10 NVMe SSDs Support</li> <li>145W CPU support</li> <li>24 DIMM sockets</li> <li>3 PCI-E Add-on cards</li> <li>1000W Titanium Level Power Supply</li> <li>2 SATA DOMs Support with Embedded Power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>2 NVMe/SATA3 hybrid ports</li> <li>Optional 8 SAS3 ports via AOC</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>2 NVMe/SATA3 hybrid ports</li> <li>Optional 8 SAS3 ports via AOC</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> </ul>
Serverboard	SUPERMICRO® X10DRU-i+	SUPERMICRO® X10DRU-i+	SUPERMICRO® X10DRU-i+
Chipset	Intel® C612 Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots
Expansion Slots	3 PCI-E 3.0 x8(2 FH, 10.5" L, LP)	2 PCI-E 3.0 x16(FH, 10.5" L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(FH, 10.5" L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)
Onboard Storage Controller	Intel® C612 controller with 10 SATA3 (6 Gbps) Ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2 10Gbase-T Ethernet 5 USB 3.0 ports (2 Rear, 2 Front, 1 Type A) 1 Serial Port	2 10G SFP+ Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port	<p>-TNRT+: 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port</p> <p>-TNR4T+: 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port</p>
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	10 Hot-Swappable 2.5" drive bays: 6 NVMe ports (NVMe from CPU1) 4 NVMe/SATA3 Hybrid Ports (NVMe from CPU2)	10 hot-swap 2.5" drive support: Default 8 SATA3 ports + 2 NVMe/SATA3 hybrid ports; Optional 8 SAS3 ports via AOC	2 PCI-E 3.0 x16(FH, 10.5" L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus
Cooling System	8 Heavy Duty fans w/ Optimal Fan Speed Control, 1 Air Shroud	5 heavy duty fans w/ Optimal Fan Speed Control; Optional 3 additional fans, 1 Air Shroud	5 heavy duty fans w/ Optimal Fan Speed Control; Optional 3 additional fans, 1 Air Shroud
Form Factor	1U Rackmount 432 x 43 x 706mm (17.2" x 1.7" x 27.8")	1U Rackmount 432 x 43 x 706mm (17.2" x 1.7" x 27.8")	1U Rackmount 437 x 43 x 724mm (17.2" x 1.7" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**1U Ultra****1U Ultra****2U Ultra**

2.5" Drives, NVMe, Expander



MODEL	<b>SYS-6018U-TR4+ SYS-6018U-TRT+</b>	<b>SYS-6018U-TR4T+ SYS-6018U-TRTP+</b>	<b>SYS-2028U-E1CNRT+ SYS-2028U-E1CNR4T+</b>
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Hyperconverge Storage</li> <li>Database Processing &amp; Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>4 3.5" drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>4 3.5" drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>24x 2.5" hot-swap drive bays</li> <li>4-port NVMe SSD Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+	SUPER● X10DRU-i+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16(FH, 10.5" L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(FH, 10.5" L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	7 PCI-E 3.0 x8(5 FH, 10.5" L, 1 LP, 1 Internal LP)
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	One of the following storage Add-on cards required: AOC-S3108L-H8iR (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)
Connectivity	<p>-TR4+: 4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p> <p>-TRT+: 2 port 10GBase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p>	<p>-TR4T+: 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p> <p>-TRTP+: 2 port 10G SFP+ Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p>	<p>-E1CNRT+: 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p> <p>-E1CNR4T+: 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p>
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4 hot-swap 3.5" drive support	4 hot-swap 3.5" drive support	24 Hot-Swap 2.5" Drive Support with Expander; (including for 4 NVMe 2.5" drive support)
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus
Cooling System	4 heavy duty fans w/ Optimal Fan Speed Control; Optional 4 additional fans, 1 Air Shroud	4 heavy duty fans w/ Optimal Fan Speed Control; Optional 4 additional fans, 1 Air Shroud	4 heavy duty fans w/ Optimal Fan Speed Control; 1 Air Shroud
Form Factor	1U Rackmount 437 x 43 x 754mm (17.2" x 1.7" x 29.7")	1U Rackmount 437 x 43 x 754mm (17.2" x 1.7" x 29.7")	2U Rackmount 437 x 89 x 705mm (17.2" x 3.5" x 27.76")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U Ultra**

2.5" Drives, NVMe, Titanium Level Power

**2U Ultra**

2.5" Drives, NVMe, Titanium Level Power



MODEL	<b>SYS-2028U-TNRT+</b> <b>SYS-2028U-TNR4T+</b>	<b>SYS-2028U-TN24R4T+</b>
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processors E5-2600 v4/v3 with QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>24x 2.5" hot-swap drive bays</li> <li>4-port NVMe SSD Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>145W CPU support</li> <li>3 PCI-E Add-on cards</li> <li>4 x 10G BaseT</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC RDIMM/LRDIMM; DDR4 up to 2400MHz, in 24 DIMM slots
Expansion Slots	<p><b>-TNRT+:</b> 7 PCI-E 3.0 x8(5 FH, 10.5" L, 1 LP, 1 Internal LP)</p> <p><b>-TNR4T+:</b> 6 PCI-E 3.0 x8(4 FH, 10.5" L, 1 LP, 1 Internal LP)</p>	2 PCI-E 3.0 x16(2 FH, 10.5" L) 1 PCI-E 3.0 x8(1 LP, 6.6" L)
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C612 controller with 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	<p><b>-TNRT+:</b> 2 10GbE-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p> <p><b>-TNR4T+:</b> 4 10GbE-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p>	4 10GbE-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor® 5; Watchdog
Drive Bays	24 hot-swap 2.5" drive support; 8 SATA3 + 4 NVMe; Optional 24 SAS3 drive support via AOCs	24 Hot-swap 2.5" NVMe Drive Bays; Optional Drive Support: 20 NVMe + 4 NVMe/SAS3; 2x 2.5" Rear Hot-swap Drive Bays (default SATA)
Peripheral Bays	N/A	N/A
Power Supply	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 1600W Titanium Level Power Supplies
Cooling System	4 heavy duty fans	4 heavy duty fans
Form Factor	2U Rackmount 437 x 89 x 705mm (17.2" x 3.5" x 27.76")	2U Rackmount 89 x 437 x 705mm (3.5" x 17.2" x 27.76")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U Ultra**  
24x 2.5" Drives, Titanium Level Power

**2U Ultra**  
24x 2.5" Drives, Titanium Level Power

**2U Ultra**  
3.5" Drives, NVMe, Titanium Level Power



MODEL	SYS-2028U-TR4+ SYS-2028U-TRT+ SYS-2028U-TRTP+	SYS-2028U-TR4T+	SYS-6028U-TNRT+ SYS-6028U-TNR4T+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>SAS3 and SATA3 Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>SAS3 and SATA3 Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>12x 3.5" hot-swap drive bays</li> <li>4-port NVMe SSD Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPERMICRO® X10DRU-i+	SUPERMICRO® X10DRU-i+	SUPERMICRO® X10DRU-i+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16(FH, 10.5")L; 7 PCI-E 3.0 x8(5 FH, 10.5")L, 1 LP, 1 Internal LP	1 PCI-E 3.0 x16(FH, 10.5")L; 6 PCI-E 3.0 x8(4 FH, 10.5")L, 1 LP, 1 Internal LP	<p>-TNRT+: 7 PCI-E 3.0 x8(5 FH, 10.5")L, 1 LP, 1 Internal LP</p> <p>-TNR4T+: 6 PCI-E 3.0 x8(4 FH, 10.5")L, 1 LP, 1 Internal LP</p>
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 24 SAS3 drive support via AOCs	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 24 SAS3 drive support via AOCs	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	-TR4I: 4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port		
	-TRT+: 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port	4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port	-TNRT+: 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port
	-TRTP+: 2 10G SFP+ Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port		-TNR4T+: 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24 hot-swap 2.5" drive support	24 hot-swap 2.5" drive support	12 hot-swap 3.5" drive support; 8 SATA3 + 4 NVMe; Optional 12 SAS3 drive support via AOC(s)
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus
Cooling System	4 heavy duty fans	4 heavy duty fans	4 heavy duty fans
Form Factor	2U Rackmount 437 x 89 x 705mm (17.2" x 3.5" x 27.76")	2U Rackmount 437 x 89 x 705mm (17.2" x 3.5" x 27.76")	2U Rackmount 89 x 437 x 723mm (3.5" x 17.2" x 28.46")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U Ultra****2U Ultra****2U Ultra***Remote Workstation*

MODEL	<b>SYS-6028U-TR4+</b> <b>SYS-6028U-TRT+</b> <b>SYS-6028U-TRTP+</b>	<b>SYS-6028U-TR4T+</b>	<b>SYS-6028UX-TR4</b>
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Intel® Xeon® processor E5-2600 v4/v3 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Remote Workstation</li> <li>Financial Market</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>Up to 4 double width GPU cards</li> <li>Up to 12 hot-swap 3.5" HDD</li> <li>Optional SAS3 and NVMe support</li> <li>Flexibile LAN port options</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+	SUPER● X10DRU-X
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	2TB Registered ECC (3DS), DDR4-2400MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16(FH, 10.5")L; 7 PCI-E 3.0 x8(5 FH, 10.5" L, 1 LP, 1 Internal LP)	1 PCI-E 3.0 x16(FH, 10.5")L; 6 PCI-E 3.0 x8(4 FH, 10.5" L, 1 LP, 1 Internal LP)	3 PCI-E Gen 3.0 x16(full height 10.5" length) 3 PCI-E Gen 3.0 x8(1x in x16 slot full height 10.5" length, 1 low profile, 1 internal low profile)
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 12 SAS3 drive support	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 12 SAS3 drive support	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 12 SAS3 drive support; Optional 4 NVMe drive support via 2x AOC-SLG3-2E4
Connectivity	<p>-<b>TR4+</b>: 4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p> <p>-<b>TRT+</b>: 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p> <p>-<b>TRTP+</b>: 2 10G SFP+; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p>	<p>4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p>	4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	12 hot-swap 3.5" drive support	12 hot-swap 3.5" drive support	12 hot-swap 3.5" drives bays support
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	1000W High-efficiency redundant (Titanium level) digital power supply
Cooling System	4 heavy duty fans	4 heavy duty fans	4 heavy duty fans w/ Optimal Fan Speed Control; 1 Air Shroud
Form Factor	2U Rackmount 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")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**UP WIO**  
Flexible I/O, Storage Array

**UP WIO**  
Flexible I/O, Storage Array



MODEL	SYS-1018R-WC0R	SYS-5018R-WR
Processor Support	Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4, Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Single Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W	Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4, Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Single Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Data Deduplication &amp; Replication</li> <li>• Database Processing &amp; Storage</li> <li>• DataCenter Applications</li> <li>• Engineering Design</li> <li>• FireWall Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Data Deduplication &amp; Replication</li> <li>• Database Processing &amp; Storage</li> <li>• DataCenter Applications</li> <li>• Engineering Design</li> <li>• FireWall Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 PCI-E x8 slot</li> <li>• 2 PCI-E 3.0 x16 slots</li> <li>• 2 Gigabit Ethernet Ports</li> </ul>	<ul style="list-style-type: none"> <li>• 1 PCI-E 3.0 x8 slot</li> <li>• 2 PCI-E 3.0 x16 slots</li> <li>• 2 Gigabit Ethernet Ports</li> </ul>
Serverboard	SUPERMICRO® X10SRW-F	SUPERMICRO® X10SRW-F
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, in 8 DIMM slotsUp to 1TB ECC 3DS LRDIMM 8x 288-pin DDR4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, in 8 DIMM slotsUp to 1TB ECC 3DS LRDIMM 8x 288-pin DDR4 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8(total 3 add-on card slots)	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 slot (total 3 add-on card slots)
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x GbE port, 2 USB 2.0, USB 3.0, VGA, Serial	2x GbE port, 2 USB 2.0, USB 3.0, VGA, Serial
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI2.0, SuperDoctor® 5, Watchdog	IPMI2.0, SuperDoctor® 5, Watchdog
Drive Bays	Hot-swap 8x SAS3/SATA + 2x SATA3 drive bays	4x 3.5" hot-swap drive bay
Peripheral Bays	N/A	1x Slim DVD-ROM Drive(option)
Power Supply	1U Redundant 700/750W Single Output Power Supply Platinum level, 54.5mm width	1U 500W Redundant Single Output power supply W/PMbus 54.5mm width
Cooling System	4x 40x56mm counter-rotation PWM fan; 2x fans for AOC cooling(option)	4x counter-rotating 40mm fans
Form Factor	1U Rackmount 437 x 43 x 597mm (17.2" x 1.7" x 23.5")	1U Rackmount 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")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**WIO 1U**

**WIO 1U**  
12Gbps SAS 3.0 HW RAID, Optional NVMe



MODEL	SYS-6018R-WTR SYS-6018R-WTRT	SYS-1028R-WC1R SYS-1028R-WC1RT
Processor Support	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 v3 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Database Processing &amp; Storage</li> <li>Hosting &amp; Application delivery</li> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>Disk Backup &amp; Recovery</li> <li>Downloads</li> <li>e-Business</li> <li>Email Server</li> <li>Enterprise Server</li> <li>Web Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>700W Gold Level High Efficiency Redundant</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 2 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>SAS3.0 (12Gbps) support</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 2 add-on cards</li> </ul>
Serverboard	-WTR: SUPERMICRO® X10DRW-i -WTRT: SUPERMICRO® X10DRW-iT	-WC1R: SUPERMICRO® X10DRW-i -WC1RT: SUPERMICRO® X10DRW-iT
Chipset	Intel® C612 chipset	Intel® C610 chipset
System Memory (Max.)*	Up to 1TB DDR4 up to 2133MHz, in 16 DIMM slots	Up to 1TB DDR4 up to 2133MHz, in 16 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16(FHHL)	2 PCI-E 3.0 x16 (FHHL) 1 PCI-E 3.0 x8 Mezzanine for HBA cards
Onboard Storage Controller	ports; RAID ;	Broadcom 3108 SAS3 (12Gbs) HW RAID controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60; 2GB DDR3 Cache; C610 controller for 2 SATA3 (6Gbps) ports; RAID 0,1;
Connectivity	-WTR: Dual LAN with Intel® i350 Gigabit Ethernet Controller -WTRT: Dual 10Gb Ethernet LAN with Intel® X540 Dual Port 10GBase-T	-WC1R: N/A -WC1RT: N/A
VGA/Audio	Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC;
Management	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SuperDoctor® 5; Watchdog;
Drive Bays	4x 3.5" hot-swap SAS/SATA drive bays	10x 2.5" hot-swap SAS/SATA drive bay
Peripheral Bays	1 slim DVD-ROM drive (optional)	N/A
Power Supply	700W Redundant Gold Level high-efficiency power supplies	700W Redundant Gold Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	5x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	5x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**WIO**  
Short-Depth 16.9" Compact



**WIO 1U**  
10 SATA3 2.5"



MODEL	SYS-1028R-WMR SYS-1028R-WMRT	SYS-1028R-WTR SYS-1028R-WTRT
Processor Support	Intel® Xeon® processor E5-2600 v3 family (up to 145W TDP **) Dual Socket R3 (LGA 2011)	Intel® Xeon® processor E5-2600 v3 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>File/Print Server</li> <li>Application and data serving</li> <li>Clone of Server Clustering</li> <li>Business Critical Applications</li> </ul>	<ul style="list-style-type: none"> <li>Disk Backup &amp; Recovery</li> <li>Downloads</li> <li>e-Business</li> <li>Email Server</li> <li>Enterprise Server</li> <li>Web Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>support up to 2x AOCs</li> <li>Short-Short-Depth 16.9</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM support</li> <li>2 SATA DOM support with embedded power</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 4 add-on cards</li> </ul>
Serverboard	-WMR: SUPER● X10DRW-E -WMRT: SUPER● X10DRW-ET	-WTR: SUPER● X10DRW-i -WTRT: SUPER● X10DRW-iT
Chipset	Intel® C612 chipset	Intel C612 Chipset
System Memory (Max.)*	16x 288-pin DDR4 DIMM slots Up to 1TB ECC LRDIMM, 512GB ECC RDIMM	16 DIMM, 1024GB Reg. ECC DDR4 up to 2133MHz
Expansion Slots	2 PCI-E 3.0 x16 full-height, Half-length slots	2 PCI-E 3.0 x16(FHHL) 1 PCI-E 3.0 x8 Mezzanine for HBA cards
Onboard Storage Controller	10x SATA3 (6Gbps) ports	SATA3 (6Gbps); RAID 0, 1, 5, 10
Connectivity	<ul style="list-style-type: none"> <li>-WMR: 2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port</li> <li>-WMRT: Dual Ethernet LAN with Intel® X540 Dual Port 10GbE-T</li> </ul>	<ul style="list-style-type: none"> <li>-WTR: 2x RJ45 Gigabit Ethernet LAN ports</li> <li>-WTRT: Intel I350 Dual port Gigabit or 10GbE-T X540 10GbE LAN</li> </ul>
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog	Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port
Drive Bays	2x 2.5" fixed with bracket	10x 2.5" hot-swap SAS/SATA drive bay
Peripheral Bays	N/A	N/A
Power Supply	1U 400W Redundant single output power supply, W/PMbus, gold level	1U Redundant 700/750W Single Output Power Supply Platinum level, 54.5mm width
Cooling System	4x 40x56mm PWM fan; 2x fans for AOC cooling ;	4x 40x56mm counter-rotation PWM fan;
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 16.9" (429mm)	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm)

\*Please check with your Supermicro sales representative and website for compatibility and configuration details

**WIO**  
NVMe Optimized

**UP WIO**  
Multiple AOC, Expansion Option



MODEL	SYS-1028R-WTNR SYS-1028R-WTNRT	SYS-5028R-WR
Processor Support	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s	Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4, Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Single Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Database Processing &amp; Storage</li> <li>Hosting &amp; Application delivery</li> <li>HPC cluster computer nodes</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>Connectivity/Storage Computer Nodes</li> <li>Data Warehouse</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8 SATA3 ports and 2 NVMe/SATA3 hybrid ports</li> <li>High-density, Enterprise Performance, Cost-effective</li> <li>16 DIMM support</li> </ul>	<ul style="list-style-type: none"> <li>8x 3.5" Hot-swap SATA3 bays w/ RAID</li> <li>Redundant 500W Platinum Level power</li> <li>5 PCI-E 3.0 x8 slots</li> </ul>
Serverboard	-WTNR: SUPERMICRO X10DRW-N -WTNRT: SUPERMICRO X10DRW-NT	SUPERMICRO X10SRW-F
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 512GB Registered ECC RDIMM, DDR4-2400MHz; Up to 2TB 3DS ECC LRDIMM, in 16 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, in 8 DIMM slotsUp to 1TB ECC 3DS LRDIMM 8x 288-pin DDR4 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 full-height, Half-length slots	5 PCI-E 3.0 x8 slots
Onboard Storage Controller	Intel® C612 controller for SATA3 (6Gbps); RAID 0, 1, 5, 10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	-WTNR: Intel® i350 Dual Port Gigabit Ethernet Controller -WTNRT: Intel® X540 Dual Port 10GbE-T	2x GbE port, 1x dedicated IPMI port4x USB 2.0 (front/rear), USB 3.0, VGA, Serial
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog	IPMI2.0, SuperDoctor® 5, Watchdog
Drive Bays	10x 2.5" hot-swap SAS/SATA drive bay	8x 3.5" Hot-swap SATA3 bays w/ RAID; optional fixed drive bays
Peripheral Bays	N/A	Option 1x slim DVD-ROM drive bay 2x USB 2.0 ports,1x COM port tray 2x USB 3.0 ports
Power Supply	1U Redundant 700/750W Single Output Power Supply Platinum level, 54.5mm width	Redundant 500W 1+1 power w/ BBP® option
Cooling System	4x 40x56mm counter-rotation PWM fan;	3x 8cm (7000 RPM) hot-swap PWM cooling fan;
Form Factor	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")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U WIO**  
16 DIMMs, 6 PCI-E 3.0x8

**2U WIO**  
16 DIMMs, 6 PCI-E 3.0x8  
Dual 10G LAN



MODEL	SYS-6028R-WTR	SYS-6028R-WTRT
Processor Support	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Database Processing &amp; Storage</li> <li>Hosting &amp; Application delivery</li> <li>HPC cluster computer nodes</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Database Processing &amp; Storage</li> <li>Hosting &amp; Application delivery</li> <li>HPC cluster computer nodes</li> <li>Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>740W Redundant Platinum Level high-efficiency power supplies</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 4 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>740W Redundant Platinum Level high-efficiency power supplies</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 4 add-on cards</li> </ul>
Serverboard	SUPERMICRO® X10DRW-i	SUPERMICRO® X10DRW-iT
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 1TB DDR4 up to 2133MHz, in 16 DIMM slots	Up to 1TB DDR4 up to 2133MHz, in 16 DIMM slots
Expansion Slots	4 PCI-E 3.0 x8(2 FHFL, 2 FHHL)	4 PCI-E 3.0 x8(2 FHFL, 2 FHHL)
Onboard Storage Controller	Intel® C612 for 8 SATA3 (6Gbps); RAID 0, 1, 5, 10	Intel® C612 for 8 SATA3 (6Gbps); RAID 0, 1, 5, 10
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet Controller	Dual LAN with Intel® X540 10GbE-T Ethernet Controller
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog
Drive Bays	8x 3.5" hot-swap SAS/SATA drive bays	8x 3.5" hot-swap SAS/SATA drive bays
Peripheral Bays	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)
Power Supply	740W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	740W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm (7000 RPM) hot-swap PWM cooling fan;	3x 8cm (7000 RPM) hot-swap PWM cooling fan;
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 SuperStorage

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



New! Highest Performance and Storage Density

Supports up to: • 56 Cores per Server • 205W TDP CPUs • 6TB DDR4-2933MHz in 24 DIMMs  
• NVMe • SAS 3.0 • Quad 10G Base-T LAN • Redundant Titanium Level Power Supplies

Storage

## Top-Loading



[SSG-5049P-E1CR45H/L](#)  
[SSG-6049P-E1CR45H/L\(+\)](#)  
[SSG-6049P-E1CR60H/L\(+\)](#)  
[SSG-6048R-E1CR90L](#)

## Simply Double



[SSG-2029P-E1CR48H/L](#)  
[SSG-2029P-NR48L](#)  
[SSG-6029P-E1CR24H/L](#)

## SBB



[SSG-2029P-DN2R24L](#)

## General Purpose



**1U**

[SSG-6019P-ACR12L](#)  
[SSG-5019D8-TR12P](#)



**2U**

[SSG-2029P-ACR24H/L](#)  
[SSG-2029P-E1CR24H/L](#)  
[SSG-6029P-E1CR12T](#)  
[SSG-6029P-E1CR12H/L](#)  
[SSG-6029P-E1CR16T](#)



**3U**

[SSG-6039P-E1CR16H/L](#)



**4U**

[SSG-5049P-E1CTR36L](#)  
[SSG-6049P-E1CR24H/L](#)  
[SSG-6049P-E1CR36H/L](#)

## High Performance Storage Servers

### The Foundation of a Flexible and Efficient Enterprise

New generation X11 Supermicro SuperStorage systems feature the latest Intel® Xeon® Processor Scalable Family, delivering the performance to drive Software Defined Storage to the next level. The Supermicro SuperStorage systems offer a no compromise storage platform with flexible market entry points from 2U, 3U, and 4U form factors using 2.5" or 3.5" drive bays for SAS3/SATA3 and NVMe storage media. SuperStorage servers support up to: 6TB DDR4 2933MHz in 24 DIMM, PCI-E 3.0 slots, NVMe, flexible networking options such as Supermicro's SIOM cards and IPMI 2.0 with KVM and Redfish Support on a dedicated LAN port.

With industry leading software compatibility Supermicro SuperStorage solutions present a number of key benefits to customers working with CPU and Capacity Intensive Storage applications, from the lowest-latency flash to massive scalability, there is an optimized model for every storage workload.



# SuperStorage Naming Guide

**SSG-2029P-E1CR24L**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup>

## SuperStorage with 2.5" Hard Drives

Character	Representation	Options
1st	Form Factor	<ul style="list-style-type: none"> <li>• 1 = 1U</li> <li>• 2 = 2U</li> <li>• 3 = 3U</li> <li>• 4 = 4U</li> </ul>
2nd	Reserved	• 0 = Reserved
3rd	CPU	<ul style="list-style-type: none"> <li>• 1 = UP</li> <li>• 2 = DP</li> </ul>
4th	System Generation	<ul style="list-style-type: none"> <li>• 9 = X11 Series</li> <li>• 8 = X10 Series</li> <li>• 7 = X9 Series</li> </ul>
5th	Socket / Family	<ul style="list-style-type: none"> <li>• P = Socket P</li> <li>• R = Socket R</li> <li>• D2 = Socket F / 2-Core</li> <li>• D4 = Socket F / 4-Core</li> <li>• D8 = Socket F / 8-Core</li> <li>• T = Tylersberg</li> <li>• A = Atom SoC</li> </ul>
6th	Interface Type	<ul style="list-style-type: none"> <li>• A: Direct Attached</li> <li>• AC: Direct Attached SAS3</li> <li>• D: Dual Motherboard</li> <li>• DC: Dual Motherboard SAS3</li> <li>• E1: Single Expander</li> <li>• E1C: Single SAS3 Expander</li> <li>• E2: Dual Expander</li> <li>• E2C: Dual SAS3 Expander</li> <li>• N: NVMe</li> </ul>
7th	Power Redundancy	• R = Redundant Power Supplies
8th	Additional	<ul style="list-style-type: none"> <li>• ##: Number of drive bays</li> <li>• 4: 4 LAN ports</li> <li>• L: IT Mode</li> <li>• H: Hardware RAID</li> <li>• N: Hardware RAID &amp; 24 DIMMs (X9/X10) / NVMe (X10 Simply Double)</li> <li>• NV: NVDIMM</li> <li>• T: HW RAID up to 16 drives</li> </ul>

**SSG-6029P-E1CR12L**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup>

## SuperStorage with 3.5" Hard Drives

Character	Representation	Options
1st	CPU	<ul style="list-style-type: none"> <li>• 5 = UP</li> <li>• 6 = DP</li> <li>• 7 = DP (Tower)</li> </ul>
2nd	Reserved	• 0 = Reserved
3rd	Form Factor	<ul style="list-style-type: none"> <li>• 1 = 1U</li> <li>• 2 = 2U</li> <li>• 3 = 3U</li> <li>• 4 = 4U</li> </ul>
4th	System Generation	<ul style="list-style-type: none"> <li>• 9 = X11 Series</li> <li>• 8 = X10 Series</li> <li>• 7 = X9 Series</li> </ul>
5th	Socket / Family	<ul style="list-style-type: none"> <li>• P = Socket P</li> <li>• R = Socket R</li> <li>• D2 = Socket F / 2-Core</li> <li>• D4 = Socket F / 4-Core</li> <li>• D8 = Socket F / 8-Core</li> <li>• T = Tylersberg</li> <li>• A = Atom SoC</li> </ul>
6th	Interface Type	<ul style="list-style-type: none"> <li>• A: Direct Attached</li> <li>• AC: Direct Attached SAS3</li> <li>• D: Dual Motherboard</li> <li>• DC: Dual Motherboard SAS3</li> <li>• E1: Single Expander</li> <li>• E1C: Single SAS3 Expander</li> <li>• E2: Dual Expander</li> <li>• E2C: Dual SAS3 Expander</li> <li>• N: NVMe</li> </ul>
7th	Power Redundancy	• R = Redundant Power Supplies
8th	Additional	<ul style="list-style-type: none"> <li>• ##: Number of drive bays</li> <li>• 4: 4 LAN ports</li> <li>• L: IT Mode</li> <li>• H: Hardware RAID</li> <li>• N: Hardware RAID &amp; 24 DIMMs (X9/X10) / NVMe (X10 Simply Double)</li> <li>• NV: NVDIMM</li> <li>• T: HW RAID up to 16 drives</li> </ul>



We Power the Cloud

**NEW!**

### 1U 32 EDSFF E1.L (Long)

Extremely High-Density All-Flash Servers,  
Supports E1.L form factor



**NEW!**

### 1U 32 EDSFF E1.S (Short)

Extremely High-Density All-Flash Servers,  
Supports E1.S form factor



MODEL	SYS-1029P-NE32R	SSG-1029P-NER32L
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>High Throughput Ingest</li> <li>High Density Hot Storage</li> <li>HPC / Data Analytics</li> <li>Media/Video Streaming</li> <li>Content Delivery Network (CDN)</li> <li>Big Data Top of Rack Storage</li> </ul>	<ul style="list-style-type: none"> <li>IOPS Intensive application</li> <li>Database</li> <li>HCI</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Front access to a total of 32 NVMe hot swap EDSFF Long SSDs</li> <li>2x PCI-E 3.0 x16 slots</li> <li>1600W Platinum Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> <li>Intel® C627 chipset support</li> <li>QAT</li> </ul>	<ul style="list-style-type: none"> <li>All flash NVMe drives</li> <li>Supports new EDSFF-S form factor</li> <li>SKL (up to 205W), 3 UPI designed for up to 10.4 GT/s[nid:9987]</li> <li>24 DIMM support</li> <li>Intel® Quick Assist Technology</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPER● X11DPS-RE	SUPER● X11DSF-E
Chipset	Intel® C627 chipset	Intel® C627 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
Expansion Slots	2 PCI-E 3.0 x16 slots (Low Profile)	2 PCI-E 3.0 X16 (FHHL), 1 PCI-E 3.0 X4 (LP) support
Onboard Storage Controller	N/A	PCI-E fan out switching supporting 32x EDSFF-S
Connectivity	Intel® X550 Dual Port 10GBase-T	Dual LAN with 10GBase-T with Intel® X550;
VGA/Audio	Aspeed AST2500 BMC	Onboard VGA port
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	32 Hot-swap EDSFF Long Drive slots	32x EDSFF-S Drive slots
Peripheral Bays	N/A	N/A
Power Supply	Redundant(1+1) 1600W Platinum level high efficiency power supplies	Redundant Power Supplies: PWS-1K62A-1R
Cooling System	8x 40x56mm PWM fan;	8x 40x56mm counter-rotation PWM fan;
Form Factor	438 x 43 x 913mm (17.26" x 1.7" x 35.95")	1U 17.2" (437mm) x 1.7" (43mm) x 30" (762mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**1U SuperStorage**  
32 Ruler NVMe Drives



**1U SuperStorage**  
1U 32 U.2 NVMe



**1U SuperStorage**  
1U 32 NF1 + 4 M.2 Drives



MODEL	SYS-1029P-NR32R	SYS-1029P-N32R	SSG-1029P-NMR36L
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• High Throughput Ingest</li> <li>• High Density Hot Storage</li> <li>• HPC / Data Analytics</li> <li>• Media/Video Streaming</li> <li>• Content Delivery Network (CDN)</li> <li>• Big Data Top of Rack Storage</li> </ul>	<ul style="list-style-type: none"> <li>• High Throughput Ingest</li> <li>• High Density Hot Storage</li> <li>• HPC / Data Analytics</li> <li>• Media/Video Streaming</li> <li>• Content Delivery Network (CDN)</li> <li>• Big Data Top of Rack Storage</li> </ul>	<ul style="list-style-type: none"> <li>• IOPS Intensive application</li> <li>• Database</li> <li>• HCI</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Front access to a total of 32 NVMe hot swap Ruler SSDs</li> <li>• 2x PCI-E 3.0 x16 slots</li> <li>• 1600W Platinum Level high-efficiency power supply</li> <li>• IPMI management with dedicated LAN</li> <li>• Intel® C627 chipset support</li> <li>• QAT</li> </ul>	<ul style="list-style-type: none"> <li>• Dual Drawer/Tray with a total of 32 NVMe 2.5" SSDs</li> <li>• 2x PCI-E 3.0 x16 slots</li> <li>• 1600W Platinum Level high-efficiency power supply</li> <li>• IPMI management with dedicated LAN</li> <li>• Intel® C627 chipset support</li> <li>• QAT</li> </ul>	<ul style="list-style-type: none"> <li>• All flash NVMe drives</li> <li>• Supports new NF1 form factor</li> <li>• SKL (up to 205W), 3 UPI designed for up to 10.4 GT/s[nid:9987]</li> <li>• 24 DIMM support</li> <li>• Intel® Quick Assist Technology</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPERMICRO® X11DPS-RE	SUPERMICRO® X11DPS-RE	SUPERMICRO® X11DSF-E
Chipset	Intel® C627 chipset	Intel® C627 chipset	Intel® C627 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
Expansion Slots	2 PCI-E 3.0 x16 slots (Low Profile)	2 PCI-E 3.0 x16 slots (Low Profile)	2 PCI-E 3.0 x16(FHHL), 1 PCI-E 3.0 x4(LP) support
Onboard Storage Controller	N/A	N/A	PCI-E fan out switching supporting 32x NF1
Connectivity	Intel® X550 Dual Port 10GBase-T	Intel® X550 Dual Port 10GBase-T	Dual LAN with 10GBase-T with Intel® X550;
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	32 Hot-swap Ruler Drive slots	32x 2.5" Drive slots	32x NF1 Drive slots + 4x SATA M.2 drive slots
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant(1+1) 1600W Platinum level high efficiency power supplies	Redundant(1+1) 1600W Platinum level high efficiency power supplies	Redundant Power Supplies: PWS-1K62A-1R
Cooling System	8x 40x56mm PWM fan;	8x 40x56mm PWM fan;	8x 40x56mm counter-rotation PWM fan;
Form Factor	438 x 43 x 913mm (17.26" x 1.7" x 35.95")	438 x 43 x 913mm (17.26" x 1.71" x 35.95")	1U Rack mount 437 x 43 x 763 mm (17.2" x 1.7" x 30.0")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 SuperStorage**  
Expandable Storage, 32 NVMe JBOF



**1U SuperStorage**  
Storage Expandable



MODEL	SSG-136R-N32JBF	SSG-136R-NR32JBF
Processor Support	N/A	N/A
Key Applications	<ul style="list-style-type: none"> <li>• High Throughput Ingest</li> <li>• High Density Hot Storage</li> <li>• HPC / Data Analytics</li> <li>• Media/Video Streaming</li> <li>• Content Delivery Network (CDN)</li> <li>• Big Data Top of Rack Storage</li> </ul>	<ul style="list-style-type: none"> <li>• High Throughput Ingest</li> <li>• High Density Hot Storage</li> <li>• HPC / Data Analytics</li> <li>• Media/Video Streaming</li> <li>• Content Delivery Network (CDN)</li> <li>• Big Data Top of Rack Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Dual Drawer/Tray with a total of 32 NVMe 2.5" SSDs</li> <li>• 4x PCI-E 3.0 x16 IO ports, 2x X16 PCI-E 3.0 x16 slots</li> <li>• 1000W Titanium Level high-efficiency power supply</li> <li>• IPMI management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>• Front access to a total of 32 NVMe hot swap Ruler SSDs</li> <li>• 4x PCI-E 3.0 x16 IO ports, 2x PCI-E 3.0 x16 slots</li> <li>• 1000W Titanium Level high-efficiency power supply</li> <li>• IPMI management with dedicated LAN</li> </ul>
Serverboard	N/A	N/A
Chipset	N/A	N/A
System Memory (Max.)*	N/A	N/A
Expansion Slots	2x X16 PCI-E Slots	2x X16 PCI-E Slots
Onboard Storage Controller	N/A	N/A
Connectivity	4x X16 PCI-E IO ports	4x X16 PCI-E IO ports
VGA/Audio	N/A	N/A
Management	IPMI 2.0 with Dedicated LAN	IPMI 2.0 with Dedicated LAN
Drive Bays	32x 2.5" Drive slots	32x Ruler Drive slots
Peripheral Bays	N/A	N/A
Power Supply	Redundant(1+1) 1000W Titanium level high efficiency power supplies	Redundant(1+1) 1000W Titanium level high efficiency power supplies
Cooling System	8x 40mm Fans, N/A	8x 40mm Fans, N/A
Form Factor	438 x 43 x 812mm (17.26" x 1.71" x 31.95")	438 x 43 x 812mm (17.26" x 1.71" x 31.95")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 2U SuperStorage****X11 2U SuperStorage**

MODEL	<b>SSG-2029P-ACR24H</b> <b>SSG-2029P-ACR24L</b>	<b>SSG-2029P-E1CR24H</b> <b>SSG-2029P-E1CR24L</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Database Processing &amp; Storage</li> <li>• HPC</li> <li>• Large Database</li> <li>• Web Cache</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• Data Center</li> <li>• iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 24x 2.5" Hot-swap SAS3/SATA3 drive bays</li> <li>• Up to 205W CPU support</li> <li>• 16 DIMM support</li> <li>• Dual 10G BaseT</li> <li>• 3 Broadcom® 3108 HW SAS controllers</li> <li>• 1200W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• 24x 2.5" Hot-swap SAS3/SATA3 drive bays</li> <li>• Up to 205W CPU support</li> <li>• 16 DIMM support</li> <li>• Dual 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 1200W Titanium Level high-efficiency power supply</li> </ul>
Serverboard	SUPERMICRO® X11DPH-T	SUPERMICRO® X11DPH-T
Chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8.	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port
Storage Controller	- <b>ACR24H</b> : 3 Broadcom 3108 SAS3 add-on controller cards - <b>ACR24L</b> : 3 Broadcom 3008 SAS3 add-on controller cards	- <b>E1CR24H</b> : Broadcom 3108 SAS3 add-on controller card - <b>E1CR24L</b> : Broadcom 3008 SAS3 add-on controller card
Connectivity	Dual LAN with 10GBase-T with Intel® X557	Dual LAN with 10GBase-T with Intel® X557
VGA/Audio		Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	24x 2.5" hot-swap SAS3/SATA3 drive bays	24x 2.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)
Power Supply	1200W Titanium Level high-efficiency power supply	1200W Titanium Level high-efficiency power supply
Cooling System	3x 8cm hot-swap redundant PWM cooling fans.	3x 8cm hot-swap redundant PWM cooling fans.
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 24.8" (630mm)	2U 17.2" (437mm) x 3.5" (89mm) x 24.8" (630mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	<b>SSG-2029P-DN2R24L</b>	<b>SSG-2029P-DN2RR32L</b>	<b>SSG-2029P-DN2R48L</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• High Availability Hardware Platform</li> <li>• Enterprise File/Block Storage Server</li> <li>• Failover Cluster</li> <li>• Corporate Database</li> <li>• HPC</li> <li>• Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Lustre</li> <li>• HPC</li> <li>• Virtualization</li> <li>• High Availability Storage Appliance Platform</li> <li>• All Flash Storage</li> </ul>	<ul style="list-style-type: none"> <li>• High Availability Hardware Platform</li> <li>• Enterprise File/Block Storage Server</li> <li>• Failover Cluster</li> <li>• Corporate Database</li> <li>• HPC</li> <li>• Virtualization</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Redundant DP SBB supporting 24x U.2 Dual-Port NVMe</li> <li>• IPMI management with dedicated LAN</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>• NV-DIMM support</li> <li>• Shared storage between redundant controllers</li> <li>• Node to node heartbeat/ NTB connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Dual Drawer/Tray with a total of 32 NVMe Ruler SSDs</li> <li>• IPMI management with dedicated LAN</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies [nid:58]</li> <li>• NV-DIMM support</li> <li>• Shared storage between redundant controllers</li> <li>• Node to node heartbeat/ NTB connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Redundant DP SBB supporting 48x U.2 Dual-Port NVMe</li> <li>• IPMI management with dedicated LAN</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies [nid:58]</li> <li>• NV-DIMM support</li> <li>• Shared storage between redundant controllers</li> <li>• Node to node heartbeat/ NTB connectivity</li> </ul>
Serverboard Chipset	SUPER● X11DSN-TS Intel® C624 chipset	SUPER● X11DSN-TSq Intel® C627 chipset	SUPER● X11DSN-TS Intel® C624 chipset
System Memory (Max.)*	Up to 1.5TB 3DS ECC RDIMM, DDR4-2666MHz; Up to 1.5TB 3DS ECC LRDIMM, in 12 DIMM slots per node	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
Expansion Slots	2 PCI-E 3.0 x16(LP,HL); 1 PCI-E 3.0 x16 SIOM	2 PCI-E 3.0 x16 Low-profile slots, 1 PCI-E 3.0 x16 SIOM slot from CPU2, x8 signals shared with QAT enabled board per node	2 PCI-E 3.0 x16(LP,HL) per node; 1 PCI-E 3.0 x16 SIOM
Onboard Storage Controller	N/A	N/A	N/A
Connectivity	Dual LAN with 10GBase-T with Intel® X557-AT2; Dual 10G private Ethernet between controller nodes; Dedicated B2B connection using NTB by PLX PCI-E 3.0 x8	Dual LAN with 10GBase-T with Intel® X772 + PHY Intel® X557; Dual 10G private Ethernet between controller nodesNode to node PCI-E x8 NTB link	Dual LAN with 10GBase-T with Intel® X557-AT2; Dual 10G private Ethernet between controller nodes; Dedicated B2B connection using NTB by PLX PCI-E 3.0 x8
VGA/Audio	1 VGA D-Sub Connector, 1 Aspeed AST2500 BMC	1 VGA D-Sub Connector, 1 Aspeed AST2500 BMC	1 VGA D-Sub Connector, 1 Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI (Intelligent Platform Management Interface) v2.0 with KVM support; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager; IPMI (Intelligent Platform Management Interface) v2.0 with KVM support; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager; IPMI (Intelligent Platform Management Interface) v2.0 with KVM support; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;
Drive Bays	24x U.2 hot-swap Dual-Port NVMe drive bays + 1x M.2 per node	32 hot-swappable Intel Ruler NVMe drive bays + 1x M.2 per node	48x U.2 hot-swap Dual-Port NVMe drive bays
Peripheral Bays	2 SATA DOM per node; 1 Optional onboard NVMe M.2 (up to 80mm) per node	N/A	2 SATA DOM per node; 1 Optional onboard NVMe M.2 (up to 80mm)
Power Supply	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies
Cooling System	5x 8cm high-performance PWM fans; 2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 25.6" (650mm)	6x 6cm counter rotating fans 2U 17.2" (437mm) x 3.5" (89mm) x 33.3" (846mm)	5x 8cm high-performance PWM fans; 2U 17.2" (437mm) x 3.5" (89mm) x 33.3" (846mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



## SuperStorage



## UP SuperStorage



MODEL	<b>SSG-2029P-E1CR48H SSG-2029P-E1CR48L</b>	<b>SSG-5029P-E1CTR12L</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake). Single Socket P (LGA 3647) supported, CPU TDP support 205W
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Connectivity/Storage Computer Nodes</li> <li>• Application and data serving</li> <li>• High Availability Storage Appliance Platform</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 48x 2.5" Drive in 2U Form Factor</li> <li>• Supports Dual 205W Skylake CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Mutiple IO Option</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Remote management via dedicated IPMI BMC</li> <li>• 12x 3.5" hot-swap SAS3 drive bays</li> <li>• Broadcom® 3008 SW controller</li> </ul>
Serverboard	SUPER● X11DSC+	SUPER● X11SPH-nCTF
Chipset	Intel® C621 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 512GB Registered ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x16 for Add-On-Module (AOM)	1 PCI-E 3.0 x16 (x16 or x8 ), 1 PCI-E 3.0 x8 (x0 or x8 ), 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8 slot)
Storage Controller	-E1CR48H: Broadcom® 3108 SAS3 HW RAID controller -E1CR48L: Broadcom® 3008 IT Mode SAS Controller	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom® 3008 SW controller for 8 SAS3 (12Gbs) ports; RAID 0,1,10;
Connectivity	N/A	Dual LAN with 10GBase-T
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	48x 2.5" hot-swap drive bay 2x 2.5" hot-swap drive bay	
Peripheral Bays	N/A	N/A
Power Supply	1U 1000/1200/1620W Redundant Single Output Power Supply W/ PMbus, Platinum	1U 800W Redundant Power Supply 76mm width, W/PMbus, Titanium
Cooling System	5x 8cm high-performance PWM fans;	3x 8cm high-performance PWM fans;
Form Factor	2U 17.2" (437mm) x 3.5" (89mm)	2U Rackmount 432 x 76 x 635mm (17.2" x 3.5" x 25.6")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 2U SuperStorage****X11 2U SuperStorage**

MODEL	<b>SSG-6029P-E1CR12H</b> <b>SSG-6029P-E1CR12L</b>	<b>SSG-6029P-E1CR12T</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• Data Center</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• 12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>• Up to 205W CPU support</li> <li>• 16 DIMM support</li> <li>• Dual 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 1200W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• Data Center</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• 12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>• Up to 205W CPU support</li> <li>• 16 DIMM support</li> <li>• Dual 10G BaseT</li> <li>• 1200W Titanium Level high-efficiency power supply</li> </ul>
Serverboard	SUPERMICRO® X11DPH-T	SUPERMICRO® X11DPH-T
Chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM Up to 2TB Intel® Optane™ DC Persistent Memory (Cascade Lake only)	Up to 4TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM Up to 2TB Intel® Optane™ DC Persistent Memory (Cascade Lake only)
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 3 occupied by controller
Storage Controller	-E1CR12H: Broadcom 3108 SAS3 add-on controller card -E1CR12L: Broadcom 3008 SAS3 add-on controller card	Broadcom® 3108 SAS3 add-on HW RAID controller
Connectivity	Dual LAN with 10GBase-T with Intel® X557	Dual LAN with 10GBase-T with Intel® X557
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	12x 3.5" hot-swap SAS3/SATA3 drive bays	12x 3.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	2x 2.5" rear hot-swap drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)
Power Supply	1200W Titanium Level high-efficiency power supply	1200W Titanium Level high-efficiency power supply
Cooling System	3x 8cm hot-swap redundant PWM cooling fans.	3x 8cm hot-swap redundant PWM cooling fans.
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 2U SuperStorage****Simply Double Storage**

MODEL	<b>SSG-6029P-E1CR16T</b>	<b>SSG-6029P-E1CR24H SSG-6029P-E1CR24L</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• Data Center</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• 16x 3.5" Hot-swap SAS3/SATA3 drive bays</li> <li>• Up to 205W CPU support</li> <li>• 16 DIMM support</li> <li>• Dual 10G BaseT</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• Data Center</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• 24x 3.5" Drives in 2U Form Factor</li> <li>• Supports Dual 205W Skylake CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Option</li> </ul>
Serverboard	SUPERMICRO® X11DPH-T	SUPERMICRO® X11DSC+
Chipset	Intel® C622 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 1 occupied by controller	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x16 for Add-On-Module (AOM)
Onboard Storage Controller	Broadcom 3108 SAS3 add-on controller card	-E1CR24H: Broadcom® 3108 SAS3 HW RAID controller -E1CR24L: Broadcom® 3008 IT Mode SAS Controller
Connectivity	Dual LAN with 10GBase-T with Intel® X557	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	16x 3.5" hot-swap SAS3/SATA3 drive bays	24x 3.5" hot-swap drive bay 2x 2.5" hot-swap drive bay
Peripheral Bays	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)	N/A
Power Supply	1600W Titanium Level high-efficiency power supply	Redundant 1600W Titanium Level high-efficiency power supplies
Cooling System	3x 8cm hot-swap redundant PWM cooling fans.	5x 8cm high-performance PWM fans;
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 27.75" (705mm)	2U 17.2" (437mm) x 3.5" (89mm) x 34" (863.6mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 3U SuperStorage****4U UP SuperStorage***Applications storage, Archive and cold storage*

MODEL	<b>SSG-6039P-E1CR16H SSG-6039P-E1CR16L</b>	<b>SSG-5049P-E1CTR36L</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake). Single Socket P (LGA 3647) supported, CPU TDP support 205W
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Connectivity/Storage Computer Nodes</li> <li>• Database Processing &amp; Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 16x 3.5" Hot-swap SAS3/SATA3 drive bays</li> <li>• Up to 205W CPU support</li> <li>• 16 DIMM support</li> <li>• Dual 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 1200W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• 2x 10GBase-T Ports</li> <li>• Remote management via dedicated IPMI BMC</li> <li>• 36x 3.5" Hot-swap SAS3 bays</li> </ul>
Serverboard	SUPERMICRO® X11DPH-T	SUPERMICRO® X11SPH-nCTF
Chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 512GB Registered ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port	1 PCI-E 3.0 x16 (x16 or x8 ), 1 PCI-E 3.0 x8 (x0 or x8 ), 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8 slot)
Storage Controller	-E1CR16H: Broadcom 3108 SAS3 add-on controller card -E1CR16L: Broadcom 3008 SAS3 add-on controller card	Broadcom® 3008 SW controller with expander to support total 14x SATA/SAS3 (12Gbs) IR mode RAID 0,1,10; or 36x SATA/SAS3 (12Gbs) IT mode
Connectivity	Dual LAN with 10GBase-T with Intel® X557	2x 10GBase-T Ports
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	16x 3.5" hot-swap SAS3/SATA3 drive bays	Optional 2x2.5" NVMe/SATA rear drive kit" to "Peripheral Bays
Peripheral Bays	2x 2.5" rear hot-swap drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)	2x 3.5" internal fixed drive bay or 4x 2.5" internal fixed drive bay, 2x M.2 Internal bays
Power Supply	1200W Titanium Level high-efficiency power supply	Redundant 1200W Platinum Level high-efficiency Power Supply
Cooling System	3x 8cm hot-swap redundant PWM cooling fans. 2x 8cm rear hot-swap exhaust PWM fan	7x 80mm high-performance fan;
Form Factor	3U 17.2" (437mm) x 5.2" (132mm) x 25.5" (647mm)	4U Rackmount 437 x 178 x 699mm (17.2" x 7" x 27.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**4U UP SuperStorage**  
Applications storage, Archive and cold storage



**X11 4U SuperStorage**



MODEL	SSG-5049P-E1CR45H SSG-5049P-E1CR45L	SSG-6049P-E1CR24H SSG-6049P-E1CR24L
Processor Support	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake). Single Socket P (LGA 3647) supported, CPU TDP support 165W	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Backup storage</li> <li>• Database Applications</li> <li>• Data Warehousing, Archiving</li> <li>• Cold Storage</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> <li>• 24x 3.5" Hot-swap SAS3/SATA3 drive bays</li> <li>• Up to 205W CPU support</li> <li>• 16 DIMM support</li> <li>• Dual 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 1200W Titanium Level high-efficiency power supply</li> </ul>
Serverboard	SUPERMICRO® X11SPL-F	SUPERMICRO® X11DPH-T
Chipset	Intel® C621 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots; Up to 1TB Intel Optane DC Persistent Memory in memory mode (Cascade Lake Only)	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	2 PCI-E 3.0 x8 (in x16 slot), 4 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8 slot)	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port
Storage Controller	-E1CR45H: AOC-S3108L-H8IR-P -E1CR45L: AOC-S3008L-L8E	-E1CR24H: Broadcom 3108 SAS3 add-on controller card -E1CR24L: Broadcom 3008 SAS3 add-on controller card
Connectivity	Dual LAN with 1GbE with Intel® I210	Dual LAN with 10GBase-T with Intel® X557
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	45x 3.5" SATA or SAS)+ 2x2.5"SATA (Rear)	24x 3.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	2x 2.5"(SATA or NVMe w/AOC) option	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)
Power Supply	1600W redundant power supply, Platinum level with PMBus & I <sup>2</sup> C	1200W Titanium Level high-efficiency power supply
Cooling System	5x 80mm rear hot-swap exhaust PWM fan;	3x 8cm hot-swap redundant PWM cooling fans. 2x 8cm rear hot-swap exhaust PWM fan
Form Factor	4U Rackmount 437 x 178 x 660mm (17.2" x 7" x 26")	4U 17.2" (437mm) x 7" (178mm) x 26" (660mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 4U SuperStorage**

36x 3.5" HDDs

**4U Top-Loading Storage**

45x 3.5" HDDs, 26" Short-Depth



MODEL	<b>SSG-6049P-E1CR36H</b> <b>SSG-6049P-E1CR36L</b>	<b>SSG-6049P-E1CR45H</b> <b>SSG-6049P-E1CR45L</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 36x 3.5" Hot-swap SAS3/SATA3 drive bays</li> <li>• Up to 205W CPU support</li> <li>• 16 DIMM support</li> <li>• Dual 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 1200W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• 45x 3.5" Drive in 4U Form Factor</li> <li>• Supports Dual 205W Skylake CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Options</li> </ul>
Serverboard	SUPERMICRO® X11DPH-T	SUPERMICRO® X11DSC+
Chipset	Intel® C622 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8
Storage Controller	-E1CR36H: Broadcom 3108 SAS3 add-on controller card -E1CR36L: Broadcom 3008 SAS3 add-on controller card	-E1CR45H: Broadcom® 3108 SAS3 HW RAID controller -E1CR45L: Broadcom® 3008 IT Mode SAS Controller
Connectivity	Dual LAN with 10GBase-T with Intel® X557	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	36x 3.5" hot-swap SAS3/SATA3 drive bays	45x 3.5" hot-swap SAS/SATA drive bay with SES3
Peripheral Bays	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110m)	2x 2.5" hot-swap drive bay
Power Supply	1200W Titanium Level high-efficiency power supply	1600W Redundant Platinum Level high efficiency Power Supplies
Cooling System	7x 8cm high-performance PWM fans, air shroud	5x 80mm rear hot-swap exhaust PWM fan;
Form Factor	4U 17.2" (437mm) x 7" (178mm) x 27.5" (699mm)	4U Rackmount 17.2" (437mm) x 7" (178mm) x 26" (660mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**4U Top-Loading Storage**

60x 3.5 HDDs

**Cold Storage**

12x 3.5 Data Drives in 1U



MODEL	<b>SSG-6049P-E1CR60H</b> <b>SSG-6049P-E1CR60L</b>	<b>SSG-5018A-AR12L</b>
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	Intel® Atom® Processor C2750. Socket FCBGA1283 supported, CPU TDP support 20W
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Storage Nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 60x 3.5" Drive in 4U Form Factor</li> <li>• Supports Dual 205W Skylake CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Options</li> </ul>	<ul style="list-style-type: none"> <li>• 1 PCI-E 2.0 x4(in x8 slot)</li> <li>• 12x 3.5" data drives in 1U</li> <li>• Cost optimized</li> <li>• RAID: IT Mode only</li> </ul>
Serverboard	SUPERMICRO X11DSC+	SUPERMICRO A1SA7-2750F
Chipset	Intel® C621 chipset	System on Chip chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	64GB Unbuffered ECC/non-ECC UDIMM, DDR3-1600MHz, in 4 DIMM slots ,x8 data width
Expansion Slots	2 PCI-E 3.0 x16,1 PCI-E 3.0 x8	1 PCI-E 2.0 x4(LP, HL, in x8 slot)
Onboard Storage Controller	-E1CR60H: Broadcom® 3108 SAS3 HW RAID controller -E1CR60L: Broadcom® 3008 IT Mode SAS controller	IT Mode
Connectivity	SIOM Networking Card For Flexible Networking Options	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2400 BMC
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI2.0, NMI, SuperDoctor® 5, Watchdog
Drive Bays	60x 3.5"/2.5" hot-swap SAS3/SATA3 drive bays	12x 3.5" hot-swap HDD bays for server chassis
Peripheral Bays	2x 2.5" hot-swap SATA3 drive bays	SATADOM for OS drive
Power Supply	1600W Redundant Platinum Level high efficiency Power Supplies	1U 400W Redundant single output power supply, W/PMbus, gold level
Cooling System	5x 80mm rear hot-swap exhaust PWM fan;	6x 40x28mm PWM fan;
Form Factor	4U Rackmount 17.2" (437mm) x 7" (178mm) x 30.2" (767.08mm)	1U 17.2" (437mm) x 1.7" (43mm) x 32" (813mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**Cost-Efficient Cold Storage**  
*12x 3.5 HDDs in 1U*

**High-Density Cold Storage**  
*12x 3.5 HDDs in 1U*

**High-Density Warm Storage**  
*12x 3.5 HDDs in 1U*


MODEL	SSG-5018D2-AR12L	SSG-5018D4-AR12L	SSG-5018D8-AR12L
Processor Support	Intel® Pentium® D 1508 Processor, SoC, 2 Core, 4 Thread 2.2 GHz (2.6 GHz Turbo), 25W	Intel® Xeon® Processor D 1518 Processor, SoC, 4 Core, 8 Thread 2.2 GHz (2.2 GHz Turbo), 35W	Intel® Xeon® Processor D 1537 Processor, SoC, 8 Core, 16 Thread 1.7 GHz (2.3 GHz Turbo), 35W
Key Applications	<ul style="list-style-type: none"> <li>Cold Storage</li> <li>Data Warehousing, Archiving</li> <li>Long Tail, Medical Records, Compliance Docs</li> <li>Low Power Efficiency Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Cold Storage</li> <li>Archiving, Mail/Finance, Security</li> <li>Scale-Out Density, VOD Delivery</li> <li>Low Power Efficiency Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Warm Storage</li> <li>CDN, Business Hosting</li> <li>OLTP/DB</li> <li>Low Power Efficiency Appliance</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>12x Hot-Swap 3.5" SAS2/SATA3 bays (6 Gb/s)</li> <li>Option 4x 2.5" internal HDD drives</li> <li>Up to 128GB DDR4 2133MHz RDIMM or 64GB UDIMM</li> <li>2-Port 1G Base-T and 2-port 10G SFP+ Network Port</li> <li>M.2 2242, 2280, 22110 PCI-E 3.0 x4 with M-key</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/KVM over LAN</li> </ul>	<ul style="list-style-type: none"> <li>12x Hot-Swap 3.5" SAS2/SATA3 bays (6 Gb/s)</li> <li>Option 4x 2.5" internal HDD drives</li> <li>Up to 128GB DDR4 2133MHz RDIMM or 64GB UDIMM</li> <li>2-Port 1G Base-T and 2-port 10G SFP+ Network Port</li> <li>M.2 2242, 2280, 22110 PCI-E 3.0 x4 with M-key</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/KVM over LAN</li> </ul>	<ul style="list-style-type: none"> <li>12x Hot-Swap 3.5" SAS2/SATA3 bays (6 Gb/s)</li> <li>Option 4x 2.5" internal HDD drives</li> <li>Up to 128GB DDR4 2133MHz RDIMM or 64GB UDIMM</li> <li>2-Port 1G Base-T and 2-port 10G SFP+ Network Port</li> <li>M.2 2242, 2280, 22110 PCI-E 3.0 x4 with M-key</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/KVM over LAN</li> </ul>
Serverboard	SUPERMICRO® X10SDV-2C-7TP4F	SUPERMICRO® X10SDV-4C-7TP4F	SUPERMICRO® X10SDV-7TP4F
Chipset	Intel® Pentium® D 1508 SoC Processor	Intel® Xeon® Processor D 1518 SoC Processor	Intel® Pentium® D 1537 SoC Processor
System Memory (Max.)*	Up to 128GB DDR4 2133 MHz RDIMM or 64GB UDIMM	Up to 128GB DDR4 2133 MHz RDIMM or 64GB UDIMM	Up to 128GB DDR4 2133 MHz RDIMM or 64GB UDIMM
Expansion Slots	1 PCI-E 3.0 x8 full height	1 PCI-E 3.0 x8 full height	1 PCI-E 3.0 x8 full height
Onboard Storage Controller	Broadcom® 2116 (IT mode)	Broadcom® 2116 (IT mode)	Broadcom® 2116 (IT mode)
Connectivity	2x USB 3.0, 5x USB 2.0 port, VGA	2x USB 3.0, 5x USB 2.0 port, VGA	2x USB 3.0, 5x USB 2.0 port, VGA
VGA/Audio	Built-in VGA from Aspeed BMC	Built-in VGA from Aspeed BMC	Built-in VGA from Aspeed BMC
Management	IPMI 2.0 w/ dedicated LAN port & KVM; 4 Pin PWM Fan Speed control; TPM option; Thermal and voltage monitoring	IPMI 2.0 w/ dedicated LAN port & KVM; 4 Pin PWM Fan Speed control; TPM option; Thermal and voltage monitoring	IPMI 2.0 w/ dedicated LAN port & KVM; 4 Pin PWM Fan Speed control; TPM option; Thermal and voltage monitoring
Drive Bays	12x Hot-Swap 3.5" SAS2/SATA3 drive bays (6 Gb/s), Option 4x 2.5" internal HDD drives	12x Hot-Swap 3.5" SAS2/SATA3 drive bays (6 Gb/s), Option 4x 2.5" internal HDD drives	12x Hot-Swap 3.5" SAS2/SATA3 drive bays (6 Gb/s), Option 4x 2.5" internal HDD drives
Peripheral Bays	N/A	N/A	N/A
Power Supply	400W Redundant Gold Level power supplies	400W Redundant Gold Level power supplies	400W Redundant Gold Level power supplies
Cooling System	5x 4cm middle fan	5x 4cm middle fan	5x 4cm middle fan
Form Factor	1U rackmount 437 x 43 x 813mm (17.2 " x 1.7" x 32")	1U rackmount 437 x 43 x 813mm (17.2 " x 1.7" x 32")	1U rackmount 437 x 43 x 813mm (17.2 " x 1.7" x 32")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U Storage**  
3x Broadcom® 3108 HW controller  
Low Latency

**2U Storage**  
3x Broadcom® 3008 IT Mode controller  
Low Latency

**24-Bay 2U Storage**  
High Availability Storage Platform



MODEL	SSG-2028R-ACR24H	SSG-2028R-ACR24L	SSG-2028R-DE2CR24L
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Redundant dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• High Performance NAS Servers</li> <li>• Web Cache</li> <li>• Corporate Database</li> <li>• Database Processing &amp; Storage</li> <li>• HPC</li> <li>• Large Database</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Database Processing &amp; Storage</li> <li>• HPC</li> <li>• Large Database</li> <li>• Web Cache</li> </ul>	<ul style="list-style-type: none"> <li>• High Availability Storage Appliance Platform</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 145W CPU support</li> <li>• 3 Broadcom® 3108 HW RAID controller</li> <li>• Broadcom® SAS 3.0 (12Gbps) support</li> <li>• 16 DIMM support DDR4-2133MHz</li> <li>• 2x 10GbE-T Ports</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>• 145W CPU support</li> <li>• 3 Broadcom® 3008 HBA controller</li> <li>• 16 DIMM support DDR4-2133MHz</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• SAS 3.0 (12Gbps) support</li> <li>• 2x 10GbE-T Ports</li> </ul>	<ul style="list-style-type: none"> <li>• Redundant DP SBB supporting shared 24x 2.5" SAS HDD</li> <li>• Intel® X540 Dual port 10GbE-T</li> <li>• Dual JBOD Expansion Ports per node</li> <li>• NV-DIMM support</li> <li>• Up to 3 add-on cards per node</li> <li>• Redundant 1200W Titanium Level redundant power supplies</li> </ul>
Serverboard	SUPERMICRO® X10DRH-iT	SUPERMICRO® X10DRH-iT	Redundant SUPERMICRO® X10DRS-2U
Chipset	Intel® C612 Express chipset	Intel® C612 Express chipset	Redundant Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Redundant up to 1TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8	Redundant 3 PCI-E 3.0 x8 Low profile expansion slots per controller
Onboard Storage Controller	3 Broadcom® 3108 HW RAID controller	3 Broadcom® 3008 HBA controllers	Redundant Broadcom® 3008 SAS controller
Connectivity	Dual LAN with 10GbE-T with Intel® X540 10GbE Controller	Dual LAN with 10GbE-T with Intel® X540 10GbE Controller	Redundant dual LAN with 10GbE-T with Intel® X540 10GbE Controller per node 100M private Ethernet between controller nodes
VGA/Audio	AST2400 VGA	AST2400 VGA	Redundant AST2400 VGA
Management	Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Redundant IPMI 2.0 + KVM with dedicated LAN
Drive Bays	24x 2.5" hot-swap SAS3/SATA3 drive bay w/ full SES-II support	24x 2.5" hot-swap SAS3/SATA3 drive bay w/ full SES-II support	Shared 24x 2.5" hot-swap SAS drive bay with SES2
Peripheral Bays	Optional 2x 2.5" Rear Hot-Swap Drive Bays	Optional 2x 2.5" Rear Hot-Swap Drive Bays	N/A
Power Supply	Redundant 920W Platinum Level Digital high-efficiency power supplies	Redundant 920W Platinum Level Digital high-efficiency power supplies	Redundant 1200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C and PMBus
Cooling System	3x cooling fans	3x cooling fans	Redundant 4x 4cm PWM cooling fans per node
Form Factor	2U Rackmount	2U Rackmount	2U Rackmount 437 x 89 x 622mm (17.2" x 3.5" x 24.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**SBB Storage**  
20x 2.5" NVMe drive bays



We Power the Cloud



**SBB Storage**  
24x 2.5" dual port NVMe drive bays



**SBB Storage**  
40x 2.5" NVMe drive bays



MODEL	SSG-2028R-DN2R20L	SSG-2028R-DN2R24L	SSG-2028R-DN2R40L
Processor Support	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W	Intel® Xeon® processor E5-2600 v3/v4 with QPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 v3 Intel® Xeon® processor E5-2600 v4 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Lustre</li> <li>• HPC</li> <li>• Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Lustre</li> <li>• HPC</li> <li>• Virtualization</li> <li>• High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Lustre</li> <li>• HPC</li> <li>• Virtualization</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Dual port NVMe</li> <li>• Support SIOM Card for Mutiple IO Option</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Dual port NVMe</li> <li>• Support SIOM Card for Mutiple IO Option</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>• Shared storage between redundant controllers</li> <li>• Node to node heartbeat/10G connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Dual port NVMe</li> <li>• Support SIOM Card for Mutiple IO Option</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> </ul>
Serverboard	SUPERMICRO X10DSN-TS	SUPERMICRO X10DSN-TS	SUPERMICRO X10DSN-TS
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	1TB Registered ECC, DDR4-2133MHz in 16 DIMM slots	1TB Registered ECC, DDR4-2400/2133 MHz in 16 DIMM slots (per node)	1TB Registered ECC, DDR4-2133MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 HHHL; 1 PCI-E 3.0 x8 HHHL; 1 SIOM	1 PCI-E 3.0 x16 HHHL, 1 PCI-E 3.0 x8 HHHL, SIOM (per node)	1 PCI-E 3.0 x16 HHHL; 1 PCI-E 3.0 x8 HHHL; 1 SIOM
Onboard Storage Controller	Intel® C612 controller for 2 SATA3 (6 Gbps) ports;	Intel® C612 controller for 2 SATA3 (6 Gbps) ports (per node)	Intel® C612 controller for 2 SATA3 (6 Gbps) ports;
Connectivity	Dual LAN with Intel® X540 10GbE-T Ethernet Controller;	Dual LAN with Intel® X540 10GbE-T Ethernet Controller (per node)	Dual LAN with Intel® X540 10GbE-T Ethernet Controller;
VGA/Audio	1 VGA by Aspeed AST2400 BMC;	1 VGA by Aspeed AST2400 BMC	1 VGA by Aspeed AST2400 BMC;
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI;	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI;	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI;
Drive Bays	20x 2.5" NVMe drive bay	24x 2.5" dual port NVMe drive bay	40x 2.5" NVMe drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2000W Redundant Titanium AC Power supply	Redundant 2000W Redundant Titanium AC Power supply	Redundant 2000W Redundant Titanium AC Power supply
Cooling System	5x 8cm high-performance PWM fans; N/A	5x 8cm high-performance PWM fans;	5x 8cm high-performance PWM fans; N/A
Form Factor	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 25.6" (650mm)	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 25.6" (650mm)	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 33.3" (846mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**Super SBB Storage****2U Storage**  
SAS3 HW RAID controller  
Storage Expandable**2U Storage**  
SAS3 IT mode controller  
Storage Expandable

MODEL	SSG-2028R-DN2R48L	SSG-2028R-E1CR24H	SSG-2028R-E1CR24L
Processor Support	Intel® Xeon® processor E5-2600 V3 Intel® Xeon® processor E5-2600 V4 with UPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Lustre</li> <li>• HPC</li> <li>• Virtualization</li> <li>• High Availability Storage Appliance Platform</li> </ul> <ul style="list-style-type: none"> <li>• Dual port NVMe</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>• Redundant DP SBB supporting 48x U.2 dual port NVMe</li> <li>• Shared storage between redundant controllers</li> <li>• Node to node heartbeat/10G connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• Broadcom® 3108 SAS3 HW RAID controller</li> <li>• 24x 2.5" Hot-swap SAS3 bays</li> <li>• 145W CPU support</li> <li>• 16 DIMM slots</li> <li>• Dual 10GBase-T</li> <li>• Dual JBOD Expansion Ports</li> <li>• 920W Redundant Platinum Level high-efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• Broadcom® 3008 SAS3 HBA controller</li> <li>• 24x 2.5" Hot-swap SAS3 bays</li> <li>• 145W CPU support</li> <li>• 16 DIMM slots</li> <li>• Dual 10GBase-T Ports</li> <li>• Dual JBOD Expansion Ports</li> <li>• 920W Redundant Platinum Level high-efficiency</li> </ul>
Serverboard	SUPERMICRO® X10DSN-TS	SUPERMICRO® X10DRH-iT	SUPERMICRO® X10DRH-iT
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	1TB Registered ECC, DDR4-2400/2133 MHz in 16 DIMM slots (per node)	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 HHHL, 1 PCI-E 3.0 x8 HHHL, 1 SIOM (per node)	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8 Slot 1 & 2 occupied by controller and JBOD expansion port	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8 Slot 1 & 2 occupied by controller and JBOD expansion port
Onboard Storage Controller	Intel® C612 controller for 2 SATA3 (6 Gbps) ports (per node)	Broadcom® 3108 SAS3 HW RAID controller	Broadcom® 3008 SAS3 HBA controller
Connectivity	Dual LAN with Intel® X540 10GBase-T Ethernet Controller (per node)	Dual LAN with Intel® X540 10GBase-T Ethernet Controller	Dual LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	1 VGA by Aspeed AST2400 BMC (per node)	AST2400 VGA	AST2400 VGA
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI;	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	48x 2.5" dual port NVMe drive bay	24x 2.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay	24x 2.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant PWS-2K05A-1R	Redundant 1000W Titanium / 920W Platinum Level high-efficiency power supplies with I²C and PMBus	Redundant 1000W Titanium / 920W Platinum Level high-efficiency power supplies with I²C and PMBus
Cooling System	5x 8cm high-performance PWM fans;	3x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans
Form Factor	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 33.3" (846mm)	2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8")	2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U Storage**  
SAS3 HW RAID controller  
Storage Expandable



**2U Simply Double Storage**  
48 Bay SAS3  
Storage Expandable



**2U Simply Double Storage**  
48 Bay SAS3  
Storage Expandable



MODEL	SSG-2028R-E1CR24N	SSG-2028R-E1CR48N	SSG-2028R-E1CR48L
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Broadcom® 3108 SAS3 HW RAID controller</li> <li>24x 2.5" Hot-swap SAS3 bays</li> <li>145W CPU support</li> <li>24 DIMM slots</li> <li>Quad 10GbE-T Ports</li> <li>Dual JBOD Expansion Ports</li> <li>920W Redundant Platinum Level high-efficiency</li> </ul>	<ul style="list-style-type: none"> <li>48x 2.5" Drive in 2U Form Factor</li> <li>-E1CR48N: Broadcom® 3108 SAS3 HW RAID controller;</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Option</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>48x 2.5" Drive in 2U Form Factor</li> <li>-E1CR48L: Broadcom® 3008 SAS3 HBA controller</li> <li>Supports dual 145W CPU</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Option</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPERMICRO® X10DRI-T4+	SUPERMICRO® X10DSC+	SUPERMICRO® X10DSC+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 3 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8) Slot 3 & 4 occupied by controller and JBOD expansion port	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8
Onboard Storage Controller	Broadcom® 3108 SAS3 HW RAID controller	Broadcom® 3108 SAS3 HW RAID controller	Broadcom® 3008 SAS3 HBA controller
Connectivity	Quad LAN with Intel® X540 10GbE-T Ethernet Controller	SIOM card for multiple IO option.	SIOM card for multiple IO option.
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24x 2.5" hot-swap SAS3/SATA3 drive bay; optional 2x 2.5" internal fixed drive bay	48x 2.5" hot-swap SAS3/SATA3 drive bays; Optional 4x NVMe hybrid drive bay support (44x 2.5" +4x NVMe)	48x 2.5" hot-swap SAS3/SATA3 drive bays; Optional 4x NVMe hybrid drive bay support (44x 2.5" +4x NVMe)
Peripheral Bays	N/A	Optional 2x 2.5" rear drive tray to support quad rear 2.5" drives	Optional 2x 2.5" rear drive tray to support quad rear 2.5" drives
Power Supply	Redundant 1000W Titanium / 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C and PMBus	1600W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1600W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap redundant PWM cooling fans	5x 8cm hot-swap redundant PWM cooling fans 2U Rackmount	5x 8cm hot-swap redundant PWM cooling fans 2U Rackmount
Form Factor	2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8")	437 x 89 x 767mm (17.2" x 3.5" x 30.2"); With Cable Management Arm installed: 35.2" (895mm)	437 x 89 x 767mm (17.2" x 3.5" x 30.2"); With Cable Management Arm installed: 35.2" (895mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



### 2U Simply Double Storage

48 Bay NVMe Drive



### 2U UP Storage

SAS 3.0, 12x 3.5" hot-swap HDDs



MODEL	SSG-2028R-NR48N	SSG-5028R-E1CR12L
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Single Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Connectivity/Storage Computer Nodes</li> <li>• Application and data serving</li> <li>• High Availability Storage Appliance Platform</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 48x 2.5" NVMe Drive in 2U Form Factor</li> <li>• Supports dual 145W CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Broadcom® 3008 controller onboard</li> <li>• Remote management via dedicated IPMI BMC</li> <li>• 12x 3.5" hot-swap SAS3 drive bays</li> <li>• Dual JBOD expansion ports</li> </ul>
Serverboard	SUPERMICRO® X10DSC+	SUPERMICRO® X10SRH-CLN4F
Chipset	Intel® C612 chipset	Intel® C612 Express chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8 Slot 3 occupied by NVMe AOC	4x PCI-E 3.0 (x8/4, x16/8, x8) + 2x PCI-E 2.0 (x8/4, x4/2); Slot 1 occupied by JBOD expansion port
Onboard Storage Controller	Onboard NVMe controller	Broadcom® 3008 onboard controller IR mode
Connectivity	SIOM card for multiple IO option.	4x GbE port, 1x dedicated IPMI port
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	48x 2.5" hot-swap NVMe drive bays	12x 3.5" Hot-swap SAS3 Drive Bays 2x 2.5" optional hot-swap drive bays
Peripheral Bays	2x 2.5" rear hot-swap drive bays	N/A
Power Supply	1600W Redundant Titanium Level high-efficiency power supplies with I²C & PMBus	Redundant 920W Platinum Level Digital high-efficiency power supplies
Cooling System	5x 8cm hot-swap redundant PWM cooling fans	3x cooling fans
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 30" (684mm)	2U Rackmount 437 x 89 x 648mm (17.2"x3.5"x25.6")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**2U Storage**  
Storage Expandable



**2U Storage**  
SAS3 HW RAID controller Storage Expandable



**2U Storage**  
SAS3 HW RAID controller  
Storage Expandable



MODEL	SSG-6028R-E1CR12H SSG-6028R-E1CR12L	SSG-6028R-E1CR12N	SSG-6028R-E1CR12T
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s <ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> <li>-E1CR12H: Broadcom® 3108 SAS3 HW RAID controller</li> <li>-E1CR12L: Broadcom® 3008 SAS3 HBA controller</li> </ul>	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s <ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> <li>Broadcom® 3108 SAS3 HW RAID controller</li> <li>12x 3.5" SAS3/SATA3 drive bays</li> <li>145W CPU support</li> <li>24 DIMM slots</li> <li>4x 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>Redundant 920W Platinum Level high efficiency power supplies</li> </ul>	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s <ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> <li>Onboard Broadcom® 3108 SAS3 HW RAID controller</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>Supports dual 145W CPU</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Dual 10G BaseT</li> <li>Redundant 920W Platinum Level (94%+) Power Supplies</li> </ul>
Key Applications			
Outstanding Features	<ul style="list-style-type: none"> <li>12x 3.5" SAS3/SATA3 drive bays</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>Redundant 920W Platinum Level high efficiency power supplies</li> </ul>		
Serverboard	SUPER● X10DRH-iT	SUPER● X10DRi-T4+	SUPER● X10DRH-CT
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	<ul style="list-style-type: none"> <li>1 PCI-E 3.0 x16</li> <li>6 PCI-E 3.0 x8</li> <li>Slot 1 &amp; 2 occupied by controller and JBOD expansion port</li> </ul>	<ul style="list-style-type: none"> <li>2 PCI-E 3.0 x16</li> <li>3 PCI-E 3.0 x8</li> <li>1 PCI-E 3.0 x4 (in x8)</li> <li>Slot 3 &amp; 4 occupied by controller and JBOD expansion port</li> </ul>	<ul style="list-style-type: none"> <li>1 PCI-E 3.0 x16</li> <li>6 PCI-E 3.0 x8</li> </ul>
Onboard Storage Controller	<ul style="list-style-type: none"> <li>-E1CR12H: Broadcom® 3108 SAS3 HW RAID controller</li> <li>-E1CR12L: Broadcom® 3008 SAS3 HBA controller</li> </ul>	Broadcom® 3108 SAS3 HW RAID controller card	Broadcom® 3108 SAS3 onboard controller card
Connectivity	Dual LAN with Intel® X540 10GbE-T Ethernet Controller	Quad LAN with Intel® X540 10GbE-T Ethernet Controller	Dual 10GbE-T with Intel® X540 10GbE Controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	<ul style="list-style-type: none"> <li>12x 3.5" hot-swap SAS3/SATA3 drive bay;</li> <li>Optional 4x NVMe hybrid drive bay support (8x 3.5" + 4x NVMe);</li> <li>2x 2.5" optional rear hot-swap drive bay</li> </ul>	<ul style="list-style-type: none"> <li>12x 3.5" hot-swap SAS3/SATA3 drive bay;</li> <li>optional 2x 2.5" internal fixed drive bay</li> </ul>	<ul style="list-style-type: none"> <li>12x 3.5" hot-swap SAS3/SATA3 drive bay;</li> <li>Optional 4x NVMe hybrid drive bay support (8x 3.5" + 4x NVMe)</li> </ul>
Peripheral Bays	N/A	N/A	2x 2.5" optional rear hot-swap drive bay
Power Supply	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans
Form Factor	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U Simply Double Storage**

**24 Bay SAS3 w/ IT Mode**  
**Storage Expandable**

**3U Storage**

**SAS3 HW/IT mode controller**  
**Storage Expandable**

**3U Storage**

**HW SAS3 controller**  
**Storage Expandable**



MODEL	<b>SSG-6028R-E1CR24L</b>	<b>SSG-6038R-E1CR16H</b> <b>SSG-6038R-E1CR16L</b>	<b>SSG-6038R-E1CR16N</b>
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 24x 3.5" Drive in 2U Form Factor</li> <li>• Broadcom® 3008 SAS3 HBA controller</li> <li>• Supports dual 145W CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Mutiple IO Option</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• 16x 3.5" Hot-swap SAS3 drive bays</li> <li>• 130W CPU support</li> <li>• 16 DIMM slots</li> <li>• Dual 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 920W Platinum Level high efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Broadcom® 3108 SAS3 HW RAID controller</li> <li>• 16x 3.5" SAS3/SATA3 drive bays</li> <li>• 130W CPU support</li> <li>• 24 DIMM slots</li> <li>• 4 x 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 920W Platinum Level high efficiency power supply</li> </ul>
Serverboard	SUPER-X10DSC+	SUPER-X10DRH-iT	SUPER-X10DRI-T4+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8	1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8, Slot 1 &2 occupied by controller and JBOD Expansion Port	2 PCI-E 3.0 x16, 3 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8) Slot 3 &4 occupied by controller and JBOD Expansion Port
Onboard Storage Controller	Broadcom® 3008 SAS3 HBA controller	<b>-E1CR16H:</b> Broadcom® 3108 SAS3 HW RAID controller; <b>-E1CR16L:</b> Broadcom® 3008 SAS3 HBA controller	Broadcom® 3108 SAS3 HW RAID controller
Connectivity	SIOM card for multiple IO option	Dual LAN with 10GbE Controller	Quad LAN with Intel® X540 10GbE-T Ethernet Controller
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	AST2400 VGA	AST2400 VGA
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24x 3.5" hot-swap drive bay; Optional 4x NVMe hybrid drive bay support (20x 3.5" +4x NVMe)	16x 3.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay	16x 3.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay
Peripheral Bays	Optional 2x 2.5" rear drive bay to support quad rear 2.5" drives	1 optional Slim DVD-ROM bay	1 optional Slim DVD-ROM bay
Power Supply	1600W Redundant Titanium Level high-efficiency power supplies with I²C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I²C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I²C & PMBus
Cooling System	5x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan
Form Factor	2U Rackmount 437 x 89 x 863.6mm (17.2" x 3.5" x 34"); With Cable Management Arm installed: 41" (1041.4mm)	3U Rackmount 437 x 132 x 647mm (17.2" x 5.2" x 25.5")	3U Rackmount 437 x 132 x 647mm (17.2" x 5.2" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SSG-5048R-E1CR36L	SSG-6048R-E1CR24H SSG-6048R-E1CR24L	SSG-6048R-E1CR24N
Processor Support	Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Connectivity/Storage Computer Nodes</li> <li>• Database Processing &amp; Storage</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Broadcom® 3008 SAS3 HBA controller onboard</li> <li>• Remote management via dedicated IPMI BMC</li> <li>• 36x 3.5" Hot-swap SAS3 bays</li> <li>• External port for JBOD connect</li> </ul>	<ul style="list-style-type: none"> <li>• 24x 3.5" Hot-swap SAS3 bays</li> <li>• 145W CPU support</li> <li>• 16 DIMM slots</li> <li>• Dual 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 920W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Broadcom® 3108 SAS3 HW RAID controller</li> <li>• 24x 3.5" Hot-swap SAS3 bays</li> <li>• 145W CPU support</li> <li>• 24 DIMM slots</li> <li>• 4x 10G BaseT</li> <li>• Dual JBOD Expansion Ports</li> <li>• 920W Platinum Level redundant high-efficiency power supplies</li> </ul>
Serverboard	SUPERMICRO® X10SRH-CLN4F	SUPERMICRO® X10DRH-iT	SUPERMICRO® X10DRI-T4+
Chipset	Intel® C612 Express chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.) <sup>*</sup>	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	4x PCI-E 3.0 (x8/4, x16/8, x8) + 2x PCI-E 2.0 (x8/4, x4/2)	1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8; Slot 1 &2 occupied by controller and JBOD Expansion Port	2 PCI-E 3.0 x16, 3 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8); Slot 3 &4 occupied by controller and JBOD Expansion Port
Onboard Storage Controller	Broadcom® 3008 SAS3 HBA controller onboard	<b>-E1CR24H:</b> Broadcom® 3108 SAS3 HW RAID controller; <b>-E1CR24L:</b> Broadcom® 3008 SAS3 HBA controller	Broadcom® 3108 SAS3 HW RAID controller
Connectivity	4x GbE port, 1x dedicated IPMI port	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	Quad LAN with Intel® X540 10GbE-T Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	36x 3.5" Hot-swap SAS3 bays; 2x 2.5" optional rear hot-swap drive bays	24x 3.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay	24x 3.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	1280W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	7x 80mm middle cooling fans	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan
Form Factor	4U Rackmount 437 x 178 x 699mm (17.2" x 7" x 27.5")	4U Rackmount 437 x 178 x 673mm (17.2" x 7" x 26.5")	4U Rackmount 437 x 178 x 673mm (17.2" x 7" x 26.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**4U Storage**  
High Availability Storage Platform



**4U Storage**  
HW SAS3 controller,  
Storage Expandable



**4U Storage**  
HW SAS3 controller,  
Storage Expandable



MODEL	SSG-6048R-DE2CR24L	SSG-6048R-E1CR36H SSG-6048R-E1CR36L	SSG-6048R-E1CR36N
Processor Support	Redundant dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Redundant DP SBB supporting shared 24x 3.5" HDD</li> <li>• Intel® X540 Dual port 10GbE-T</li> <li>• Dual JBOD expansion ports per node</li> <li>• NV-DIMM support</li> <li>• Up to 3 add-on cards per node</li> <li>• Titanium Level power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Broadcom® 3108 SAS3 HW RAID controller</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> <li>• 145W CPU support</li> <li>• 36x 3.5" Hot-swap SAS3 bays</li> <li>• Dual JBOD Expansion Ports</li> <li>• Dual 10G BaseT</li> <li>• 16 DIMM slots</li> </ul>	<ul style="list-style-type: none"> <li>• Broadcom® 3108 SAS3 HW RAID controller</li> <li>• 145W CPU support</li> <li>• 24 DIMM slots</li> <li>• 36x 3.5" Hot-swap SAS3 bays</li> <li>• Dual JBOD Expansion Ports</li> <li>• 4x 10GbE-T Ports</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> </ul>
Serverboard	Redundant SUPERMICRO X10DRS-4U	SUPERMICRO X10DRH-iT	SUPERMICRO X10DRI-T4+
Chipset	Redundant Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Redundant up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	Redundant 3 PCI-E 3.0 x8 (1x HHHL, 2x LPHL) expansion slots per controller	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8 Slot 1 &2 occupied by controller and JBOD Expansion Port	2 PCI-E 3.0 x16, 3 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8) Slot 3 &4 occupied by controller and JBOD Expansion Port
Onboard Storage Controller	Redundant Broadcom® 3008 SAS controller	<b>-E1CR36H:</b> Broadcom® 3108 SAS3 HW RAID controller <b>-E1CR36L:</b> Broadcom® 3008 SAS3 HBA controller	Broadcom® 3108 SAS3 HW RAID controller
Connectivity	Redundant dual LAN with 10GbE-T with Intel® X540 10GbE Controller per node; 100M private Ethernet between controller nodes	Dual LAN with 10GbE-T with Intel® X540 10GbE Controller	Quad LAN with Intel® X540 10GbE-T Ethernet Controller
VGA/Audio	Redundant AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	Redundant IPMI 2.0 + KVM with dedicated LAN	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Shared 24x 3.5" hot-swap SAS drive bay with SES2	36x 3.5" hot-swap SAS3/SATA3 drive bays; 2x 2.5" optional rear hot-swap drive bays; 4x 2.5" internal fixed drive bays; Optional 4x NVMe hybrid drive bay support (32x 3.5" + 4x NVMe)	36x 3.5" hot-swap SAS3/SATA3 drive bay; 4x 2.5" internal fixed drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1600W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1280W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1280W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	Redundant 2x 4cm PWM cooling fans and 4x 8cm system PWM cooling fans	7x 8cm high-performance PWM fans, air shroud	7x 8cm high-performance PWM fans, air shroud
Form Factor	4U Rackmount 437 x 178 x 648mm (17.2"x7"x25.5")	4U Rackmount 437 x 178 x 699mm (17.2" x 7" x 27.5")	4U Rackmount 437 x 178 x 699mm (17.2" x 7" x 27.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**4U Storage**  
Capacity Maximized  
Top-Loading 45 Bay



We Power the Cloud



**4U Storage**  
60x 3.5" SAS3 Drive Bays,  
w/ IT mode controller, Storage Expandable



**4U Storage**  
60x 3.5" SAS3 Drive Bays,  
w/ IT mode controller, Storage Expandable



MODEL	SSG-6048R-E1CR45L	SSG-6048R-E1CR60L	SSG-6048R-E1CR60N
Processor Support	Intel® Xeon® processor E5-2600 V3 Intel® Xeon® processor E5-2600 V4 with QPI up to Dual 8.0GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; Supports up to 160W	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; Supports up to 160W
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• 45x 3.5" Drive in 4U Form Factor</li> <li>• Supports up to Dual 160W Broadwell CPU</li> <li>• 24 DIMM sockets</li> <li>• Optional 6x NVMe drive bay</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• -H: Broadcom® 3108 SAS3 controller</li> <li>• -L: Broadcom® 3008 SAS3 controller; RAID 0, 1, 10</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• 60x 3.5" Drive in 4U Form Factor</li> <li>• Broadcom® 3008 SAS3 HBA controller</li> <li>• Supports dual 145W CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• Redundant 2000W Titanium Level high-efficiency power supplies</li> <li>• LCD screen</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul> <ul style="list-style-type: none"> <li>• 60x 3.5" Drive in 4U Form Factor</li> <li>• Broadcom® 3108 SAS3 HW RAID controller</li> <li>• Supports dual 145W CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• Redundant 2000W Titanium Level high-efficiency power supplies</li> <li>• LCD screen</li> </ul>
Serverboard	SUPERMICRO® X10DSC+	SUPERMICRO® X10DSC+	SUPERMICRO® X10DSC+
Chipset	Intel® C624 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 1TB 3DS ECC, DDR4-2666MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	3 PCI-E 3.0 x16; 4 PCI-E 3.0 x8;	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8
Onboard Storage Controller	Intel® C624 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Broadcom® 3008 SAS3 HBA controller	Broadcom® 3108 SAS3 HW RAID controller
Connectivity	Dual LAN with 10GbE-T with Intel® X557;	SIOM card for multiple IO option	SIOM card for multiple IO option
VGA/Audio	1 VGA	AST2400 VGA	AST2400 VGA
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	45x 3.5" hot-swap SAS/SATA drive bay with SES3	60x 3.5" hot-swap SAS3/SATA3 drive bays; 6x optional NVMe drive bays	60x 3.5" hot-swap SAS3/SATA3 drive bays; 6x optional NVMe drive bays
Peripheral Bays	2x 2.5" hot-swap drive bay	2x 2.5" rear hot-swap drive bays	2x 2.5" rear hot-swap drive bays
Power Supply	Yes Redundant 2 Qty. PWS-1K66P-1R	2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	5x 80mm rear hot-swap exhaust PWM fan;	5x 8cm hot-swap redundant PWM cooling fans	5x 8cm hot-swap redundant PWM cooling fans
Form Factor	4U Rackmount 437 x 178 x 660mm (17.2" x 7" x 26")	4U Rackmount 447 x 178 x 906mm (17.6" x 7" x 35.66")	4U Rackmount 447 x 178 x 906mm (17.6" x 7" x 35.66")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**4U Double-Sided Storage****4U Top-Loading Storage**

90x 3.5" Drive Bays



MODEL	SSG-6048R-E1CR72L	SSG-6048R-E1CR90L
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• CDN</li> <li>• Media/Streaming</li> <li>• NAS and IP-SAN</li> <li>• Unstructured Data Storage</li> <li>• Virtual Tape</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• High Density 4U Server supports 72x 3.5" SAS3 drives</li> <li>• Supports dual 145W CPU</li> <li>• Supports 16 DIMM DDR4 up to 2133MHz</li> <li>• Support 72x 3.5" SAS3 HDD</li> <li>• 3 Broadcom® 3008 SAS3 HBA controllers</li> <li>• Dual 10G BaseT</li> </ul>	<ul style="list-style-type: none"> <li>• 90x 3.5" Drive in 4U Form Factor</li> <li>• 2 Broadcom® 3008 SAS3 HBA controllers</li> <li>• Support Dual Intel® Boardwell CPU</li> <li>• 8 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• 4x 1000W Titanium Level high-efficiency power supplies</li> <li>• Quad LAN 10G SFP+ LAN ports</li> </ul>
Serverboard	SUPERMICRO® X10DRH-iT	SUPERMICRO® X10DSC-TP4S
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 1TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	3x slots occupied by IT Mode disk controllers Broadcom® 3008; 4x Low profile slots available	N/A
Onboard Storage Controller	3 Broadcom® 3008 SAS3 HBA controllers	2 Broadcom® 3008 SAS3 HBA controllers
Connectivity	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	SIOM card for multiple IO option; On board Quad LAN 10G SFP+ with Intel® X710
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	72x 3.5" hot-swap SAS3/SATA3 drive bays with SES2	90x 3.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	2x 2.5" rear hot-swap drive bays	2x 2.5" rear hot-swap drive bays
Power Supply	2000W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	4x 1000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	7x 92mm hot-swap redundant PWM cooling fans	5x 8cm hot-swap redundant PWM cooling fans
Form Factor	4U Rackmount 437 x 178 x 889mm (17.2"x7"x35")	4U Rackmount 447 x 178 x 906mm (17.6"x7"x35.66")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U SBB Storage**  
SBB JBOD



**3U SBB Storage**  
SBB JBOD



**4U SBB Storage**  
SBB JBOD



MODEL	SSG-927R-E2CJB	SSG-937R-E2CJB	SSG-947-E2CJB
Processor Support	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Key Applications	<ul style="list-style-type: none"> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>High Availability Storage Appliance Platform</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Redundant Hot-Swappable Expander Trays</li> <li>4x SAS3.0 IO ports</li> <li>1200W Titanium Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Redundant hot-swappable expander trays</li> <li>4x SAS 3.0 IO ports</li> <li>1200W Titanium Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Redundant hot-swappable expander trays</li> <li>4x SAS 3.0 IO ports</li> <li>1200W Titanium Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> </ul>
Serverboard	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Chipset	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
System Memory (Max.)*	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Expansion Slots	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Onboard Storage Controller	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Connectivity	4x SAS 3.0 IO ports	4x SAS 3.0 IO ports	4x SAS 3.0 IO ports
VGA/Audio	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Management	IPMI 2.0 with dedicated LAN	IPMI 2.0 with dedicated LAN	IPMI 2.0 with dedicated LAN
Drive Bays	24x 2.5" Drive bays	16x 3.5" hot-swap SAS drive bays	24x 3.5" hot-swap SAS drive bays
Peripheral Bays	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Power Supply	Redundant 1200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C and PMBus	Redundant 1200W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 1200W Platinum Level high-efficiency power supplies
Cooling System	8x 4cm PWM FANS	12x 4cm PWM cooling fans	4x 40mm Fans, 4x 80mm Fans
Form Factor	2U Rackmount 437 x 89 x 622.3mm (17.2" x 3.5" x 24.5")	3U Rackmount 437 x 132 x 647mm (17.2" x 5.2" x 25.5")	4U Rackmount 437 x 178 x 647mm (17.2" x 7" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 GPU

**Intel® Xeon® Scalable Processors Supported (Cascade Lake/Skylake)**



**2/4/6/8/10/16/20 GPUs/Coprocessors in 1U/2U/4U/10U Form Factors**

**Supports up to: 56 Cores per Server • 205W TDP CPUs • 6TB DDR4-2933MHz in 24 DIMMs**

**Supports: 10GBase-T • Redundant Titanium Level (96%) Power Supplies**

**Supports Intel® Optane™ DC Persistent Memory (Cascade Lake)**



**SYS-9029GP-TNVRT (HGX-2 Platform)**

**10U System with 16 GPUs using NVLink and NVSwitch**



**SYS-6049GP-TRT**

- 20 Single Width GPUs
- 20 single width NVIDIA® T4 GPUs
- Dual Intel® Xeon® Scalable Processors (Cascade Lake/Skylake), up to 205W TDP, Dual Root Architecture
- 24x 3.5" Hot Swap drive bays
- 4 Redundant 2000W (2+2) Titanium Level Power Supplies
- 24 DIMM Slots DDR4
- 8 heavy duty fans



**SYS-1029GQ-TVRT**

- 4 GPUs in 1U
- Dual Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)
- 4 NVIDIA® Tesla® V100 with NVLink® in a 1U
- 2x 2.5" Hot Swap NVMe/SAS3/SATA3 Drive Bays
- 12 DIMM Slots DDR4
- 7 Internal Fans

## Maximum Acceleration and Cost Effective Scalability for AI, Deep Learning and HPC Applications

Supermicro GPU systems offer a broad portfolio to suit the most demanding workloads requiring GPU co-processing capabilities. From systems optimized for AI learning environments, inference systems, or HPC applications; Supermicro offers choice in the right system for your needs combined with the flexibility of near limitless configuration options; unlike fixed configuration alternatives.

With support for the 2nd generation Intel® Xeon® processors, Intel® Optane™ DC Persistent Memory, and multiple options for NVMe, SAS or SATA drives the Supermicro GPU systems provide the optimal foundation for maximum performance with the latest in GPU technologies.

To provide the highest performance and lowest latency, NVIDIA® NVLink® and/or NVSwitch® connect multiple NVIDIA® Tesla® V100 GPUs in GPU systems optimized for learning, with a 10U HGX-2 system providing up to 16 V100 GPUs, a 4U system providing up to 8 V100 GPUs, and a 1U system providing up to 4 V100 GPUs. Systems optimized for inferencing are composed of NVIDIA® Tesla® T4 GPUs, with a 4U system providing up to 20 T4 GPUs. Additional models support single or dual PCI-E root complex for high performance optimization.

With a broad line of GPU systems supporting 1, 2, 4, 8, 16 or 20 GPUs across form factors ranging from a dense 1U system through the most powerful 10U system; supporting Scientific Research, 3D Rendering, HPC, Virtual Desktops or AI/Deep Learning is all possible with the highest performing systems available.



## Qualified Platform List (X11 & H11) for NVIDIA Tesla / GRID / Quadro & AMD Radeon Instinct™

Server Models	Description	V100	M60	M10	P100	P40	P4	T4 (70W)	P5000	P6000	MI25	WX9100 WX7100 WX5100 WX4100	
SYS-1029GQ-TVRT	4 GPU	✓											
SYS-1029GQ-TXRT	4 GPU				✓								
SYS-1029GQ-TRT	4 GPU	✓	✓ <sub>j</sub>	✓ <sub>k</sub>	✓	✓							
SYS-1029GQ-TNRT													
SYS-1029GP-TR	3 GPU	✓ <sub>j, m</sub>	✓ <sub>j</sub>	✓ <sub>j, k</sub>	✓ <sub>j, m</sub>	✓ <sub>j</sub>							
SYS-1019GP-TT	2 GPU	✓ <sub>j</sub>	✓ <sub>j</sub>	✓ <sub>j</sub>	✓ <sub>j</sub>	✓ <sub>j</sub>	✓ <sub>j</sub>						
SYS-5019GP-TT													
SYS-2029GP-TR	6 GPU	✓ <sub>j, n</sub>	✓ <sub>j, l</sub>	✓ <sub>j, k</sub>	✓ <sub>j, n</sub>	✓ <sub>j</sub>	✓ <sub>j, o</sub>	✓ <sub>o</sub>					
SYS-4029GP-TVRT	8 GPU	✓											
SYS-4029GP-TRT	8 GPU	✓ <sub>j</sub>			✓ <sub>j</sub>	✓ <sub>j</sub>	✓ <sub>j</sub>		✓ <sub>j</sub>	✓ <sub>j</sub>			
SYS-4029GP-TRT2	10 GPU	✓ <sub>j</sub>			✓ <sub>j</sub>	✓ <sub>j</sub>	✓ <sub>j</sub>		✓ <sub>j</sub>	✓ <sub>j</sub>	✓ <sub>j</sub>		
SYS-7049GP-TRT	4 GPU	✓	✓ <sub>j</sub>	✓ <sub>j, k</sub>	✓	✓ <sub>j</sub>	✓ <sub>j</sub>		✓ <sub>j</sub>	✓ <sub>j</sub>	✓ <sub>j</sub>		
SYS-7039A-i	2 GPU								✓	✓		✓	
SYS-7049A-T	2 GPU								✓	✓		✓	
SYS-1029U-TR4T													
SYS-1029U-TR4													
SYS-1029U-TRT													
SYS-1029U-TRTP													
SYS-1029U-TRTP2													
SYS-1029U-TR25M													
SYS-1029U-TN10RT													
SYS-1029U-E1CR4T													
SYS-1029U-E1CR4													
SYS-1029U-E1CRT													
SYS-1029U-E1CRTP													
SYS-1029U-E1CRTP2													
SYS-1029U-E1CR25M													
SYS-6019U-TR4T													
SYS-6019U-TR4													
SYS-6019U-TRT													
SYS-6019U-TRTP													
SYS-6019U-TRTP2													
SYS-6019U-TR25M													
SYS-6029U-TR4T													
SYS-6029U-TR4													
SYS-6029U-TRT													
SYS-6029U-TRTP													
SYS-6029U-TR25M													
SYS-6029U-E1CR4T													
SYS-6029U-E1CR4													
SYS-6029U-E1CRT													
SYS-6029U-E1CRTP													
SYS-6029U-E1CRTP2													
SYS-6029U-E1CR25M													
SYS-2029U-TR4T													
SYS-2029U-TR4													
SYS-2029U-TRT													
SYS-2029U-TRTP													
SYS-2029U-TR25M													
SYS-2029U-E1CR4T													
SYS-2029U-E1CR4													
SYS-2029U-E1CRT													
SYS-2029U-E1CRTP													
SYS-2029U-E1CRTP2													
SYS-2029U-E1CR25M													
SYS-2029U-TN24R4T	2 GPU (1 if indicated)		✓ <sub>a, d, g, i</sub>	✓ <sub>a, d, h, j</sub>	✓ <sub>b, d, h</sub>	✓ <sub>a, d, g, i</sub>	✓ <sub>a, d, h</sub>	✓ <sub>h, p, q, r (4 GPU)</sub>		✓ <sub>b, d, h, j</sub>	✓ <sub>b, d, h, j</sub>		
AS-4023S-TRT	2 GPU			✓ <sub>a, e, i, j</sub>	✓ <sub>b, e, i</sub>		✓ <sub>a, e, i</sub>	✓ <sub>h, p</sub>		✓ <sub>b, e, i, j</sub>	✓ <sub>b, e, i, j</sub>		
AS-2023US-TR4	2 GPU	✓ <sub>a, s, t, v</sub>				✓ <sub>a, s, t, v</sub>				✓ <sub>b, s, t, v</sub>		✓ <sub>b, s, u, w</sub>	

- ✓ a. Add 1x CBL-PWEX-1016-3 per GPU
- ✓ b. Add 1x CBL-PWEX-1017 per GPU
- ✓ c. Add 8X FAN-0163L4
- ✓ d. For 1 or 2 GPU: Add 4x FAN-0166L4, 2x SNK-P0067PS, 1x MCP-310-21903-OB, 1x MCP-310-21905-OB, 1x RSC-R2UW-2E8E16
- ✓ e. Add 4x FAN-0166L4, 2x SNK-P0067PS, 1x MCP-310-21903-OB, 1x MCP-310-21904-OB
- ✓ f. Top row of drive bays (2, 5, 8, 11) must be unpopulated
- ✓ g. Drive bays 0-3 & 20-23 must be unpopulated
- ✓ h. Can only support CPUs with TDP of 165W or less; the system must be operated at 30°C or below; HDD performance may be impacted so SSDs are recommended
- ✓ i. Can only support CPUs with TDP of 165W or less; the system must be operated at 25°C or below; HDD performance may be impacted so SSDs are recommended
- ✓ j. Passed internal Supermicro validation - NVQual in process
- ✓ k. Supports up to two M10 GPUs
- ✓ l. Supports up to four M60 GPUs
- ✓ m. The system must be operated at 30°C or lower with 2 GPUs, 25°C or lower with 3 GPUs.
- ✓ n. The system must be operated at 30°C or lower with 4 GPUs, 25°C or lower with 6 GPUs.
- ✓ o. MCP-120-21807-0N bracket is required for P4 & T4 GPU installation.
- ✓ p. Add 4x FAN-0166L4.
- ✓ q. For 1 or 2 GPU: Add 1x RSC-R2UW-2E8E16.
- ✓ r. For 3 or 4 GPU: Add 1x RSC-W2-66. For 4 GPU: Also add 1x AOC-2UR66-i4XTF.
- ✓ s. Add GPU Kit, first GPU need to be installed in Slot 5/6,WIO Left. Second GPU need to be installed in Slot 1,UIO right.
- ✓ t. Drive bays 9,10,11 must be unpopulated
- ✓ u. Drive bays 2,5,8,9,10,11 must be unpopulated when installing 2 GPU
- ✓ v. The system must be operated at 30°C or lower with 1 GPU, 25°C or lower with 2 GPUs.
- ✓ w. The system must be operated at 25°C or lower with 1 GPU, 20°C or lower with 2 GPUs.

GPU



MODEL	SYS-1019GP-TT	SYS-5019GP-TT	SYS-1029GP-TR
Processor Support	Intel Xeon Scalable Processors with UPI up to 10.4 GT/s	Intel Xeon Scalable Processors with UPI up to 10.4 GT/s	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake). Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>Astrophysics</li> <li>Chemistry</li> <li>Cloud and Virtualization needs</li> <li>Cloud Computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>3x 3.5" SAS/SATA drive bays</li> <li>512GB DDR3 SDRAM</li> <li>1400W Platinum Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>3x 3.5" SAS/SATA drive bays</li> <li>512GB DDR3 SDRAM</li> <li>1400W Platinum Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM sockets</li> <li>4x 2.5" hot-swap drive bays</li> <li>GPU health monitoring with fan speed control</li> <li>Up to 3 GPU cards in 1U</li> </ul>
Serverboard	SUPERMICRO® X11SPG-TF	SUPERMICRO® X11SPG-TF	SUPERMICRO® X11DPG-SN
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	Up to 4TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM in 16 DIMM slots, Up to 2TB Intel® Optane™ DC Persistent Memory (Cascade Lake only)
Expansion Slots	1 PCI-E 3.0 x16 Center Right Hand Slot, 1 PCI-E 3.0 x16 Left Riser Slot, 1 PCI-E 3.0 x16 Right Riser Slot	1 PCI-E 3.0 x16 Center Right Hand Slot, 1 PCI-E 3.0 x16 Left Riser Slot, 1 PCI-E 3.0 x16 Right Riser Slot	4 PCI-E 3.0 x16; 1 PCI-E 3.0 x8 (in x16) low profile slot
Onboard Storage Controller	Intel® C621 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x 10GBase-T ports; Intel® X540 10GBase-T	2x 10GBase-T ports; Intel® X540 10GBase-T	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	6x 2.5" hot-swap SAS/SATA drive bay	3x 3.5" hot-swap SAS/SATA	2x 2.5" hot-swap NVMe/SAS/SATA drive bays; 2x 2.5" hot-swap SAS/SATA drive bays
Peripheral Bays	1x slim DVD-ROM drive bay 1x USB + COM port tray	N/A	N/A
Power Supply	1400W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1400W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1600W Platinum level efficiency redundant power supplies
Cooling System	8x 4cm high-performance counter-rotating PWM fans with optimal fan speed control;	8x 4cm high-performance counter-rotating PWM fans with optimal fan speed control;	10x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 28.5" (724mm)	1U 17.2" (437mm) x 1.7" (43mm) x 28.2" (716mm)	1U 17.2" (437mm) x 1.7" (43 mm) x 30.6" (777 mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-2029GP-TR	SYS-4029GP-TVRT	SYS-4029GP-TXRT
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Big Data Analytics</li> <li>• High-performance computing</li> <li>• Research lab/National Lab</li> <li>• Astrophysics</li> <li>• Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Big Data Analytics</li> <li>• High-performance computing</li> <li>• Research lab/National Lab</li> <li>• Astrophysics</li> <li>• Business Intelligence</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 10x 2.5" hot-swap drive bays</li> <li>• 16 DIMM sockets</li> <li>• GPU health monitoring with fan speed control</li> <li>• High-density, Enterprise Performance, Cost-effective</li> </ul>	<ul style="list-style-type: none"> <li>• Support 8 Tesla V100 with 300GB/s NVLINK</li> <li>• Support GPUDirect RDMA</li> <li>• Support 8 NVMe SSD</li> <li>• Support up to 205W CPU</li> <li>• Optimized cooling with no GPU pre-heat</li> <li>• 2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Support 8 Tesla P100 with 160GB/s NVLINK</li> <li>• Support up to 205W CPU</li> <li>• Support GPUDirect RDMA</li> <li>• 2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> <li>• Support 8 NVMe SSD</li> </ul>
Serverboard	SUPERMICRO® X11DPG-SN	SUPERMICRO® X11DGO-T	SUPERMICRO® X11DGO-T
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots (2933MHz in two DIMMs per channel supported on Rev 1.10 MB only); Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots (2933MHz in two DIMMs per channel supported on Rev 1.10 MB only); Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
Expansion Slots	6 PCI-E x16 slots; 1 PCI-E x8 (in x16) low profile slot	4 PCI-E Gen3 x16 (GPU tray for GPUDirect RDMA); 2 PCI-E Gen3 x16 (CPU tray)	4 PCI-E Gen3 x16 (GPU tray for GPUDirect RDMA); 2 PCI-E Gen3 x16 (CPU tray)
Onboard Storage Controller	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	N/A	2x 10GbE-T ports; Intel® X540 10GbE-T	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI2.0; SPM; SUM; SuperDoctor® 5;	IPMI2.0; SPM; SUM; SuperDoctor® 5;
Drive Bays	8x 2.5" hot-swap SAS/SATA drive bays; 2x 2.5" hot-swap NVMe/SAS/SATA drive bays	16x 2.5" Hot-wap SATA/SAS drives; Supports 8 NVMe Drives	16x 2.5" Hot-wap SATA/SAS drives; Supports 8 NVMe Drives
Peripheral Bays	N/A	N.A	N.A
Power Supply	2000W Platinum level (94%) efficiency redundant power supplies	2200W(2+2) Redundant Power Supplies Titanium Level (96%+)	2000W(2+2) Redundant Power Supplies Titanium Level (96%+)
Cooling System	5x 8cm heavy duty fans with optimal fan speed control	8x 92mm Cooling Fans	8x 92mm Cooling Fans
Form Factor	2U 17.2" (437mm) x 3.5" (89 mm) x 31" (787 mm)	447 x 178 x 805mm (17.6" x 7.0" x 31.7")	447 x 178 x 805mm (17.6" x 7.0" x 31.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**4U X11 GPU Optimized**  
4U 8/10 GPUs



We Power the Cloud



**4U X11 GPU Optimized**  
4U 8/10 GPUs



**4U X11 GPU**  
4U 8GPU under single root system  
(Cascade mode)



MODEL	SYS-4029GP-TRT	SYS-4029GP-TRT2	SYS-4029GP-TRT3
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Deep Learning Training</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 24 DIMM sockets</li> <li>• 24x 2.5" SATA drives</li> <li>• Support up to 8 GPUs</li> <li>• </li> <li>• Optimized cooling with no GPU pre-heat</li> </ul>	<ul style="list-style-type: none"> <li>• 24 DIMM sockets</li> <li>• 24x 2.5" SATA drives</li> <li>• Support up to 8 GPUs</li> <li>• </li> <li>• Optimized cooling with no GPU pre-heat</li> </ul>	<ul style="list-style-type: none"> <li>• Support up to 8 GPUs</li> <li>• 24x 2.5" hot-swap drive bays</li> <li>• 24 DIMM sockets</li> <li>• Optimized cooling with no GPU pre-heat</li> </ul>
Serverboard	SUPERMICRO® X11DPG-OT-CPU	SUPERMICRO® X11DPG-OT-CPU	SUPERMICRO® X11DPG-OT-CPU
Chipset	Intel® C622 chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots(2933MHz in two DIMMs per channel supported on Rev 1.10 MB only); Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots(2933MHz in two DIMMs per channel supported on Rev 1.10 MB only); Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots(2933MHz in two DIMMs per channel supported on Rev 1.10 MB only); Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	8 PCI-E Gen.3 x16 support up to 8 double width GPU 2 PCI-E Gen.3 x8 1 PCI-E Gen.2 x4	11 PCI-E 3.0 x16 (FH, FL); 1 PCI-E 3.0 x8 (FH, FL, in x16 slot);	10 PCI-E 3.0 x16 (FH, FL); 1 PCI-E 3.0 x8 (FH, FL, in x16 slot);
Onboard Storage Controller	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x 10GbE-T ports; Intel® X540 10GbE-T	2x 10GbE-T ports; Intel® X540 10GbE-T	2x 10GbE-T ports; Intel® X540 10GbE-T
VGA/Audio	1x VGA, Aspeed AST2500 BMC	1x VGA, Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	24x 2.5" Hot-swap SATA/SAS drives	24x 2.5" Hot-swap SATA/SAS drives	22x 2.5" SATA/SAS drive bays; 2x 2.5" NVMe/SATA/SAS drive bays
Peripheral Bays	N.A	N.A	N/A
Power Supply	4x 2000W Redundant Titanium Level high-efficiency power supplies with I²C & PMBus	4x 2000W Redundant Titanium Level high-efficiency power supplies with I²C & PMBus	4x 2000W Redundant (2+2) Titanium Level high-efficiency power supplies
Cooling System	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	437 x 178 x 737mm (17.2" x 7.0" x 29")	437 x 178 x 737mm (17.2" x 7.0" x 29")	4U

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**4U X11 GPU**  
20 Single Width GPUs



**Workstation**  
4U GPU



**Workstation**  
4U GPU



MODEL	SYS-6049GP-TRT	SYS-7049GP-TR	SYS-7049GP-TRT
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	Intel Xeon Scalable Processors with UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Deep Learning Inference</li> <li>Video Transcoding</li> </ul>	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> <li>Simulation and Creation Design</li> <li>Imaging and Computer Vision</li> </ul>	<ul style="list-style-type: none"> <li>Scientific Virtualization</li> <li>High Performance Computing</li> <li>High-End GPU workstation</li> <li>Bio-Informatics</li> <li>Machine Learning</li> <li>Computer Aided Design</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Support up to 20 GPUs</li> <li>24x 3.5" Hot-swap drive bays</li> <li>24 DIMM sockets</li> <li>Optimized cooling with no GPU pre-heat</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM support</li> <li>1620W Redundant Platinum Level high-efficiency power supplies</li> <li>512GB DDR3 SDRAM</li> <li>8 Hot-Swap 3.5" SATA/SAS drive bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>7.1 HD Audio</li> </ul>	<ul style="list-style-type: none"> <li>2200W Redundant Titanium Level high-efficiency power supplies</li> <li>16 DIMM slots</li> <li>8 Hot-Swap 3.5" SATA/SAS Drives</li> <li>7.1 HD Audio Header</li> </ul>
Serverboard	SUPER● X11DPG-OT-CPU	SUPER● X11DPG-QT	SUPER● X11DPG-QT
Chipset	Intel® C622 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots(2933MHz in two DIMMs per channel supported on Rev 1.10 MB only); Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).
Expansion Slots	20 PCI-E 3.0 x16 support up to 20 single width GPU; 1 PCI-E 3.0 x8 (FH, FL in x16 slot)	4 PCI-E 3.0 x16 (double-width), 2 PCI-E 3.0 x8 (1 in x16 slot), 1 PCI-E 2.0 x4 (in x8)	6 PCI-E 3.0 x16 Slots; 1 PCI-E x4(in x8 slot)
Onboard Storage Controller	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x 10GBase-T ports; Intel® X540 10GBase-T	Dual LAN with Intel I350 Gigabit Ethernet controller; Matrox G200ew graphics	2x 10GBase-T ports; Intel® X550 10GBase-T
VGA/Audio	1x VGA, Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	24x 3.5" Hot-swap drives	8 Hot-swap 3.5" SAS/SATA Drives	8 Hot-swap 3.5" Drive Bays; (2x SATA3 ports default)
Peripheral Bays	N.A	3x 5.25" drive bays in storage module - rotates 90° for Rackmount, 1x 3.5" fixed drive bay	N/A
Power Supply	2000W(2+2) Redundant Power Supplies Titanium Level (96%+)	1620W Redundant Platinum Level high-efficiency power supplies with I²C & PMBus	2200W Titanium Level efficiency redundant power supplies
Cooling System	8x 92mm RPM Hot-Swappable Cooling Fans	4x 92x38mm 4-pin PWM Middle Cooling Fans, 4x 80x38mm 4-pin PWM Rear Exhaust Fans	4 heavy duty fans, 4 exhaust fans, and 2 active heat sink w/ Optimal Fan Speed Control
Form Factor	437 x 178 x 737mm (17.2" x 7.0" x 29")	4U	4U Rackmount/Workstation 462 x 178 x 673mm (18.2" x 7.0" x 26.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

GPU

**10U X11 GPU**  
10U System with 16 GPUs using NVLink and NVSwitch



**1U X10 GPU**



**1U X10 GPU**



MODEL	SYS-9029GP-TNVRT	SYS-1018GR-T	SYS-5018GR-T
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	Intel® Xeon® Processor E5-1600 v3 Intel® Xeon® processor E5-2600 v3	Intel® Xeon® Processor E5-1600 v3 Intel® Xeon® processor E5-2600 v3
Key Applications	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Deep Learning Training</li> <li>• High Performance Computing</li> <li>• Autonomous Vehicle Technology</li> </ul>	<ul style="list-style-type: none"> <li>• HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>• HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Support up to 16 GPUs</li> <li>• Supports NVLink and NVSwitch technologies</li> <li>• 16 NVMe 2.5" hot-swap drive bays</li> <li>• 16 PCIe Gen 3.0 x16 LP slots for RDMA via EDR</li> </ul>	<ul style="list-style-type: none"> <li>• 3x 3.5" SAS/SATA drive bays</li> <li>• 512GB DDR3 SDRAM</li> <li>• 1400W Platinum Level high-efficiency power supply</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• UID LED</li> </ul>	<ul style="list-style-type: none"> <li>• 3x 3.5" SAS/SATA drive bays</li> <li>• 512GB DDR3 SDRAM</li> <li>• 1400W Platinum Level high-efficiency power supply</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• UID LED</li> </ul>
Serverboard	SUPERMICRO® X11DPG-HGX2X11DPG-HGX2	SUPERMICRO® X10SRG-F	SUPERMICRO® X10SRG-F
Chipset	Intel® C621 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	512GB Registered ECC, DDR4-2133MHz in 8 DIMM slots	512GB Registered ECC, DDR4-2133MHz in 8 DIMM slots
Expansion Slots	16 PCI-E 3.0 x16 for RDMA via IB EDR; 2 PCI-E 3.0 x16 on MB	2 PCI-E 3.0 x16; 1 PCI-E 3.0 x8;	2 PCI-E 3.0 x16; 1 PCI-E 3.0 x8;
Onboard Storage Controller	Intel® C621 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with 10GbE-T with Intel® X540 10GbE Controller	N/A	N/A
VGA/Audio	1x VGA, Aspeed AST2500 BMC	1 VGA	1 VGA
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor III; Watchdog;	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor III; Watchdog;
Drive Bays	16 hot-swap NVMe 2.5" drive bays; 6 hot-swap SATA 2.5" drive bays	3x 3.5" hot-swap SAS/SATA	3x 3.5" hot-swap SAS/SATA
Peripheral Bays	N/A	1x slim DVD-ROM drive bay 1x USB + COM port tray	1x slim DVD-ROM drive bay 1x USB + COM port tray
Power Supply	6x 3000W Redundant (5+1) Titanium Level Power Supplies	1400W Redundant Platinum Level high-efficiency power supplies with I²C & PMBus	1400W Redundant Platinum Level high-efficiency power supplies with I²C & PMBus
Cooling System	6x 80mm Hot-swap PWM Fans; 8x 92mm hot-swap fan;	8x 4cm high-performance counter-rotating PWM fans with optimal fan speed control;	8x 4cm high-performance counter-rotating PWM fans with optimal fan speed control;
Form Factor	10U Rackmount 437 x 452 x 705mm(17.2" x 17.8" x 27.75")	1U 17.2" (437mm) x 1.7" (43mm) x 28.2" (716mm)	1U 17.2" (437mm) x 1.7" (43mm) x 28.2" (716mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**1U 4-GPU**



**1U 4 Pascal GPUs**



**1U 4-GPU**



MODEL	SYS-1028GQ-TR SYS-1028GQ-TRT	SYS-1028GQ-TXR SYS-1028GQ-TXRT	SYS-1028GQ-TVRT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 (Broadwell) product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> <li>2D/3D and CAD Applications</li> <li>High-performance computing</li> <li>Oil &amp; Gas</li> <li>Cloud and Virtualization needs</li> <li>Astrophysics</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 4 double width GPU cards in 1U</li> <li>Supports 16 DIMM DDR4-2133MHz</li> <li>2000W Redundant Platinum Level high-efficiency power supplies</li> <li>4x 2.5" SATA drives</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>GPU health monitoring with fan speed control</li> </ul>	<ul style="list-style-type: none"> <li>Supports up to 4 Pascal GPUs with 80GB/s NVLink</li> <li>Optimized for GPUDirect RDMA</li> <li>145W CPU support</li> <li>16 DIMM support</li> <li>(96%) Power Supplies</li> <li>2x 2.5" Hot-Swap HDD and internal 2x 2.5" HDD</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>GPU health monitoring with fan speed control</li> </ul>	<ul style="list-style-type: none"> <li>Optimized for GPUDirect RDMA</li> <li>Supports 2000W Redundant Titanium Power Supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>GPU health monitoring with fan speed control</li> </ul>
Serverboard	SUPERMICRO® X10DGQ	SUPERMICRO® X10DGQ	SUPERMICRO® X10DGQ
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC LRDIMM/RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	4 PCI-E 3.0 x16 slots (4x GPU/Coprocessor opt.) 2 PCI-E 3.0 x8 (in x16) low profile slot	3 PCI-E by 16 slots 1 PCI-E by 8 low profile slot	3 PCI-E by 16 slots; 1 PCI-E by 8 low profile slots
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	-TR: Dual LAN with Intel® i350 Gigabit Ethernet controller -TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-TXR: Dual LAN with Intel® i350 Gigabit Ethernet controller -TXRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	Dual LAN with Intel X540 Gigabit Ethernet controller; Matrox G200ew graphics
VGA/Audio	AST2400 VGA	AST2400 VGA	1 VGA, 1 Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SPM; SUM; SuperDoctor® 5; Watchdog;
Drive Bays	2x 2.5" hot-swap SATA drive bays; 2x 2.5" internal HDDs	2x 2.5" hot-swap SATA drive bays; 2x 2.5" internal HDDs	2x 2.5" hot-swap SAS/SATA drive bay; 2x 2.5" internal HDDs
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2000W Platinum Level high-efficiency power supplies	Redundant 2000W Titanium Level high-efficiency power supplies	2000W Redundant Titanium level efficiency redundant power supplies
Cooling System	9x 4cm heavy duty counter-rotating PWM fans with air shroud with optimal fan speed control	9x 4cm heavy duty counter-rotating PWM fans with air shroud with optimal fan speed control	8x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 894mm (17.2" x 1.7" x 35.2")	1U Rackmount 437 x 43 x 894mm (17.2" x 1.7" x 35.2")	437 x 43 x 894mm (17.2" x 1.7" x 35.2")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

GPU

**1U 3-GPU****2U GPU***Tesla® Kepler Ready!***2U GPU***Tesla® Kepler Ready!*

MODEL	<b>SYS-1028GR-TR</b> <b>SYS-1028GR-TRT</b>	<b>SYS-2028GR-TR</b> <b>SYS-2028GR-TRT</b>	<b>SYS-2028GR-TRH</b> <b>SYS-2028GR-TRHT</b>
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s <ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Financial Analysis</li> <li>• High-performance computing</li> <li>• Oil &amp; Gas</li> </ul>	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s <ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Financial Analysis</li> <li>• High-performance computing</li> <li>• Oil &amp; Gas</li> </ul>	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s <ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Financial Analysis</li> <li>• High-performance computing</li> <li>• Oil &amp; Gas</li> </ul>
Key Applications			
Outstanding Features	<ul style="list-style-type: none"> <li>• Supports 16 DIMM DDR4-2133MHz</li> <li>• 4x 2.5" SATA drives</li> <li>• GPU health monitoring with fan speed control</li> <li>• Up to 3 GPUs cards in 1U</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 6 PCI-E 3.0 x16 slots support 6 double-width GPU cards</li> <li>• 10x 2.5" SAS/SATA drive bays</li> <li>• 16 DIMM slots</li> <li>• GPU health monitoring with fan speed control</li> <li>• High-density, Enterprise Performance, Cost-effective</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 6 PCI-E 3.0 x16 slots support 6 double-width GPU cards</li> <li>• 10x 2.5" SAS/SATA drive bays</li> <li>• 16 DIMM slots</li> <li>• GPU health monitoring with fan speed control</li> <li>• High-density, Enterprise Performance, Cost-effective</li> </ul>
Serverboard	-TR: SUPER● X10DRG-H -TRT: SUPER● X10DRG-HT	-TR: SUPER● X10DRG-H -TRT: SUPER● X10DRG-HT	-TRH: SUPER● X10DRG-H -TRHT: SUPER● X10DRG-HT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	3 PCI-E 3.0 x16 slots (3x GPUs/Coprocessor opt.) 1 PCI-E 3.0 x8 (in x16) low profile slot	4x PCI-E 3.0 x16 slots (GPU/Coprocessor opt.); 1 x PCI-E 3.0 x8 (in x16) low profile slot;	6x PCI-E 3.0 x16 slots (GPU/Coprocessor opt.); 1x PCI-E 3.0 x8 (in x16) low profile slot
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10 -TR: Dual LAN with Intel® i350 Gigabit Ethernet controller	Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10 -TR: Dual LAN with Intel® i350 Gigabit Ethernet controller	Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10 -TRH: Dual LAN with Intel® i350 Gigabit Ethernet controller
Connectivity	-TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-TRHT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4x 2.5" hot-swap SAS/SATA drive bays	10 x 2.5" hot-swap SAS/SATA drive bay	10 x 2.5" hot-swap SAS/SATA drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1600W Platinum Level high-efficiency power supplies	Redundant 2000W Platinum Level high-efficiency power supplies	Redundant 2000W Platinum Level high-efficiency power supplies
Cooling System	10x 4cm heavy duty counter-rotating PWM fans with air shroud with optimal fan speed control	5x 8cm heavy duty fans with optimal fan speed control	5x 8cm heavy duty fans with optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 777mm (17.2" x 1.7" x 30.6")	2U Rackmount 437 x 89 x 787mm (17.2" x 3.5" x 31")	2U Rackmount 437 x 89 x 787mm (17.2" x 3.5" x 31")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5028TK-HTR	SYS-4028GP-TRT2	SYS-4028GR-TR SYS-4028GR-TRT
Processor Support	Quad set of Coprocessor (codename Knights Landing); optional integrated Intel® Omni-Path fabric	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• HPC/Cluster</li> <li>• Financial Analysis</li> <li>• Oil and Gas Simulation</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Big Data Analytics</li> <li>• High-performance computing</li> <li>• Research lab/National Lab</li> <li>• Astrophysics</li> <li>• Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Compute Intensive Application</li> <li>• Up to 8 GPUs/Coprocessor in 4U</li> <li>• 24 DIMM slots</li> <li>• 24x 2.5" SATA drives</li> <li>• GPU health monitoring with fan speed control</li> <li>• 4x 1600W Redundant Platinum Level power supplies</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2 low-profile PCI-E x16 slots</li> <li>• Intel® Omni-Path fabric support</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>• 24x 2.5" SATA drives</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 24 DIMM sockets</li> <li>• Supports 8 GPU under one CPU Root</li> <li>• Optimized for GPUDirect RDMA</li> </ul>	<p>-TR: SUPER● X10DRG-O+-CPU, X10DRG-O-PCI-E -RT: SUPER● X10DRG-OT+-CPU, X10DRG-O-PCI-E Intel® C612 chipset</p> <p>Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots</p>
Serverboard	SUPER● K1SPi	SUPER● X11DPG-OT-CPU	<p>-TR: SUPER● X10DRG-O+-CPU, X10DRG-O-PCI-E -RT: SUPER● X10DRG-OT+-CPU, X10DRG-O-PCI-E Intel® C612 chipset</p> <p>Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots</p>
Chipset	Intel® C612 Chipset	Intel® C612 chipset Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots(2933MHz in two DIMMs per channel supported on Rev 1.10 MB only); Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	<p>Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots</p>
System Memory (Max.)*	Quad set of up to 384GB ECC LRDIMM, 192GB ECC RDIMM, DDR4-2400MHz in 6 DIMM slots		
Expansion Slots	Quad set of 2 PCI-E x16 (LP)	11 PCI-E 3.0 x16(FH, FL); 1 PCI-E 3.0 x8(FH, FL, in x16 slot);	8x PCI-E 3.0 x16 (support up to 8 double width GPUs) 2x PCI-E 3.0 x8 1x PCI-E 2.0 x4
Onboard Storage Controller	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Dual LAN with 10GbE-T with Intel® X540 10GbE Controller and 1x Dedicated IPMI portDual LAN with 10GbE-T with Intel® X540 10GbE Controller; Matrox G200ew graphics Aspeed AST2500 BMC	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10 -TR: Dual LAN with Intel® i350 Gigabit Ethernet Controller; -RT: Dual LAN with Intel® X540 10GbE-T Ethernet Controller AST2400 VGA
Connectivity	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
VGA/Audio	AST2400 VGA		
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN		
Drive Bays	Quad set of 3x 3.5" hot-swap SATA drive bays	24x 2.5" HDD drives	24x hot-swap 2.5" SAS/SATA drives
Peripheral Bays	1x slim DVD-ROM drive bay 2x USB 2.0 ports (option)	N/A	N/A
Power Supply	Redundant 2000W Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	4x 2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Four 1600W (2+2) Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control 2U Rackmount	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm RPM Hot-Swappable Cooling Fans 4U Rackmount
Form Factor	438 x 88 x 762mm (17.25" x 3.47" x 30")	4U	437 x 178 x 737mm (17.2" x 7" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**4U 10-GPU**  
Under single CPU root



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**4U 10-GPU**  
Under single CPU root



**4U 8-GPU**



MODEL	SYS-4028GR-TR2	SYS-4028GR-TRT2	SYS-4028GR-TXR
Processor Support	Intel® Xeon® processor E5-2600 v4 with UPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 v4 with UPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4 (Broadwell) product family with UPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Big Data Analytics</li> <li>• High-performance computing</li> <li>• Research lab/National Lab</li> <li>• Astrophysics</li> <li>• Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Big Data Analytics</li> <li>• High-performance computing</li> <li>• Research lab/National Lab</li> <li>• Astrophysics</li> <li>• Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Big Data Analytics</li> <li>• High-performance computing</li> <li>• Research lab/National Lab</li> <li>• Astrophysics</li> <li>• Business Intelligence</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 24x 2.5" SATA drives</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 24 DIMM sockets</li> <li>• Supports 8 GPU under one CPU Root</li> <li>• Optimized for GPUDirect RDMA</li> </ul>	<ul style="list-style-type: none"> <li>• Supports 8 GPU under one CPU Root</li> <li>• Optimized for GPUDirect RDMA</li> <li>• 24x 2.5" SATA drives</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 24 DIMM sockets</li> </ul>	<ul style="list-style-type: none"> <li>• Support 8 Tesla P100 with 80GB/s NVLINK</li> <li>• Support GPUDirect RDMA</li> <li>• Support 8 NVMe SSD</li> <li>• Support up to 160W CPU</li> <li>• Optimized cooling with no GPU pre-heat</li> <li>• 2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> </ul>
Serverboard	SUPER● X10DRG-OT+-CPU	SUPER● X10DRG-OT+-CPU	SUPER● X10DRG-O+-CPU
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB DDR4-2400MHz in 24 DIMM slots	Up to 3TB DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM, 2TB ECC RDIMM
Expansion Slots	11 PCI-E 3.0 x16(FH, FL); 1 PCI-E 3.0 x8(FH, FL, in x16 slot);	11 PCI-E 3.0 x16(FH, FL); 1 PCI-E 3.0 x8(FH, FL, in x16 slot);	4 PCI-E 3.0 x16, 2 PCI-E 3.0 x8
Onboard Storage Controller	Intel® C612 chipset supports SATA3 (6Gbps) with RAID 0, 1, 5, 10	Intel® C612 chipset supports SATA3 (6Gbps) with RAID 0, 1, 5, 10	Intel® C612 chipset SATA3 (6Gbps)
Connectivity	Dual 1GbE LAN ports and 1x Dedicated IPMI portDual LAN with Intel i350 Gigabit Ethernet controller; Matrox G200ew graphics	Dual LAN with 10GbE-T with Intel® X540 10GbE Controller and 1x Dedicated IPMI portDual LAN with 10GbE-T with Intel® X540 10GbE Controller; Matrox G200ew graphics	Dual LAN with Intel® i350 GbE LAN Controller
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI2.0, SPM, SUM, SuperDoctor® 5	IPMI2.0, SPM, SUM, SuperDoctor® 5	IPMI2.0; SPM; SUM; SuperDoctor® 5;
Drive Bays	24x 2.5" HDD drives	24x 2.5" HDD drives	16x 2.5" Hot-swap SATA/SAS drives; Supports 8 NVMe Drives
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x 2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	4x 2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	2000W(2+2) Redundant Power Supplies Titanium Level (96%+)
Cooling System	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm Cooling Fans
Form Factor	4U	4U	447 x 178 x 805mm (17.6" x 7.0" x 31.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**4U 8-GPU**



**4U X10 GPU**



MODEL	SYS-4028GR-TXRT	SYS-4028GR-TVRT
Processor Support	Intel® Xeon® processor E5-2600 v4 product family with QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4 (Broadwell) product family with UPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Big Data Analytics</li> <li>• High-performance computing</li> <li>• Research lab/National Lab</li> <li>• Astrophysics</li> <li>• Business Intelligence</li> </ul> <ul style="list-style-type: none"> <li>• Support 8 Tesla P100 with 80GB/s NVLINK</li> <li>• Support GPUDirect RDMA</li> <li>• Support 8 NVMe SSD</li> <li>• Support up to 160W CPU</li> <li>• Optimized cooling with no GPU pre-heat</li> <li>• 2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Big Data Analytics</li> <li>• High-performance computing</li> <li>• Research lab/National Lab</li> <li>• Astrophysics</li> <li>• Business Intelligence</li> </ul> <ul style="list-style-type: none"> <li>• Support 8 Tesla V100 GPUs with 300GB/s NVLink</li> <li>• Support GPUDirect RDMA</li> <li>• Support 8 NVMe SSD</li> <li>• Support up to 160W CPU</li> <li>• Optimized cooling with no GPU pre-heat</li> <li>• 2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> </ul>
Serverboard	SUPERMICRO® X10DRG-OT+-CPU	SUPERMICRO®
Chipset	Intel® C612 Chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM, 2TB ECC RDIMM
Expansion Slots	4 x PCI-E 3.0 x16 2 x PCI-E 3.0 x8	4 PCI-E 3.0 x16, 2 PCI-E 3.0 x8
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 chipset SATA3 (6Gbps)
Connectivity	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller; Dual LAN with Intel® I350 Gigabit Ethernet controller	N/A
VGA/Audio	Matrox G200ew graphics	Dual LAN with Intel® x540 Ethernet Controller;
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI2.0; SPM; SUM; SuperDoctor® 5;
Drive Bays	24 x 2.5" HDD drive bays	16x 2.5" Hot-swap SATA/SAS drives; Supports 8 NVMe Drives
Peripheral Bays	N/A	N/A
Power Supply	4x 2000W Redundant Titanium Level (96%+) high-efficiency power supplies with I²C & PMBus	2000W(2+2) Redundant Power Supplies Titanium Level (96%+)
Cooling System	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm Cooling Fans
Form Factor	4U Rackmount 447 x 178 x 805mm (17.6" x 7.0" x 31.7")	447 x 178 x 805mm (17.6" x 7.0" x 31.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



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### GPU Workstation Code Optimization



### SuperWorkstation Thunderbolt Support Supports 4 GPUs



MODEL	SYS-5038K-i	SYS-7048GR-TR
Processor Support	Single Intel® Xeon® Phi™ x200 processor (LGA 3647) supported (non-fabric)	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• HPC/Cluster</li> <li>• Financial Analysis</li> <li>• Oil and Gas Simulation</li> <li>• Code Optimization</li> </ul>	<ul style="list-style-type: none"> <li>• HPC cluster computer nodes</li> <li>• Simulation and Creation Design</li> <li>• Imaging and Computer Vision</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Quiet Operation (31 dBA for 215 W CPUs)</li> <li>• Single Intel® Xeon® Phi™ x200 Processor</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Mid Tower ATX Chassis</li> </ul>	<ul style="list-style-type: none"> <li>• 16 DIMM slots</li> <li>• 2000W Redundant Titanium Level high-efficiency power supplies</li> <li>• 16 DIMM slots</li> <li>• 8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 7.1 HD Audio Header</li> <li>• 4 x PCI-E 3.0 x16 slots, 2 x PCI-E 3.0 x8 (1 in x16), 1 x PCI-E 2.0 x4 (in x8)</li> </ul>
Serverboard	SUPERMICRO® K1SPE	SUPERMICRO® X10DRG-Q
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 384GB ECC LRDIMM, 192GB ECC RDIMM, DDR4-2400MHz in 6 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16; 1 PCI-E 3.0 x4	4 PCI-E 3.0 x16 (double-width), 2 PCI-E 3.0 x8 (1 in x16 slot), 1 PCI-E 2.0 x4 (in x8), Support Thunderbolt 2.0 AOC
Onboard Storage Controller	Intel® C612 controller with SATA3 (6 Gbps) ports supporting RAID 0,1,5	Intel® C612 AHCI controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet controller	Dual LAN with Intel® i350 Gigabit Ethernet Controllers
VGA/Audio	Aspeed AST2400 BMC	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	6x 3.5" tool-less HDD trays; 4x 2.5" tool-less HDD trays	8x hot-swap 3.5" SAS/SATA drive bays
Peripheral Bays	2x 5.25" bays	3x 5.25" drive bays in storage module - rotates 90° for Rackmount, 1x 3.5" fixed drive bay
Power Supply	750W Multi-output 80Plus Gold power supply	2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	Dual cooling zones; 2x 120 mm front chassis fans, 1x 80 mm mid chassis fan, 1x 120 mm rear chassis fan, 2x 120 mm radiator exhaust fans, and a closed loop liquid cooling unit	4x 92x38mm 4-pin PWM Middle Cooling Fans, 2x 80x38mm 4-pin PWM Rear Exhaust Fans
Form Factor	Mid-Tower ATX 201 x 460 x 493mm (7.9" x 18.1" x 19.4")	4U Tower 462 x 178 x 673mm (18.2" x 7" x 26.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 BigTwin™/TwinPro™/Twin

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



- **A Full Range of Processors** Up to the highest performing 205 watt TDP CPUs
- **Maximum Memory** 6TB in 24 DIMMs per node
- **All-Flash NVMe** 24 NVMe or Hybrid NVMe/SAS3 drives
- **Double the I/O Capacity** Three PCI-E 3.0 x16 options per node

## 3 UPI BigTwin™

### Features:

- 1 SIOM flexible networking slot
- 2 Low Profile PCI-E 3.0 x16 expansion Slots
- Up to 56 cores with Dual Intel® Xeon® Scalable Processors
- Up to 6TB DDR4-2933 in 24 DIMM Slots
- 4 counter rotating fans support N+1 cooling redundancy
- 2 NVMe/SATA hybrid M.2 w/ optional adapter
- 1 SATA DOM



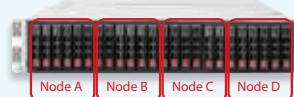
## BigTwin™



### Features:

- 4/2 hot swappable nodes in 2U
- 24 DIMMs per node
- **24 NVMe** Support (-HNR)
- 1 SIOM slot per node
- 2 low-profile PCI-E x16 slots per node
- Quad set of IPMI 2.0 + KVM with dedicated LAN

## TwinPro<sup>2</sup>™/SIOM



## X11 FatTwin™

- **A Full Range of Processors** Up to 165 watt TDP CPUs
- **High Density** 8/4 hot-plug node 4U SuperServer®
- **Power Efficient** Redundant 2200W Titanium Level (96%) Power Supplies
- **Twin Innovation** Based on proven Supermicro Twin Technology



SYS-F619P2-FT  
SYS-F619P3-FT



Front View

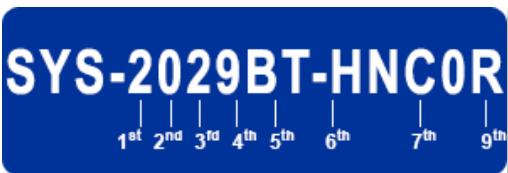


Rear View

SYS-F619P2-FT  
SYS-F619P3-FT

8 DP Nodes, 2x 3.5" or 2.5" drives  
per node, 12 DIMMs, F10

# Twin/TwinPro/BigTwin Naming Guide



## 2.5" Hard Drives

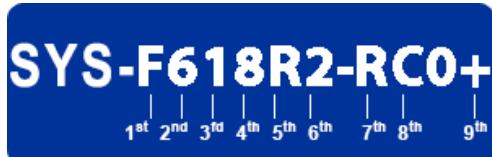
Character	Representation	Options
1st	Form Factor	• 1 = 1U • 2 = 2U
2nd	Reserved	• 0 = Reserved
3rd	Generation	• 2 = Dual processor
4th	System Generation	• 9 = X11 Series • 8 = X10 Series • 7 = X9 Series
5th	Chipset	• BT = BigTwin • TP = TwinPro (X10, X11) • PR = TwinPro (X9) • TK = TwinPro (Xeon® Phi) • TR = Twin
6th	HDD Interface	• 70 = Broadcom 2008 • 71 = Broadcom 2108 • 72 = Broadcom 2208 • 73 = Broadcom 2308 • C0 = SAS3 IT Mode, Broadcom 3008 • C1 = SAS3 HW RAID, Broadcom 3108 • N = NVMe • T = SATA
7th	Power Redundancy	• F: IB FDR / 40G Ethernet • Q: QDR • T: 10GBase-T
8th	Connectivity	• R = Redundant Power Supplies
9th	Power Type	• + = 24 DIMM (X10) / 16 DIMM (older X9)
10th	Others	• F = Onboard BMC (older X9) • -SIOM = SIOM slot (X10)



## 3.5" Hard Drives

Character	Representation	Options
1st	CPU	• 6 = Dual processor
2nd	Reserved	• 0 = Reserved
3rd	Form Factor	• 1 = 1U • 2 = 2U
4th	Generation	• 9 = X11 Series • 8 = X10 Series • 7 = X9 Series
5th	Chipset / System Platform	• BT = BigTwin • TP = TwinPro (X10, X11) • PR = TwinPro (X9) • TK = TwinPro (Xeon® Phi) • TR = Twin
6th	# of Nodes	• D: 2 nodes • H: 4 nodes
7th	Interface / Other	• 70 = Broadcom 2008 • 71 = Broadcom 2108 • 72 = Broadcom 2208 • 73 = Broadcom 2308 • C0 = SAS3 IT Mode, Broadcom 3008 • C1 = SAS3 HW RAID, Broadcom 3108 • N = NVMe • T = SATA
8th	Connectivity	• F: IB FDR / 40G Ethernet • Q: QDR • T: 10GBase-T
9th	Power Type	• R = Redundant Power Supplies
10th	Others	• + = 24 DIMM (X10) / 16 DIMM (older X9) • F = Onboard BMC (older X9) • -SIOM = SIOM slot (X10)

# FatTwin Naming Guide



## FatTwin Servers with 2.5" Hard Drives

Character	Representation	Options
1st	Product Series	• F = FatTwin
2nd	Number of processor(s)	• 5 = UP • 6 = DP • 8 = QP
3rd	Tray Height / Form Factor	• 1 = 1U • 2 = 2U • 4 = 4U
4th	System Generation	• 9 = X11 Series • 8 = X10 Series • 7 = X9 Series
5th	Chipset / Socket / Platform	• P = Socket P • R = Socket R • B = Socket B2 • G = GPU node • H = Hadoop node
6th	HDD/Tray Form Factor	• 2: Half width tray with 2.5" drives • 4: Full width tray with 2.5" drives
7th	I/O Direction	• F = Front I/O • R = Rear I/O
8th	Controller Interface	• 72: Broadcom 2208 controller • 73: Broadcom 2308 controller • T: Intel® SATA • C0: Broadcom 3008 controller • C1: Broadcom 3108 controller
9th and 10th	Additional	• B = Rear HDDs • PT = 10G LAN • + = 16 DIMMs (X9, X10) • L = Cost effective • N = NVMe drives • F = Infiniband 56Gbps

## FatTwin Servers with 3.5" Hard Drives

Character	Representation	Options
1st	Product Series	• F = FatTwin
2nd	Number of processor(s)	• 5 = UP • 6 = DP • 8 = QP
3rd	Tray Height / Form Factor	• 1 = 1U • 2 = 2U • 4 = 4U
4th	System Generation	• 9 = X11 Series • 8 = X10 Series • 7 = X9 Series
5th	Chipset / Socket / Platform	• P = Socket P • R = Socket R • B = Socket B2 • G = GPU node • H = Hadoop node
6th	HDD/Tray Form Factor	• 3: Half width tray with 3.5" drives • 6: Full width tray with 3.5" drives
7th	I/O Direction	• F = Front I/O • R = Rear I/O
8th	Controller Interface	• 72: Broadcom 2208 controller • 73: Broadcom 2308 controller • T: Intel® SATA • C0: Broadcom 3008 controller • C1: Broadcom 3108 controller
9th and 10th	Additional	• B = Rear HDDs • PT = 10G LAN • + = 16 DIMMs (X9, X10) • L = Cost effective • N = NVMe drives • F = Infiniband 56Gbps



**X11 BigTwin**  
Dual DP Nodes,  
24 Hybrid SAS3/NVMe Drive Bays



**X11 BigTwin**  
Dual DP Nodes,  
24 Hybrid NVMe/SAS3 Drive Bays



**X11 BigTwin**  
Quad DP Nodes,  
24 Hybrid NVMe/SAS3 Drive Bays



MODEL	SYS-2029BT-DNC0R	SYS-2029BT-DNR	SYS-2029BT-HNC0R
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>3 PCI-E Add-on cards</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>2 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>3 PCI-E Add-on cards</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2 Low-profile PCI-E X16 slot</li> <li>1 SIOM card support</li> </ul>
Serverboard	SUPER● X11DPT-B	SUPER● X11DPT-B	SUPER● X11DPT-B
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	2 PCI-E 3.0 x8; 1 PCI-E 3.0 x16; 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 x8; 1 PCI-E 3.0 x16; 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Broadcom 3216 SAS3 (12 Gbps) controller; IT mode	NVMe	Broadcom 3008 SAS3 (12Gbps) controller; IT mode
Connectivity	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	4 Hot-swap 2.5" NVMe/SAS drive bays + 8 Hot-swap 2.5" SAS drive bays per node	12 Hot-swap 2.5" NVMe drive bays per node	4 Hot-swap 2.5" NVMe/SAS drive bays + 2 Hot-swap 2.5" SAS drive bays per node
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C&PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C&PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C&PMbus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud
Form Factor	432 x 88 x 711mm (17.6" x 3.47" x 28.75")	447 x 76 x 730mm (17.6" x 3.47" x 28.75")	447 x 88 x 730mm (17.6" x 3.47" x 28.75")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin



MODEL	SYS-2029BT-HNC1R	SYS-2029BT-HNR	SYS-2029BT-HNTR
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>12Gb/s SAS HW RAID &amp; NVMe</li> <li>2 M.2 SATA3 or NVMe support</li> <li>1 Low Profile PCI-E x16 slot</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2 Low-profile PCI-E X16 slot</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>1 M.2 SATA3 or NVMe support</li> <li>2 Low-profile PCI-E X16 slot</li> <li>1 SIOM card support</li> </ul>
Serverboard	SUPERMICRO® X11DPT-B	SUPERMICRO® X11DPT-B	SUPERMICRO® X11DPT-B
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.) <sup>*</sup>	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	1 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Broadcom 3108 SAS3 (12Gbps) RAID controller; RAID 0, 1, 5, 6, 10, 50, 60	NVMe	Intel® C621 controller for SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	4 Hot-swap 2.5" NVMe/SAS drive bays + 2 Hot-swap 2.5" SAS drive bays per node	6 Hot-swap 2.5" NVMe drive bays per node	4 Hot-swap 2.5" NVMe/SATA3 drive bays + 2 Hot-swap 2.5" SATA3 drive bays per node
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C&PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C&PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C&PMbus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud
Form Factor	447 x 88 x 730mm (17.6" x 3.47" x 28.75")	447 x 88 x 730mm (17.6" x 3.47" x 28.75")	447 x 88 x 730mm (17.6" x 3.47" x 28.75")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details



**X11 BigTwin**  
Quad DP Nodes, 24 SATA Drive Bays



**X11 BigTwin 3 UPI**  
Quad DP Nodes, 24 NVMe Drive Bays



MODEL	SYS-2029BT-HTR	SYS-2029BZ-HNR
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>SATA 3.0 (6Gbps) support</li> <li>2 Low-profile PCI-E slots</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2 Low-profile PCI-E X16 slot</li> <li>1 SIOM card support</li> </ul>
Serverboard	SUPERMICRO® X11DPT-B	SUPERMICRO® X11DPT-BH
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	2 PCI-E 3.0 X16(LP) 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Intel C621 SATA (6 Gbps) controller; RAID 0,1,5,10	NVMe
Connectivity	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	6 Hot-swap 2.5" SATA drive bays per node	6 Hot-swap 2.5" NVMe drive bays per node
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I²C&PMBus	Redundant 2600W Titanium Level high-efficiency power supplies with I²C&PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 40x56mm heavy duty PWM fans per node with air shroud
Form Factor	447 x 88 x 730mm (17.6" x 3.47" x 28.75")	447 x 88 x 730mm (17.6" x 3.47" x 28.75")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin

**X11 BigTwin**  
Dual DP Nodes  
12 Hybrid SAS3/NVMe Drive Bays



**X11 BigTwin**  
Quad DP Nodes  
12 Hybrid SAS3/NVMe Drive Bays



MODEL	SYS-6029BT-DNC0R	SYS-6029BT-HNC0R
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>3 PCI-E Add-on cards</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2 Low-profile PCI-E 3.0 x16 slot</li> <li>1 SIOM card support</li> </ul>
Serverboard	SUPERMICRO® X11DPT-B	SUPERMICRO® X11DPT-B
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	2 PCI-E 3.0 x8; 1 PCI-E 3.0 x16; 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 x16(LP), 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Broadcom 3008 SAS3 (12 Gbps) controller; IT mode	Broadcom 3008 SAS3 (12Gbps) controller; IT mode
Connectivity	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	3 Hot-swap 3.5" NVMe/SAS drive bays + 3 Hot-swap 3.5" SAS drive bays per node	3 Hot-swap 3.5" NVMe/SAS drive bays per node
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with i³C&PMBus	Redundant 2200W Titanium Level high-efficiency power supplies with i³C&PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud
Form Factor	447 x 88 x 765mm (17.6" x 3.47" x 30.11")	447 x 88 x 765mm (17.6" x 3.47" x 30.11")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**2U BigTwin™**  
4 hot swappable nodes in 2U,  
Redundant Titanium Level power supplies



**2U BigTwin™**  
4 hot swappable nodes in 2U,  
Redundant Titanium Level power supplies



MODEL	SYS-2028BT-HNC0R+	SYS-2028BT-HNC1R+
Processor Support	Dual Intel® Xeon® Processor ES-2600 v4 product family with UPI up to 9.6 GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-critical applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>SAS3 and NVMe support</li> <li>24 DIMMs per node</li> <li>2 Low-profile PCI-E XI6 slot</li> <li>1 SATA DOM support</li> <li>1 SIOM card support</li> <li>4 Nodes in 2U</li> </ul>	<ul style="list-style-type: none"> <li>24x SAS3 Support (16 can be NVMe)</li> <li>4 hot swappable nodes in 2U</li> <li>2 low profile PCI-E x16 slot</li> <li>24 DIMMs per node</li> <li>1 SIOM card support</li> <li>2 low-profile PCI-E x16 slots</li> <li>2200W High Efficiency (96%) Redundant Power Supplies</li> </ul>
Serverboard	SUPERMICRO® X10DRT-B+	Quad set SUPERMICRO® X10DRT-B+
Chipset	Intel® C612 chipset	Quad set Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS RDIMM, 768GB ECC RDIMM 2400MHz, in 24 DIMM slots per Node.	Quad set up to 3TB ECC 3DS RDIMM, 768GB ECC RDIMM 2400MHz, in 24 DIMM slots per Node
Expansion Slots	2 PCI-E 3.0 XI6(LP) 1SIOM card support Note: Must bundle with Network card.	Quad set 2 PCI-E 3.0 x16 (LP) 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Broadcom 3008 support RAID 0,1,10 per Node	Quad set Broadcom® 3008 SAS controller for 6 SAS3 (12 Gbps) ports per node (4 can be NVMe)
Connectivity	SIOM Networking AOC Matrix	Quad set SIOM Networking AOC Matrix
VGA/Audio	Aspeed AST2400 BMC	Quad set Aspeed AST2400 BMC
Management	Quad set of IPMI2.0+KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS drive bays or 4x NVMe + 2x 2.5" SAS drive bays	Quad set of 6x 2.5" hot-swap SAS3/NVMe drive bays
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMbus
Cooling System	4x 8cm heavy duty PWM fans with air shroud, N/A	4x 8cm heavy duty PWM fans with air shroud
Form Factor	2U Rackmount	2U (4-node) Rackmount

Twin

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-2028BT-HNR+	SYS-2028BT-HNTR+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® processor E5-2600 v4/v3 family3, Socket R3 (LGA 2011) supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-critical applications</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Compute Intensive Application</li> <li>• Enterprise Server</li> <li>• Data Center</li> <li>• HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 4 hot swappable nodes in 2U</li> <li>• 2 low profile PCI-E x16 slot</li> <li>• 24 DIMMs per node</li> <li>• 1 SIOM card support</li> <li>• 2 low-profile PCI-E x16 slots</li> <li>• 2200W High Efficiency (96%) Redundant Power Supplies</li> <li>• -HNR+: 24x NVMe Support</li> </ul>	<ul style="list-style-type: none"> <li>• NVMe Support</li> <li>• 24 DIMMs per node</li> <li>• 1 M.2 SATA3 or NVMe support</li> <li>• 2 Low -profile PCI-E 3.0 x16 slot</li> <li>• 1 SIOM card support</li> <li>• 4 Nodes in 2U</li> </ul>
Serverboard	Quad set SUPERMICRO X10DRT-B+	SUPERMICRO X10DRT-B+
Chipset	Quad set Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Quad set up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM 2400MHz, in 24 DIMM slots per Node	Up to 3TB ECC 3DS RDIMM/LRDIMM, DDR4 up to 2400MHz, in 24 DIMM slots per Node
Expansion Slots	Quad set 2 PCI-E 3.0 x16 (LP) 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 X16(LP), 1 SIOM card support. Note: Must bundle with Network Card
Onboard Storage Controller	Quad set Intel® C612 controller for M.2, NVMe from CPU	Intel® C612 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Quad set SIOM Networking AOC Matrix	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Quad set Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap NVMe drive bays	6 SATA3 or 4 NVMe + 2 SATA3 Hot-swap 2.5" drive bays per node
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMbus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud
Form Factor	2U (4-node) Rackmount	447 x 88 x 730mm (17.6" x 3.47" x 28.75")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**2U BigTwin™**  
4 hot swappable nodes in 2U



**2U BigTwin™**  
4 hot swappable nodes in 2U,  
Redundant Titanium Power



MODEL	SYS-2028BT-HTR+	SYS-6028BT-HNC0R+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4 product family with UPI up to 9.6 GT/s	Quad set of Intel® Xeon® processor E5-2600 v3 Intel® Xeon® processor E5-2600 v4 with UPI up to 9.6GT/s † BIOS version 2.0 or above is required
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 hot swappable nodes in 2U</li> <li>24 DIMMs per node</li> <li>1 SIOM card support</li> <li>2 low-profile PCI-E x16 slots</li> <li>2000w High Efficiency (96%) Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>SAS3 and NVMe support</li> <li>24 DIMMs per node</li> <li>2 PCI-E 3.0 x16 Low Profile slots</li> <li>1 SIOM card support</li> <li>1 SATA DOM support</li> <li>4 Nodes in 2U</li> </ul>
Serverboard	Quad set of SUPERMICRO X10DRT-B+	Quad set of SUPERMICRO X10DRT-B+
Chipset	Quad set of Intel® C612 chipset	Quad set of Intel® C612 chipset
System Memory (Max.)*	Quad set of Up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM 2400MHz, in 24 DIMM slots per Node.	Quad set of Up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM 2400MHz, in 24 DIMM slots per Node.
Expansion Slots	Quad set of 2 PCI-E 3.0 X16(LP) 1 SIOM card support Note: Must bundle with Network Card	Quad set of 2 PCI-E 3.0 (X16) Low Profile slots 1 SIOM card support Note: Must bundle with Network card.
Onboard Storage Controller	Quad set of Intel C612 controller for 6 SATA3(6 Gbps) ports;RAID 0,1,5,10	Quad set of SAS3 support via Broadcom 3008 ; IT mode
Connectivity	Quad set of SIOM Networking AOC Matrix	Quad set of SIOM Networking AOC Matrix
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	Quad set of IPMI 2.0+KVM with dedicated LAN,Intel Node Manager,SUM,SPM,SSM,SuperDoctor 5,Watchdog	Quad set of SIOM Networking AOC Matrix
Drive Bays	Quad set of Quad set of 6x 2.5" hot-swap SATA3 drive bays	3x 3.5" hot-swap SAS drive bays or 3x NVMe drive bays
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I²C & PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I²C & PMbus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud, N/A
Form Factor	2U Rackmount	447 x 88 x 775mm (17.6" x 3.47" x 30.5") Package: 51 x 229 x 1143mm (24.65" x 9.76" x 45.28")

Twin

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



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Twin

### 1U TwinPro

Dual DP Nodes, 4x 2.5" Drive Bays

### 1U TwinPro

Dual DP Nodes, 4x 2.5" Drive Bays

### 1U TwinPro

Dual DP Nodes, 4x 2.5" Drive Bays



MODEL	SYS-1029TP-DC0R	SYS-1029TP-DC1R	SYS-1029TP-DTR
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 1U</li> <li>1 SIOM card support</li> <li>2x PCI-E 3.0 x16 Low-profile slot and 2 x M.2 slot</li> <li>Dual set of 4 hot-swap 2.5" SATA/SAS drive bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1000W Titanium Level High-Efficiency Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 1U</li> <li>1 SIOM card support</li> <li>2x PCI-E 3.0 x16 Low-profile slot and 2 x M.2 slot</li> <li>Dual set of 4 hot-swap 2.5" SATA/SAS drive bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1000W Titanium Level High-Efficiency Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 1U</li> <li>1 SIOM card support</li> <li>2x PCI-E 3.0 x16 Low-profile slot and 2 x M.2 slot</li> <li>Dual set of 4 hot-swap 2.5" SATA drive bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1000W Titanium Level High-Efficiency Redundant Power Supplies</li> </ul>
Serverboard	SUPERMICRO® X11DPT-PS	SUPERMICRO® X11DPT-PS	SUPERMICRO® X11DPT-PS
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	Dual set of: 2 PCI-E 3.0 LP x16; 1x SIOM card support	Dual set of: 2 PCI-E 3.0 LP x16; 1x SIOM card support	Dual set of: 2 PCI-E 3.0 LP x16; 1x SIOM card support
Onboard Storage Controller	Dual set of Broadcom 3008 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5,6,10,50 w/ optional SuperCap	Dual set of Broadcom 3108 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5,6,10,50	Dual set of Intel® C621 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Dual set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card	Dual set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card	Dual set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC;	1 VGA, 1 Aspeed AST2500 BMC;	1 VGA, 1 Aspeed AST2500 BMC;
Management	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Dual set of 4x 2.5" hot-swap SATA/SAS drive bays	Dual set of 4x 2.5" hot-swap SATA/SAS drive bays	Dual set of 4x 2.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1000W Redundant Titanium Level high-efficiency Power Supplies with I²C & PMBus	1000W Redundant Titanium Level high-efficiency Power Supplies with I²C & PMBus	1000W Redundant Titanium Level high-efficiency Power Supplies with I²C & PMBus
Cooling System	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control
Form Factor	437 x 43 x 718mm (17.2" x 1.7" x 28.25")	437 x 43 x 718mm (17.2" x 1.7" x 28.25")	437 x 43 x 718mm (17.2" x 1.7" x 28.25")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**X11 TwinPro™**  
Quad DP Nodes, 24x 2.5" Drive Bays

**X11 TwinPro™**  
Quad DP Nodes, 24x 2.5" Drive Bays

**X11 TwinPro™**  
Quad DP Nodes, 24x 2.5" Drive Bays



MODEL	SYS-2029TP-HC0R	SYS-2029TP-HC1R	SYS-2029TP-HTR
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s
Key Applications	Compute Intensive Application Data Center Enterprise Server Financial Analysis HPC Mission-Critical	Compute Intensive Application Data Center Enterprise Server Financial Analysis HPC Mission-Critical	Compute Intensive Application Data Center Enterprise Server Financial Analysis HPC Mission-Critical
Outstanding Features	2 Low-profile PCI-E 3.0 x16 slots 1 PCI-E 3.0 x16 SIOM LAN Networking slot IPMI 2.0 + KVM with dedicated LAN QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays	2 Low-profile PCI-E 3.0 x16 slots 1 PCI-E 3.0 x16 SIOM LAN Networking slot IPMI 2.0 + KVM with dedicated LAN QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays	2 Low-profile PCI-E 3.0 x16 slots 1 PCI-E 3.0 x16 SIOM LAN Networking slot IPMI 2.0 + KVM with dedicated LAN QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays
Serverboard	SUPERMICRO® X11DPT-PS	SUPERMICRO® X11DPT-PS	SUPERMICRO® X11DPT-PS
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	Quad set of: 2 PCI-E 3.0 LP x16; 1x SIOM LAN Networking card support	Quad set of: 2 PCI-E 3.0 LP x16; 1x SIOM LAN Networking card support	Quad set of: 2 PCI-E 3.0 LP x16; 1x SIOM LAN Networking card support
Onboard Storage Controller	Quad set of Broadcom 3008 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,10	Quad set of Broadcom 3108 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5,6,10,50,60 w/ optional SuperCap	Quad set of Intel® C620 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need one network card installed per node	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need one network card installed per node
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	2200W Redundant Titanium Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	2200W Redundant Titanium Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	2200W Redundant Titanium Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	438 x 88 x 724mm (17.25" x 3.47" x 28.5")	438 x 88 x 724mm (17.25" x 3.47" x 28.5")	438 x 88 x 724mm (17.25" x 3.47" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin



We Power the Cloud

**X11 TwinPro™**  
Dual DP Nodes, 12x 3.5" Drive Bays



**X11 TwinPro™**  
Dual DP Nodes, 12x 3.5" Drive Bays



MODEL	SYS-6029TP-HC0R	SYS-6029TP-HC1R
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2 Low-profile PCI-E 3.0 x16 slots</li> <li>• 1 PCI-E 3.0 x16 SIOM LAN Networking slot</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>• 2 Low-profile PCI-E 3.0 x16 slots</li> <li>• 1 PCI-E 3.0 x16 SIOM LAN Networking slot</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> </ul>
Serverboard	SUPERMICRO® X11DPT-PS	SUPERMICRO® X11DPT-PS
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	Quad set of: 2 PCI-E 3.0 LP x16; 1x SIOM card support	Quad set of: 2 PCI-E 3.0 LP x16; 1x SIOM LAN Networking card support
Onboard Storage Controller	Quad set of Broadcom 3008 SAS3 controller for 3 SATA3(6 Gbps)/SAS3(12Gbps) ports; RAID 0,1,10	Quad set of Broadcom 3108 SAS3 controller for 3 SATA3 (6 Gbps) ports; RAID 0,1,5,6 w/optional SuperCap
Connectivity	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need one network card installed per node	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need one network card installed per node
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 3x 3.5" hot-swap SATA drive bays	Quad set of 3x 3.5" hot-swap SAS/SATA drive bays
Peripheral Bays	N/A	N/A
Power Supply	2200W Redundant Titanium Level high-efficiency Power Supplies with I²C & PMBus	2200W Redundant Titanium Level high-efficiency Power Supplies with I²C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	438 x 88 x 775mm (17.25" x 3.47" x 30.5")	438 x 88 x 775mm (17.25" x 3.47" x 30.5")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details

**1U TwinPro™**  
2 hot swappable nodes in 1U, Redundant Titanium Level power supplies



MODEL	SYS-1028TP-DTFR SYS-1028TP-DC0FR SYS-1028TP-DC1FR	SYS-1028TP-DTR SYS-1028TP-DC0R SYS-1028TP-DC1R	SYS-1028TP-DTTR SYS-1028TP-DC0TR SYS-1028TP-DC1TR
Processor Support	Dual sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Dual set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s, CPU support up to 145W TDP	Dual set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s, CPU support up to 145W TDP
Key Applications	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> <li>2 hot swappable nodes in 1U</li> <li>1x PCI-E 3.0 x16 Low-profile slot and 1x "0" slot</li> <li>Single port FDR (56Gbps) IB w/ QSFP connector</li> <li>Intel® i350-AM2 Dual port GbE LAN</li> <li>900W Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> <li>2 hot swappable nodes in 1U</li> <li>Broadcom® 3108 SAS3 controller (DC1R)</li> <li>Broadcom® 3008 SAS3 controller (DC0R)</li> <li>1x PCI-E 3.0 x16 Low-profile slot and 1x "0" slot</li> <li>Intel® i350-AM2 Dual port GbE LAN</li> <li>1000W Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> <li>2 hot swappable nodes in 1U</li> <li>Broadcom® 3108 SAS3 controller (DC1TR)</li> <li>Broadcom® 3008 SAS3 controller (DC0TR)</li> <li>1x PCI-E 3.0 x16 Low-profile slot and 1x "0" slot</li> <li>Intel® X540 Dual port 10GBase-T LAN</li> <li>1000W Redundant Power Supplies</li> </ul>
Serverboard	SUPERMICRO® X10DRT-PIBF	SUPERMICRO® X10DRT-P	SUPERMICRO® X10DRT-PT
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Dual set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Dual set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Dual set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Dual set of low-profile PCI-E x16; 1x "0" slot	Dual set of Low-profile PCI-E x16 slot 1x "0" slot (-DC0R)	Dual set of Low-profile PCI-E x16 slot 1x "0" slot (-DC0TR)
Onboard Storage Controller	<ul style="list-style-type: none"> <li>-DTFR: Dual set of Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10</li> <li>-DC0FR: Dual set of Broadcom 3008 controller for 4 SAS3(12 Gbps) ports; RAID 0,1,10</li> <li>-DC1FR: Dual set of Broadcom 3108 controller for 4 SAS3(12 Gbps) ports; RAID 0,1,5,6,10</li> </ul>	<ul style="list-style-type: none"> <li>-DTR: Dual set of Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10 ;</li> <li>-DC0R: Dual set of Broadcom® 3008 SW RAID for 4 SAS3 (12 Gbps) ports; RAID 0,1,10;</li> <li>-DC1R: Dual set of Broadcom® 3108 HW RAID for 4 SAS3 (12 Gbps) ports; RAID 0,1,5,6,10</li> </ul>	<ul style="list-style-type: none"> <li>-DTTR: Dual set of Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;</li> <li>-DC0TR: Dual set of Broadcom® 3008 SW RAID for 4 SAS3 (12 Gbps) ports; RAID 0,1,10;</li> <li>-DC1TR: Dual set of Broadcom® 3108 HW RAID for 4 SAS3 (12 Gbps) ports; RAID 0,1,5,6,10</li> </ul>
Connectivity	Dual set of Dual LAN with Intel® i350 Gigabit Ethernet controller Dual set of Single FDR infiniband with Mellanox Connect-X3	Dual set of Dual 1GbE ports with Intel® i350 Ethernet controller	Dual set of Dual 10GBase-T ports with Intel®X540 Ethernet controller
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC;	Dual set of Aspeed AST2400 BMC	Dual set of Aspeed AST2400 BMC
Management	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog
Drive Bays	Dual set of 4x 2.5" hot-swap SATA drive bays	Dual set of 4x 2.5" hot-swap SAS3/SATA3 drive bays	Dual set of 4x 2.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	900W Redundant Titanium Level high-efficiency Power Supplies with I²C & PMBus	1000W Redundant Titanium Level high-efficiency power supplies with I²C & PMBus	1000W Redundant Titanium Level high-efficiency power supplies with I²C & PMBus
Cooling System	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control
Form Factor	1U Rackmount	1U Rackmount	1U Rackmount

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin



We Power the Cloud



(Rear View)



SYS-2028TP-H Series

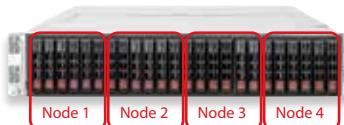
4 DP Nodes in 2U, 24x 2.5" SAS/SATA drives

MODEL	SYS-2028TP-HC0R	SYS-2028TP-HC0FR	SYS-2028TP-HC0TR
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul> <ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul> <ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul> <ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>
Outstanding Features	-HC0R: SUPERMICRO® X10DRT-P	SUPERMICRO® X10DRT-PIBF	SUPERMICRO® X10DRT-PT
Serverboard	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"
Onboard Storage Controller	Quad set of Broadcom® 3008 SW RAID 12Gbps SAS 3.0 controller; RAID 0,1,10	Quad set of Broadcom® 3008 SW RAID 12Gbps SAS 3.0 controller; RAID 0,1,10	Quad set of Broadcom® 3008 SW RAID 12Gbps SAS 3.0 controller; RAID 0,1,10
Connectivity	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Quad set of FDR (Connect-X3) InfiniBand / 40G Ethernet	Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

## 2U TwinPro2™

4 hot-swap nodes in 2U w/ 2.5" or 3.5" HDDs; Intel® Xeon® Processor E5-2600 v4 product family support



SYS-2028TP-H Series

4 DP Nodes in 2U, 24x 2.5" SAS3/SATA drives

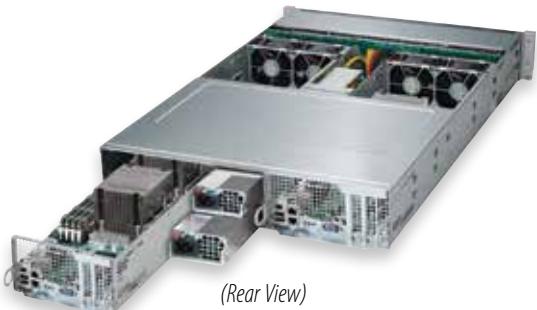
MODEL	SYS-2028TP-HTFR	SYS-2028TP-HTR	SYS-2028TP-HTTR
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>4 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>SAS 3.0, 40G Ethernet, FDR IB</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>4 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>SAS 3.0, 40G Ethernet, FDR IB</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>4 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>SAS 3.0, 40G Ethernet, FDR IB</li> </ul>
Serverboard	SUPERMICRO® X10DRT-PIBF	SUPERMICRO® X10DRT-P	SUPERMICRO® X10DRT-PT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"
Onboard Storage Controller	Quad set of Intel® C612 AHCI controller for 6 SATA3 (6Gbps); RAID 0,1,5,10	Quad set of Intel® C612 AHCI controller for 6 SATA3 (6Gbps); RAID 0,1,5,10	Quad set of Intel® C612 AHCI controller for 6 SATA3 (6Gbps); RAID 0,1,5,10
Connectivity	Quad set of FDR (Connect-X3) InfiniBand / 40G Ethernet	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2000W Titanium Level high-efficiency power supplies with I²C & PMBus	Redundant 2000W Titanium Level high-efficiency power supplies with I²C & PMBus	Redundant 2000W Titanium Level high-efficiency power supplies with I²C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin



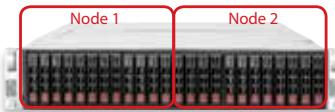
We Power the Cloud



(Rear View)

### 2U TwinPro™

2 hot-swap nodes in 2U w/ 2.5" HDDs, New! Intel® Xeon® Processor E5-2600 v4 product family support



SYS-2028TP-DEC(F)(T)R

Expander to support 12x SAS 3.0 HDDs provided



SYS-2028TP-D Series

2 DP Nodes in 2U, 24x 2.5" SAS3/SATA3 drives

MODEL	SYS-2028TP-DC0R SYS-2028TP-DC1R SYS-2028TP-DECR SYS-2028TP-DTR	SYS-2028TP-DC0FR SYS-2028TP-DECFR	SYS-2028TP-DC0TR SYS-2028TP-DC1TR SYS-2028TP-DTTR
Processor Support	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W <ul style="list-style-type: none"><li>• Compute Intensive Application</li><li>• Data Center</li><li>• Enterprise Server</li><li>• Financial Analysis</li><li>• HPC</li><li>• Mission-Critical</li></ul>	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W <ul style="list-style-type: none"><li>• Compute Intensive Application</li><li>• Data Center</li><li>• Enterprise Server</li><li>• Financial Analysis</li><li>• HPC</li><li>• Mission-Critical</li></ul>	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W <ul style="list-style-type: none"><li>• Compute Intensive Application</li><li>• Data Center</li><li>• Enterprise Server</li><li>• Financial Analysis</li><li>• HPC</li><li>• Mission-Critical</li></ul>
Key Applications			
Outstanding Features	<ul style="list-style-type: none"><li>• 2 hot swappable nodes in 2U</li><li>• IPMI 2.0 + KVM with dedicated LAN</li><li>• SAS3.0 (12Gbps) support</li><li>• 1280W Platinum Level redundant high-efficiency power supplies</li></ul>	<ul style="list-style-type: none"><li>• 2 hot swappable nodes in 2U</li><li>• IPMI 2.0 + KVM with dedicated LAN</li><li>• SAS3.0 (12Gbps) support</li><li>• (full size) mSATA support</li><li>• 12 hot-swap 2.5" SAS/SATA drive bays per node</li></ul>	<ul style="list-style-type: none"><li>• 2 hot swappable nodes in 2U</li><li>• IPMI 2.0 + KVM with dedicated LAN</li><li>• SAS3.0 (12Gbps) support</li><li>• (full size) mSATA support</li><li>• Up to 2 Low Profile Add-On-Cards</li><li>• 1280W Platinum Level redundant high-efficiency power supplies</li></ul>
Serverboard Chipset	SUPERMICRO X10DRT-P Intel® C612 chipset	SUPERMICRO X10DRT-PIBF Intel® C612 Chipset	SUPERMICRO X10DRT-PT Intel® C612 chipset
System Memory (Max.)*	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.  -DC0R/DECR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 "0 slot" -DC1R: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and One GPU/Xeon Phi or internal X16 slot. -DTR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 PCI-E 3.0 x16 for GPU support (with GPU kit)	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.  -DC0R/DECR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 "0 slot" -DC1R: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and One GPU/Xeon Phi or internal X16 slot. -DTR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 PCI-E 3.0 x16 for GPU support (with GPU kit)	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.  -DC0TR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 "0 slot" -DC1TR/DTTR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 PCI-E 3.0 x16 for GPU support (with GPU kit)
Expansion Slots			
Onboard Storage Controller	-DC0R/DECR: Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 -DC1R: Twin set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50,60 -DTR: Twin set of Intel® C612 PCH controller for 8 SATA3 ports; RAID 0,1,5,10,50	-DC0FR: Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 -DECFR: Twin set of FDR (Connect-X3) / 40G Ethernet	-DC0TR: Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 -DC1TR: Twin set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50,60 -DTTR: Twin set of Intel® C612 PCH controller for 8 SATA3 ports; RAID 0,1,5,10,50
Connectivity	Twin set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Twin set of FDR (Connect-X3) / 40G Ethernet	Twin set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GbE-T Connector
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC
Management	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Twin set of 12x 2.5" hot-swap SAS(8)+SATA(4) drive bays	Twin set of 12x 2.5" hot-swap SAS(8)+SATA(4) drive bays	Twin set of 12x 2.5" hot-swap SAS(8)+SATA(4) drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1280W Redundant Platinum Level Digital high-efficiency power supplies with I²C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I²C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I²C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

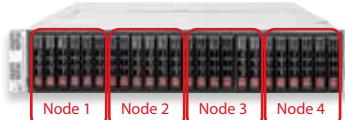
\* Please check with your Supermicro sales representative and website for compatibility and configuration details

## 2U TwinPro2™

4 hot-swap nodes in 2U w/ 2.5" or 3.5" HDDs, Intel® Xeon® Processor E5-2600 v4 product family support



(Rear View)



SYS-2028TP-H Series

4 DP Nodes in 2U, 24x 2.5" SAS/SATA drives

MODEL	SYS-2028TP-HC0R SYS-2028TP-HC1R SYS-2028TP-HTR	SYS-2028TP-HC0TR SYS-2028TP-HC1TR SYS-2028TP-HTTR	SYS-2028TP-HC0FR SYS-2028TP-HC1FR SYS-2028TP-HTFR
Processor Support	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W <ul style="list-style-type: none"><li>• Compute Intensive Application</li><li>• Data Center</li><li>• Enterprise Server</li><li>• Financial Analysis</li><li>• HPC</li><li>• Mission-Critical</li></ul>	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W <ul style="list-style-type: none"><li>• Compute Intensive Application</li><li>• Data Center</li><li>• Enterprise Server</li><li>• Financial Analysis</li><li>• HPC</li><li>• Mission-Critical</li></ul>	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W <ul style="list-style-type: none"><li>• Compute Intensive Application</li><li>• Data Center</li><li>• Enterprise Server</li><li>• Financial Analysis</li><li>• HPC</li><li>• Mission-Critical</li></ul>
Key Applications	<ul style="list-style-type: none"><li>• 1 Low-profile PCI-E x16 slot</li><li>• 4 hot swappable nodes in 2U</li><li>• IPMI 2.0 + KVM with dedicated LAN</li><li>• QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li></ul>	<ul style="list-style-type: none"><li>• 1 Low-profile PCI-E x16 slot</li><li>• 4 hot swappable nodes in 2U</li><li>• IPMI 2.0 + KVM with dedicated LAN</li><li>• QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li></ul>	<ul style="list-style-type: none"><li>• 1 Low-profile PCI-E x16 slot</li><li>• 4 hot swappable nodes in 2U</li><li>• IPMI 2.0 + KVM with dedicated LAN</li><li>• QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li></ul>
Outstanding Features	<b>Serverboard</b> SUPER● X10DRT-P	<b>Serverboard</b> SUPER● X10DRT-PT	<b>Serverboard</b> SUPER● X10DRT-PIBF
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"  <b>-HC0R:</b> Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 <b>-HC1R:</b> Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50 <b>Quad set of Intel® C612 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10</b>	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"  <b>-HC0TR:</b> Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 <b>-HC1TR:</b> Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50 <b>-HTTR:</b> Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"  <b>-HC0FR:</b> Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 <b>-HC1FR:</b> Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50 <b>-HTFR:</b> Quad set of Intel® C612 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Onboard Storage Controller	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GbE-T Connector	Quad set of FDR (Connect-X3) / 40GbE
Connectivity	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC
VGA/Audio	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Management	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays
Drive Bays	N/A	N/A	N/A
Peripheral Bays	2000W Redundant Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	2000W Redundant Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	2000W Redundant Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin



**2U TwinPro™**  
2 hot-swap nodes in 2U w/ up to 4 NVMe per Node



SYS-2028TP-DNC/(T)(F)R

Up to 4x NVMe + 8x SAS 3.0 drives (per node)



SYS-6028TP-DNC/(T)(F)R

Up to 4x NVMe + 2x SAS 3.0 drives (per node), or

Up to 6x SAS 3.0 support (per node)

MODEL	SYS-2028TP-DNCR	SYS-2028TP-DNCFR	SYS-2028TP-DNCTR
Processor Support	Twin sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Twin sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Twin sets of Intel® Xeon® processor E5-2600 V3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul> <ul style="list-style-type: none"> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> <li>NVMe Support</li> <li>Up to 2 Low Profile Add-On-Cards</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul> <ul style="list-style-type: none"> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> <li>NVMe Support</li> <li>Up to 2 Low Profile Add-On-Cards</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul> <ul style="list-style-type: none"> <li>NVMe support</li> <li>Up to 2 Low Profile Add-On-Cards</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> </ul>
Serverboard	SUPERMICRO® X10DRT-P	SUPERMICRO® X10DRT-PIBF	SUPERMICRO® X10DRT-PT
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.
Onboard Storage Controller	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10
Connectivity	Twin set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Twin set of FDR (Connect-X3) / 40G Ethernet	Twin set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC (per node)	1 VGA, 1 Aspeed AST2400 BMC (per node)	1 VGA, 1 Aspeed AST2400 BMC (per node)
Management	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Twin set of 4x NVMe and 8x 2.5" hot-swap SAS drives.	Twin set of 4x NVMe and 8x 2.5" hot-swap SAS drives.	Twin set of 4x NVMe and 8x 2.5" hot-swap SAS drives.
Peripheral Bays	N/A	N/A	N/A
Power Supply	1280W Redundant Platinum Level Digital high-efficiency power supplies with I²C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I²C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I²C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

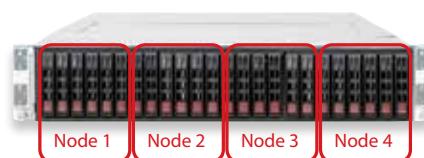
\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud



(Rear View)



SYS-2028TP-H Series

4 DP Nodes in 2U, 24x 2.5" SAS3/SATA3 drives

MODEL	SYS-2028TP-HC0R-SIOM SYS-2028TP-HC1R-SIOM SYS-2028TP-HTTR-SIOM	SYS-6028TP-HC0R SYS-6028TP-HC1R SYS-6028TP-HTR	SYS-6028TP-HC0FR SYS-6028TP-HTFR
Processor Support	Quad sets of Intel® Xeon® processor E5-2600 v3/v4 Socket R4 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2 Low-profile PCI-E slots</li> <li>• 1 SIOM card support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• QUAD set of 3 hot-swap 3.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• QUAD set of 3 hot-swap 3.5" SATA/SAS drive bays</li> </ul>
Serverboard	SUPERMICRO® X10DRT-PS	SUPERMICRO® X10DRT-P	SUPERMICRO® X10DRT-PIBF
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Quad set of up to 2TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2400MHz in 16 DIMM slots.	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	Quad set of: 1 PCI-E 3.0 x16 LP; 1 PCI-E 3.0 x8 LP; 1x SIOM card support	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"
Onboard Storage Controller	<ul style="list-style-type: none"> <li>-HC0R-SIOM: Quad set of Broadcom 3008 SW RAID 12Gbps SAS 3.0 controller for RAID 0,1,10</li> <li>-HC1R-SIOM: Quad set of Broadcom 3108 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5,6,10,50 w/optional SuperCap</li> <li>-HTTR-SIOM: Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10</li> </ul>	<ul style="list-style-type: none"> <li>-HC0R: Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</li> <li>-HC1R: Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,10</li> <li>-HTR: Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10</li> </ul>	<ul style="list-style-type: none"> <li>-HC0FR: Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</li> <li>-HTFR: Quad set of Intel® C612 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10</li> </ul>
Connectivity	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	<ul style="list-style-type: none"> <li>-HC0FR: Quad set of FDR (Connect-X3) / 40G Ethernet</li> <li>-HTFR: Quad set of 3x 3.5" hot-swap SATA drive bays</li> </ul>
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays	Quad set of 3x 3.5" hot-swap SATA drive bays	Quad set of 3x 3.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	2000W Redundant Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	2000W Redundant Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	2000W Redundant Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

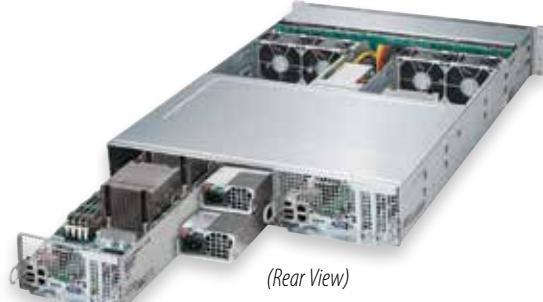
Twin

**2U TwinPro™**  
4 hot-swap nodes in 2U w/ 2.5" or 3.5" HDDs



(Rear View)

**2U TwinPro™**  
2 hot-swap nodes in 2U w/ up to 4 NVMe per Node



(Rear View)

MODEL	SYS-6028TP-HC0TR SYS-6028TP-HC1TR SYS-6028TP-HTTR	SYS-6028TP-DNCR SYS-6028TP-DNCFR
Processor Support	Quad sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Twin sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>4 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>QUAD set of 3 hot-swap 3.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> <li>NVMe Support</li> <li>Up to 2 Low Profile Add-On-Cards</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> </ul>
Serverboard	SUPERMICRO® X10DRT-PT	SUPERMICRO® X10DRT-P
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.
Onboard Storage Controller	<ul style="list-style-type: none"> <li>-HC0TR: Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</li> <li>-HC1TR: Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,10</li> <li>-HTTR: Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10</li> </ul>	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10
Connectivity	<ul style="list-style-type: none"> <li>-HC0TR: Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector</li> <li>-HC1TR: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller</li> <li>-HTTR: Quad set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller</li> </ul>	<ul style="list-style-type: none"> <li>-DNCR: Twin set of Dual LAN with Intel® i350 Gigabit Ethernet controller</li> <li>-DNCFR: Twin set of FDR (Connect-X3) / 40G Ethernet</li> </ul>
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC (per node)
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 3x 3.5" hot-swap SATA drive bays	Twin set of 6x 3.5" hot-swap drive bays. (Max) Up to 4x NVMe + 2x SAS3 drives (per node), or, (Max) Up to 6x SAS3 support (per node)
Peripheral Bays	N/A	N/A
Power Supply	2000W Redundant Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**2U TwinPro™**  
2 hot-swap nodes in 2U w/ up to 4 NVMe per Node



**SIOM Support on 2U TwinPro™**

4 hot-swap nodes in 2U w/ 2.5" HDDs,  
Up to 2 Low Profile PCI-E Cards + 1 SIOM Card



(Rear View)

MODEL	SYS-6028TP-DNCTR	SYS-6028TP-HC0R-SIOM SYS-6028TP-HC1R-SIOM SYS-6028TP-HTR-SIOM
Processor Support	Twin sets of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad sets of Intel® Xeon® processor E5-2600 v3/v4 Socket R4 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	Compute Intensive Application Data Center Enterprise Server Financial Analysis HPC Mission-Critical	Compute Intensive Application Data Center Enterprise Server Financial Analysis HPC Mission-Critical
Outstanding Features	2 hot swappable nodes in 2U IPMI 2.0 + KVM with dedicated LAN SAS3.0 (12Gbps) support NVMe Support Up to 2 Low Profile Add-On-Cards 1280W Platinum Level redundant high-efficiency power supplies	2 Low-profile PCI-E slots 1 SIOM card support IPMI 2.0 + KVM with dedicated LAN QUAD set of 3 hot-swap 3.5" SATA/SAS drive bays
Serverboard	SUPERMICRO X10DRT-PT	SUPERMICRO X10DRT-PS
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Quad set of up to 2TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2400MHz in 16 DIMM slots.
Expansion Slots	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.	Quad set of: 1 PCI-E 3.0 LP x16; 1 PCI-E 3.0 LP x8; 1x SIOM card support
Onboard Storage Controller	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10	-HC0R-SIOM: Quad set of Broadcom 3008 SW RAID 12Gbps SAS 3.0 controller for RAID 0,1,10 -HC1R-SIOM: Quad set of Broadcom 3108 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5 w/optional SuperCap -HTR-SIOM: Quad set of Intel® C612 controller for 3 SATA3 (6 Gbps) ports; RAID 0,1,5
Connectivity	Twin set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC (per node)	1 VGA, 1 Aspeed AST2400 BMC
Management	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Twin set of 6x 3.5" hot-swap drive bays. (Max) Up to 4x NVMe + 2x SAS3 drives (per node), or, (Max) Up to 6x SAS3 support (per node)	Quad set of 3x 3.5" hot-swap SAS/SATA drive bays
Peripheral Bays	N/A	N/A
Power Supply	1280W Redundant Platinum Level Digital high-efficiency power supplies with I <sup>2</sup> C & PMBus	2000W Redundant Platinum Level high-efficiency Power Supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")	438 x 88 x 775mm (17.25" x 3.47" x 30.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

**1U Twin**  
Cost-Optimized, 2 nodes in 1U w/  
4x 3.5" and 8x 2.5" HDDs



**1U Twin**  
Cost-Optimized, 2 nodes in 1U w/  
4x 3.5" and 8x 2.5" HDDs

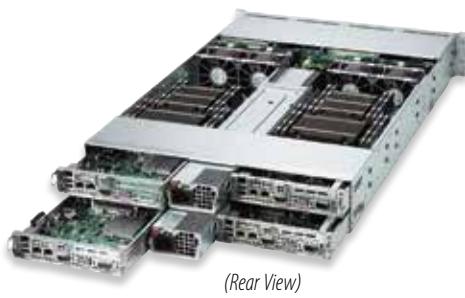


**2U Twin**  
2 hot-swap nodes in 2U



MODEL	SYS-1028TR-T	SYS-1028TR-TF	SYS-2028TR-HTR SYS-2028TR-H72R
Processor Support	Intel® Xeon® processor E5-2600 v3 with UPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 v3 with UPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product family with UPI up to 9.6 GT/s TDP support up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• HPC</li> <li>• Data Center</li> <li>• Front End Server</li> </ul>	<ul style="list-style-type: none"> <li>• HPC</li> <li>• Data Center</li> <li>• Front End Server</li> </ul>	<ul style="list-style-type: none"> <li>• HPC</li> <li>• Virtualization</li> <li>• Data Center</li> <li>• Web Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1000W Titanium Level high-efficiency power supply</li> <li>• 10x 2.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>• 1000W Titanium Level high-efficiency power supply</li> <li>• 10x 2.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 management with dedicated LAN</li> <li>• 56Gbps InfiniBand controller onboard</li> </ul>	<ul style="list-style-type: none"> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 4 hot swappable nodes in 2U</li> <li>• 2 SATA DOM support with embedded power</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPERMICRO® X10DRT-L	SUPERMICRO® X10DRT-LIBF	SUPERMICRO® X10DRT-H
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel C612
System Memory (Max.)*	512GB Registered ECC, DDR4-2133MHz in 8 DIMM slots	512GB Registered ECC, DDR4-2133MHz in 8 DIMM slots	Quad set of 512 GB ECC LRDIMM, 256 GB ECC RDIMM; DDR4-2400MHz in 8 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 (in x16 slot);	1 PCI-E 3.0 x16 (in x16 slot);	Quad set of 1 PCI-E 3.0 x16 Low-profile
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	<b>-HTR:</b> Quad set of SATA3 via Intel C612; SW RAID supports 0,1,5,10, <b>-H72R:</b> Quad set of SAS2 (6Gbps) via Broadcom 2208; HW RAID supports 0, 1, 5, 6, 10, 50
Connectivity	2 Intel® i350 Gigabit Ethernet	2 Intel® i350 Gigabit Ethernet	Quad set of dual LAN with INTEL i350 Gigabit Ethernet controller
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC;	1 VGA, 1 Aspeed AST2400 BMC;	Quad set of Aspeed AST2400 BMC
Management	Intel® Node Manager; IPMI2.0; NMI; SuperDoctor® 5; Watchdog;	Intel® Node Manager; IPMI2.0; NMI; SuperDoctor® 5; Watchdog;	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor III; Watchdog
Drive Bays	8x 2.5" hot-swap SAS/SATA drive bay	8x 2.5" hot-swap SAS/SATA drive bay	Quad set of 6x 2.5" hot-swap SATA drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	1000W High-efficiency redundant (Titanium level) digital power supply	1000W High-efficiency redundant (Titanium level) digital power supply	1600W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	6x 40x56mm counter-rotation PWM fan;	6x 40x56mm counter-rotation PWM fan;	4x 8cm heavy duty fans with PWM fan speed control
Form Factor	1U-Twin 17.2" (437mm) x 1.75" (44.45mm) x 27.75" (705mm)	1U-Twin 17.2" (437mm) x 1.75" (44.45mm) x 27.75" (705mm)	438 x 88 x 724mm (17.25" x 3.47" x 28.5") Package: 671 x 284 x 1011mm (26.4" x 11.2" x 39.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**2U Twin**  
2 hot-swap nodes in 2U



MODEL	SYS-2028TR-H72FR SYS-2028TR-HTFR	SYS-6028TR-HTR	SYS-6028TR-HTFR
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Web Server</li> <li>• HPC</li> <li>• Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Web Server</li> <li>• HPC</li> <li>• Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Web Server</li> <li>• HPC</li> <li>• Virtualization</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Broadcom® 2208</li> <li>• 1600W Redundant Titanium Level high-efficiency power supplies</li> <li>• 8 DIMM slots</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 2x SATADOM</li> <li>• 4 hot-swappable nodes in 2U</li> </ul>	<ul style="list-style-type: none"> <li>• 1600W Redundant Titanium Level high-efficiency power supplies</li> <li>• 8 DIMM slots</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 2x SATADOM</li> <li>• 4 hot-swappable nodes in 2U</li> </ul>	<ul style="list-style-type: none"> <li>• 1600W Redundant Titanium Level high-efficiency power supplies</li> <li>• 8 DIMM slots</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 2x SATADOM</li> <li>• 4 hot-swappable nodes in 2U</li> </ul>
Serverboard	SUPERMICRO® X10DRT-HIBF	SUPERMICRO® X10DRT-H	SUPERMICRO® X10DRT-HIBF
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 Low-profile	Quad set of 1 PCI-E 3.0 x16 Low-profile	Quad set of 1 PCI-E 3.0 x16 Low-profile
Onboard Storage Controller	Quad set of SAS2 (6Gbps) via Broadcom® 2208; HW RAID supports 0,1,5,6,10,50	Quad set of Intel® C612 controller for 3 SATA3 (6 Gbps) ports; RAID 0,1	Quad set of Intel® C612 controller for 3 SATA3 (6 Gbps) ports; RAID 0,1
Connectivity	<ul style="list-style-type: none"> <li>-H72FR: Quad set of dual LAN with Mellanox ConnectX3 single port FDR</li> <li>-HTFR: Quad set of dual LAN with Mellanox ConnectX3 single port FDR</li> </ul>	Quad set of dual LAN with Intel® i350 dual Gigabit Ethernet LAN	Quad set of dual LAN with Mellanox ConnectX3 single port FDR
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS2 HDDs	Quad set of 3x 3.5" hot-swap SATA3 HDDs	Quad set of 3x 3.5" hot-swap SATA3 HDDs
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1600W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 1600W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 1600W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 80mm heavy duty fans with PWM fan speed control	4x 80mm heavy duty fans with PWM fan speed control	4x 80mm heavy duty fans with PWM fan speed control
Form Factor	2U Rackmount 438 x 88 x 679mm (17.25" x 3.47" x 26.75")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin



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**X11 FatTwin™**  
Xeon® SP CPU with 12x 3.5" HDD



**X11 FatTwin™**  
DP Intel® Xeon® Scalable Processors  
with 2x 2.5" SSD/HDD per node



**X11 FatTwin™**  
4U 8-Node, Rear I/O  
6x 2.5" Drive Bays per Node



MODEL	SYS-F619H6-FT	SYS-F619P2-FT	SYS-F619P2-RC0 SYS-F619P2-RTN
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s	Octal set of 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• Hadoop &amp; Ceph storage solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 145W CPU support</li> <li>• support up to 28 cores</li> <li>• 1 Low Profile PCI-E x16 slot</li> <li>• 1 SIOM PCI-E x16 slot</li> <li>• support up to 12x 3.5" HDD</li> <li>• 1200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• support up to 28 cores</li> <li>• 2x 2.5" SATA drives</li> <li>• 1 SIOM PCI-E x16 slot</li> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 1 Low-profile PCI-E x8 slot</li> <li>• 2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• support up to 28 cores</li> <li>• 6x SATA or 4x SATA &amp; 2 NVMe</li> <li>• 1 SIOM PCI-E x16 slot</li> <li>• 2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	Octal set of SUPERMICRO® X11DPFF-SN	Octal set of SUPERMICRO® X11DPFF-SN	Octal set of SUPERMICRO® X11DPFR-SN
Chipset	Octal set of Intel® C621 chipset	Octal set of Intel® C621 chipset	Octal set of Intel® C621 chipset
System Memory (Max.)*	Octal set of Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Octal set of Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	Octal set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	Octal set of 1 PCI-E 3.0 x16(SIOM); 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x8(LP)	1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)
Onboard Storage Controller	Octal set of intel C621 controller with 14 SATA3 ports & Onboard NVMe	Octal set of Intel C620 controller with 12 SATA3 ports	-RC0: Octal set of Broadcom 3008 12Gb/s SAS Controller -RTN: Octal set of intel C621 controller with 14 SATA3 ports
Connectivity	N/A	Octal set of 1GbE Ethernet Connectivity	Must bundle with at least one SIOM network card
VGA/Audio	Octal set of 1 VGA, Aspeed AST2500 BMC	Octal set of 1 VGA, Aspeed AST2500 BMC	1 VGA, Aspeed AST2500 BMC
Management	Octal set of Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Octal set of Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Octal set of Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.
Drive Bays	Octal set of 12x 3.5" internal HDD SATA3	Octal set of Octal set of 2x 2.5" SATA3/NVMe	Octal set of 6x 2.5" Hot Swap SAS 3 or 4x 2.5" Hot Swap SAS 3 & 2 Hot Swap NVMe U.2
Peripheral Bays	N/A	N/A	N/A
Power Supply	1200W high-efficiency Titanium Level redundant power supply w/ PMBus	Four (4x) 2200W high-efficiency Titanium Level redundant power supply w/ PMBus	2200W high-efficiency Titanium Level redundant power supply w/ PMBus
Cooling System	8x 8cm rear fans per chassis	Eight (8x) 8cm 13.5k RPM rear fans per enclosure	3x 4cm 20k RPM middle fans per node
Form Factor	448 x 177 x 737mm (17.63" x 6.96" x 29")	448 x 177 x 737mm (17.63" x 6.96" x 29")	448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



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**X11 FatTwin™**  
4U 8-Node, Rear I/O  
6x 2.5" Drive Bays per Node



**X11 FatTwin™**  
4U 8-Node, Rear I/O  
6x 2.5" Drive Bays per Node



**X11 FatTwin™**  
DP Intel® Xeon® Scalable Processors,  
2x 3.5" SSD/HDD per node



MODEL	SYS-F619P2-RC1	SYS-F619P2-RT	SYS-F619P3-FT
Processor Support	Octal set of 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s	Octal set of 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• support up to 28 cores</li> <li>• 6x SATA or 4x SATA &amp; 2 NVMe</li> <li>• 1 SIOM PCI-E x16 slot</li> <li>• 2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• support up to 28 cores</li> <li>• 6x SATA or 4x SATA &amp; 2 NVMe</li> <li>• 1 SIOM PCI-E x16 slot</li> <li>• 2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• support up to 28 cores</li> <li>• 2x 3.5"SATA drives</li> <li>• 1 SIOM PCI-E x16 slot</li> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 1 Low-profile PCI-E x8 slot</li> <li>• 2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	Octal set of SUPERMICRO® X11DPFR-SN	Octal set of SUPERMICRO® X11DPFR-S	Octal set of SUPERMICRO® X11DPFF-SN
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Octal set of Up to Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Octal set of Up to Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	Octal set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x16(SIOM)
Onboard Storage Controller	Octal set of Broadcom SAS 3108 12Gb/s HW RAID	Octal set of intel C620 controller with 14 SATA3 ports	Octal set of Intel C620 controller with 12 SATA3 ports
Connectivity	Must bundle with at least one SIOM network card	Must bundle with at least one SIOM network card	Octal set of 1GbE Ethernet Connectivity
VGA/Audio	Octal set of 1 VGA, Aspeed AST2500 BMC	Octal set of 1 VGA, Aspeed AST2500 BMC	Octal set of 1 VGA, Aspeed AST2500
Management	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Octal set of Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.
Drive Bays	Octal set of 6x 2.5" Hot Swap SAS 3 HW RAID or 4x 2.5" Hot Swap SAS 3 HW RAID & 2 Hot Swap NMVe U.2	Octal set of 6x 2.5" Hot Swap SATA 3	Octal set of 2x 3.5" SATA3
Peripheral Bays	N/A	N/A	N/A
Power Supply	2200W high-efficiency Titanium Level redundant power supply w/ PMBus	2200W high-efficiency Titanium Level redundant power supply w/ PMBus	Four (4x) 2200W high-efficiency Titanium Level redundant power supply w/ PMBus
Cooling System	3x 4cm 20k RPM middle fans per node	3x 4cm 20k RPM middle fans per node	Eight (8x) 8cm 13.5k RPM rear fans per enclosure
Form Factor	448 x 177 x 737mm (17.63" x 6.96" x 29")	448 x 177 x 737mm (17.63" x 6.96" x 29")	448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin



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**X11 FatTwin™**  
4U 4-Node, Rear I/O  
8 Hot-swap 3.5" Drive Bays per Node

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**X11 FatTwin™**  
4U 4-Node, Rear I/O  
8 Hot-swap 3.5" Drive Bays per Node



MODEL	SYS-F629P3-RC0B SYS-F629P3-RC1B	SYS-F629P3-RTBN	SYS-F629P3-RTB
Processor Support	Quad set of 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s	Quad set of 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s	Quad set of 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• Hadoop &amp; Ceph storage solutions</li> <li>• 6x 3.5" SATA 3 &amp; 2x NVMe U.2</li> <li>• support up to 28 cores</li> <li>• 1 Low Profile PCI-E x16 slot</li> <li>• 1 SIOM PCI-E x16 slot</li> <li>• 1200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• Hadoop &amp; Ceph storage solutions</li> <li>• 6x 3.5" SATA 3 &amp; 2x NVMe U.2</li> <li>• support up to 28 cores</li> <li>• 1 Low Profile PCI-E x16 slot</li> <li>• 1 SIOM PCI-E x16 slot</li> <li>• 1200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• Hadoop &amp; Ceph storage solutions</li> <li>• 8x 3.5" SATA 3</li> <li>• support up to 28 cores</li> <li>• 1200W Redundant Titanium Level high-efficiency power supplies</li> <li>• 1 Low Profile PCI-E x16 slot</li> <li>• 1 SIOM PCI-E x16 slot</li> </ul>
Outstanding Features	Quad set of SUPERIOR X11DPFR-SN	Quad set of SUPERIOR X11DPFR-SN	Quad set of SUPERIOR X11DPFR-S
Serverboard	Quad set of Intel® C621 chipset	Quad set of Intel® C621 chipset	Quad set of Intel® C621 chipset
System Memory (Max.)*	Quad set of Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Quad set of Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Quad set of Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	Quad set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	Quad set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	Quad set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)
Onboard Storage Controller	<ul style="list-style-type: none"> <li>-RC0B: Quad set of Broadcom 3008 12Gb/s SAS Controller</li> <li>-RC1B: Quad set of Broadcom SAS 3108 12Gb/s HW RAID</li> </ul>	Quad set of intel C621 controller with 14 SATA3 ports & Onboard NVMe	Quad set of intel C621 controller with 14 SATA3 ports & Onboard NVMe
Connectivity	Must bundle with at least one SIOM network card	Must bundle with at least one SIOM network card	Must bundle with at least one SIOM network card
VGA/Audio	Quad set of 1 VGA, Aspeed AST2500 BMC	Quad set of 1 VGA, Aspeed AST2500 BMC	Quad set of 1 VGA, Aspeed AST2500 BMC
Management	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.
Drive Bays	<ul style="list-style-type: none"> <li>-RC0B: Quad set of 8x 3.5" Hot Swap SAS 3 or 6x 3.5" Hot Swap SAS 3 &amp; 2 Hot Swap NMVe U.2</li> <li>-RC1B: Quad set of 8x 3.5" SAS 3 HW RAID or 6x 3.5" SAS 3 HW RAID &amp; 2 Hot Swap NMVe U.2</li> </ul>	Quad set of 8x 3.5" Hot Swap SATA 3 or 6 Hot Swap SATA 3 and 2x NVMe U.2	Quad set of 8x 3.5" Hot Swap SATA 3
Peripheral Bays	N/A	N/A	N/A
Power Supply	1200W high-efficiency Titanium Level redundant power supply w/ PMBus	1200W high-efficiency Titanium Level redundant power supply w/ PMBus	1200W high-efficiency Titanium Level redundant power supply w/ PMBus
Cooling System	2x 8cm 14k RPM middle fans per node	2x 8cm 14k RPM middle fans per node	2x 8cm 14k RPM middle fans per node
Form Factor	448 x 177 x 737mm (17.63" x 6.96" x 29")	448 x 177 x 737mm (17.63" x 6.96" x 29")	448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

**FatTwin™**  
HADOOP, 4-Node, 12x 3.5" HDD per node  
Front I/O, 16 DIMMs



**FatTwin™**  
HADOOP, 4-Node,  
12x 3.5" HDD per node



**FatTwin™**  
HADOOP, 4-Node, 12x 3.5" HDD per node  
Front I/O, 16 DIMMs



MODEL	SYS-F618H6-FT+	SYS-F618H6-FTL+	SYS-F618H6-FTPT+ SYS-F618H6-FTPTL+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Hadoop</li> </ul>	<ul style="list-style-type: none"> <li>Hadoop</li> </ul>	<ul style="list-style-type: none"> <li>Hadoop</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 nodes in 4U</li> <li>12x 3.5" drives</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Tool free drive trays and top cover</li> <li>Enhance internal chassis airflow</li> <li>Fan LED indicator</li> </ul>	<ul style="list-style-type: none"> <li>12x 3.5" drives</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>4 nodes in 4U</li> <li>12x 3.5" drives</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Tool free drive trays and top cover</li> <li>Enhance internal chassis airflow</li> <li>Fan LED indicator</li> </ul>
Serverboard	Quad set of SUPERMICRO® X10DRFF-CG	Quad set of SUPERMICRO® X10DRFF-CG	Quad set of SUPERMICRO® X10DRFF-CTG
Chipset	Quad set of Intel® C612 chipset	Quad set of Intel® C612 chipset	Quad set of Intel® C612 chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of 1TB Registered ECC, DDR3-1866MHz 128GB Unbuffered ECC/non-ECC, DDR3-1866MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 2 PCI-E 3.0 x8 LP	Quad set of 2 PCI-E 3.0 x8(LP)	Quad set of 2 PCI-E 3.0 x8 LP
Onboard Storage Controller	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,10; Broadcom® 3008 SW controller for 8 SAS3 (12Gbs) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,10; Broadcom® 3008 SW controller for 8 SAS3 (12Gbs) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,10; Broadcom® 3008 SW controller for 8 SAS3 (12Gbs) ports; RAID 0,1,10
Connectivity	Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Quad set of Intel® i350 Dual Port Gigabit Ethernet	Quad set of Dual 10GbE-T with Intel® X540 10GbE controller
VGA/Audio	Quad set of AST2400 VGA	Quad set of Aspeed AST2400 BMC	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI2.0, SPM, SUM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of Up to 8 Fixed 3.5" SAS3/SATA3 + 4 Fixed 3.5" SATA3 HDDs per U and optional 2.5" drives mounted in the PCI-e slot	Quad set of Up to 8 Fixed 3.5" SAS3/SATA3 + 4 Fixed 3.5" SATA3 HDDs per U and optional 2.5" drives mounted in the PCI-e slot	Quad set of Up to 8 Fixed 3.5" SAS3/SATA3 + 4 Fixed 3.5" SATA3 HDDs per U and optional 2.5" drives mounted in the PCI-e slot
Peripheral Bays	Optional 2.5" drives mounted in the PCI-E slots	Optional 2.5" drives mounted in the PCIe slots	Optional 2.5" drives mounted in the PCI-E slots
Power Supply	2x 2000W Redundant Titanium Level (96%+) power supplies with I <sup>2</sup> C & PMBus	2x 2000W high-efficiency titanium redundant power supply w/ PMBus	2x 2000W Redundant Titanium Level (96%+) power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud and PWM fan speed control	8x 8cm heavy duty fans with air shroud and PWM fan speed control	8x 80mm heavy duty fans with air shroud and PWM fan speed control
Form Factor	4U Rackmount (Recommend 48" depth rack) 448 x 177 x 889mm (17.63" x 6.96" x 35")	448 x 177 x 889mm (17.63" x 6.96" x 35") Package: 650 x 300 x 1219mm (25.6" x 11.8" x 48")	4U Rackmount (Recommend 48" depth rack) 448 x 177 x 889mm (17.63" x 6.96" x 35")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin



We Power the Cloud

**FatTwin™**  
8-Node, Front I/O  
2x 2.5" HDD per Node



**FatTwin™**  
8-Node, Front I/O  
2x 2.5" HDD per Node



**FatTwin™**  
8-Node, 16 DIMMs, Front I/O  
4x 2.5" HDD per Node



MODEL	SYS-F618R2-FC0	SYS-F618R2-FT SYS-F618R2-FT2+	SYS-F618R2-FT+
Processor Support	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 v4 with UPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® processor E5-2600 v4 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Cluster Node</li> <li>• Compute Intensive Application</li> <li>• Data Center</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Compute Intensive Application</li> <li>• HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 1620W Redundant Platinum Level high-efficiency power supplies</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• SAS 3.0 (12 Gbps) support (-FC0)</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• support up to 22 cores</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• SATA 3.0 (6Gbps) support</li> <li>• 1620W Redundant Platinum Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• support up to 22 cores</li> <li>• 16 DIMM support</li> <li>• 1 x16, 1 x4, and 2 x8 optional expansion slots</li> <li>• RAID 0,1,10 (optional with 4 x 2.5" drive bays installed)</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 2000W Redundant Platinum Level high-efficiency power supplies</li> </ul>
Serverboard	SUPERMICRO® X10DRFF-C	SUPERMICRO® X10DRFF	SUPERMICRO® X10DRFF-iG
Chipset	Intel® C612 Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Octal set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Octal set of Up to 512GB, DDR4-2400MHz in 8 DIMM slots	Octal set of 512GB Registered ECC, DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x16 (low-profile)	1 PCI-E 3.0 x16(LP)	Octal set of 1 PCI-E 3.0 x16, 1 PCI-E 2.0 x4, and 2 PCI-E 3.0 x8(optional)
Onboard Storage Controller	Octal set of Broadcom® 3008 controller for 4 SAS 3.0 (12Gbps) ports; RAID 0,1,10;	<p><b>-FT:</b> Octal set of Intel® C612 chipset supports SATA3 (6Gbps) with RAID 0, 1</p> <p><b>-FT2+:</b> Octal set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom® 2208 SAS2 controller onboard; HW RAID 0, 1, 5, 6, 10, 50 support</p>	Octal set of Intel® C612 chipset supports SATA3 (6Gbps) with RAID 0, 1, 5, 10
Connectivity	Octal set of Dual Intel® i210 single port Gigabit Ethernet LAN	Octal set of 2x 1GigE LAN Ports	Octal set of 2x GbE LAN ports and 1x Dedicated IPMI port
VGA/Audio	Octal set of AST2400 VGA	Octal set of 1x VGA, Matrox® G200eW video controller	Octal set of Aspeed AST2400 BMC
Management	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Octal set of IPMI2.0, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	-FC0: Octal set of 2x 2.5" hot-swap SAS3 drive bays	Octal set of 2x 2.5"	Octal set of 4x 2.5" HDD
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 1620W Platinum Level power supplies with I <sup>2</sup> C & PMBus	1620W high-efficiency redundant power supply with PMBus	4x 2000W Redundant Power Supplies Titanium Level (96%)
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	8x 8cm 9.5k RPM rear fans	8x 8cm 9.5k RPM rear fans
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	448 x 177 x 737mm (17.63" x 6.96" x 29")	737 x 177 x 448mm (29" x 6.96" x 17.65")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**FatTwin™**  
8-Node, 16 DIMMs, Front I/O  
4x 2.5" HDD per Node



**FatTwin™**  
8-Node, 16 DIMMs, Front I/O  
6x 2.5" HDD per Node



**FatTwin™**  
8-Node, Rear I/O  
6x 2.5" HDD per Node



MODEL	SYS-F618R2-FTPT+	SYS-F618R2-R72+ SYS-F618R2-RT+	SYS-F618R2-R72PT+ SYS-F618R2-RTPT+
Processor Support	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud and Virtualization</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud and Virtualization</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1x8 and 1x4 PCI-E slots</li> <li>• 4x 2.5" HDD per node</li> <li>• 16 DIMM slots</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• RAID 0,1 support</li> <li>• 2000W Titanium Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>• 1620W Redundant Platinum Level high-efficiency power supplies</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 16 DIMM slots</li> <li>• 6x 2.5" hot-swap SAS2/SATA drive bays per node</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>• 1620W Redundant Platinum Level high-efficiency power supplies</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 16 DIMM slots</li> <li>• 6x 2.5" hot-swap SAS2/SATA drive bays per node</li> </ul>
Serverboard	SUPERMICRO® X10DRFF-iTG	SUPERMICRO® X10DRFR	SUPERMICRO® X10DRFR-NT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x8 (low-profile) and 1 PCI-E 2.0 x4 or 2 PCI-E 3.0 x8 (optional)	Octal set of 1 PCI-E 3.0 x16 (low-profile) and 1 PCI-E 3.0 x8 (MicroLP)	Octal set of 1 PCI-E 3.0 x16 (low-profile) and 1 PCI-E 3.0 x8 (MicroLP)
Onboard Storage Controller	Octal set of Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10	<b>-R72+:</b> Octal set of Broadcom® 2208 controller for 6 SAS 2.0 (6Gbps) ports; RAID 0,1,5,6,10,50 <b>-RT+:</b> Octal set of Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	<b>-R72PT+:</b> Octal set of Broadcom® 2208 controller for 6 SAS 2.0 (6Gbps) ports; RAID 0,1,5,6,10,50 <b>-RTPT+:</b> Octal set of Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Octal set of Dual LAN with Intel® X540 10GbE-T Ethernet Controller	Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Octal set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GbE-T Connector
VGA/Audio	Octal set of AST2400 VGA	Octal set of AST2400 VGA	Octal set of AST2400 VGA
Management	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Octal set of 4x 2.5" SATA3 fixed drive bays	Octal set of 6x 2.5" hot-swap SAS2/SATA3 drive bays <b>-RT+:</b>	Octal set of 6x 2.5" hot-swap SAS2/SATA3 drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 2000W Titanium Level (96%)+ Digital power supplies with I²C & PMBus	4x Redundant 1620W Platinum Level (94%)+ power supplies with I²C & PMBus	4x Redundant 1620W Platinum Level (94%)+ power supplies with I²C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**FatTwin™**  
8-Node Rear I/O, 6x 2.5" HDD per Node



Rear View

MODEL	SYS-F618R2-RC0+ SYS-F618R2-RC1+	SYS-F618R2-RTN+	SYS-F618R2-RCOPT+ SYS-F618R2-RC1PT+ SYS-F618R2-RTPTN+
Processor Support	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Cloud and Virtualization</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• 145W CPU support</li> <li>• Supports 16 DIMM DDR4 up to 2400MHz</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>• 6 x 2.5" Hot-Swap SAS/SATA drives (Per Node)</li> <li>• Optional NVMe support</li> <li>• Broadcom® 3008 controller onboard</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud and Virtualization</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 145W CPU support</li> <li>• 16 DIMM slots</li> <li>• 2000W Redundant Titanium Level (96%+) high-efficiency power supplies</li> <li>• 2x 1G or 10G Ethernet</li> <li>• NVMe Support</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud and Virtualization</li> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC cluster computer nodes</li> <li>• 145W CPU support</li> <li>• Supports 16 DIMM DDR4 up to 2400MHz</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>• 6 x 2.5" Hot-Swap SAS/SATA drives (Per Node)</li> <li>• Optional NVMe support</li> </ul>
Serverboard	SUPERMICRO® X10DRFR-N	SUPERMICRO® X10DRFR-N	SUPERMICRO® X10DRFR-NT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x16 (LP) and 1 PCI-E 3.0 x8 (MicroLP)	Octal set of 1 PCI-E 3.0 x16 (LP) and 1 PCI-E 3.0 x8 (MicroLP)	Octal set of 1 PCI-E 3.0 x16 (LP) and 1 PCI-E 3.0 x8 (MicroLP)
Onboard Storage Controller	<ul style="list-style-type: none"> <li>-RC0+: Octal set of Broadcom® 3008 controller for 6 SAS 3.0 (12Gbps) ports; RAID 0,1,10;</li> <li>-RC1+: Octal set of 6 SAS3 (12Gbps) ports; or 4x SAS3 + 2x NVMe optional SSDs; SAS3 support via Broadcom® 3108; RAID 0,1,5,6,10,50</li> </ul>	Octal set of Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10	<ul style="list-style-type: none"> <li>-RCOPT+: Octal set of Broadcom® 3008 controller for 6 SAS 3.0 (12Gbps) ports; RAID 0,1,10;</li> <li>-RC1PT+: Octal set of Broadcom 3008 SAS3 (12Gbps) HBA/SW RAID 0, 1, 10 support</li> <li>-RC1PT+: Octal set of 6 SAS3 (12Gbps) ports; or 4x SAS3 + 2x NVMe optional SSDs; SAS3 support via Broadcom® 3108; RAID 0,1,5,6,10,50</li> <li>-RTPTN+: Octal set of Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10</li> </ul>
Connectivity	Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Octal set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	Octal set of AST2400 VGA	Octal set of AST2400 VGA	Octal set of AST2400 VGA
Management	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Octal set of 6x SAS3/SATA3; or, 4x SAS3/SATA3	Octal set of 6x 2.5" hot-swap SATA3 drive bays; or, 4x SATA3	Octal set of 6x SAS3/SATA3 or 4x SAS3/SATA3
Peripheral Bays	Octal set of 2x NVMe optional	Octal set of 2x NVMe optional	Octal set of 2x NVMe optional
Power Supply	4x Redundant 2000W Titanium Level (96%+) power supplies with I²C & PMBus	4x Redundant 2000W Titanium Level (96%+) power supplies with I²C & PMBus	4x Redundant 2000W Titanium Level (96%+) power supplies with I²C & PMBus
Cooling System	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**FatTwin™**  
4 DP Nodes, 3 GPUs/Coprocessor per Node, Front I/O, 16 DIMMs



MODEL	SYS-F628G2-FC0+ SYS-F628G2-FC0PT+	SYS-F628G2-FT+ SYS-F628G2-FTPT+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Up to 3 GPUs/Coprocessor per node* (*2x K80 per node)</li> <li>• 145W CPU support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 2 add-on cards</li> <li>• SAS3 (12Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 3 GPUs/Coprocessor per node* (*2x K80 per node)</li> <li>• 145W CPU support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 2 add-on cards</li> <li>• SAS3 (12Gbps) support</li> </ul>
Serverboard	<p>-FC0+: SUPERMICRO® X10DRFF-CG</p> <p>-FC0PT+: SUPERMICRO® X10DRFF-CTG</p>	<p>-FT+: SUPERMICRO® X10DRFF-iG</p> <p>-FTPT+: SUPERMICRO® X10DRFF-iTG</p>
Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 3 PCI-E 3.0 x16 FH/FL Double Width + 2 PCI-E 3.0 x8 LP	Quad set of 3 PCI-E 3.0 x16 FH/FL Double Width + 2 PCI-E 3.0 x8 LP
Onboard Storage Controller	Quad set of Broadcom® 3008 SW controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	<p>-FC0+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller;</p> <p>-FC0PT+: Quad set of Dual 10GBase-T with Intel® X540 10GbE Controller</p>	<p>-FT+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller;</p> <p>-FTPT+: Quad set of Dual 10GBase-T with Intel® X540 10GbE Controller</p>
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SATA3/SAS3 drive bays	Quad set of 6x 2.5" hot-swap SATA3/SAS3 drive bays
Peripheral Bays	N/A	N/A
Power Supply	4x Redundant 2000W Titanium Level power supplies with I <sup>2</sup> C & PMBus	4x Redundant 2000W Titanium Level power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional fans available	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional fans available
Form Factor	4U Rackmount: 448 x 177 x 889mm (17.63" x 6.96" x 35")	4U Rackmount: 448 x 177 x 889mm (17.63" x 6.96" x 35")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin

**FatTwin™**  
4 DP Nodes, 3 GPUs/Coprocessor per Node, Front I/O, 16 DIMMs



We Power the Cloud



MODEL	SYS-F628G3-FC0+ SYS-F628G3-FC0PT+	SYS-F628G3-FT+ SYS-F628G3-FTPT+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Up to 3 GPUs/Coprocessor per node* (*2x K80 per node)</li> <li>• 145W CPU support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 2 add-on cards</li> <li>• SAS3 (12Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 3 GPUs/Coprocessor per node* (*2x K80 per node)</li> <li>• 145W CPU support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 2 add-on cards</li> <li>• SAS3 (12Gbps) support</li> </ul>
Serverboard	<p>-FC0+: SUPERMICRO® X10DRFF-CG</p> <p>-FC0PT+: SUPERMICRO® X10DRFF-CTG</p>	<p>-FT+: SUPERMICRO® X10DRFF-iG</p> <p>-FTPT+: SUPERMICRO® X10DRFF-iTG</p>
Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 3 PCI-E 3.0 x16 FH/FL Double Width + 2 PCI-E 3.0 x8 LP	Quad set of 3 PCI-E 3.0 x16 FH/FL Double Width + 2 PCI-E 3.0 x8 LP
Onboard Storage Controller	Quad set of Broadcom® 3008 SW controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	<p>-FC0+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller;</p> <p>-FC0PT+: Quad set of Dual LAN with Intel® X540 10GbE-T Ethernet Controller</p>	<p>-FT+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller;</p> <p>-FTPT+: Quad set of Dual LAN with Intel® X540 10GbE-T Ethernet Controller</p>
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 2x 3.5" hot-swap SATA3/SAS3 drive bays	Quad set of 2x 3.5" hot-swap SATA3/SAS3 drive bays
Peripheral Bays	N/A	N/A
Power Supply	4x Redundant 2000W Titanium Level power supplies with I <sup>2</sup> C & PMBus	4x Redundant 2000W Titanium Level power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional fans available	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional fans available
Form Factor	4U Rackmount : 448 x 177 x 889mm (17.63" x 6.96" x 35")	4U Rackmount : 448 x 177 x 889mm (17.63" x 6.96" x 35")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

### FatTwin™

8-Node Front I/O, Serviceability & Efficiency!

### FatTwin™

4 DP Nodes, Front I/O, 16 DIMMs

### FatTwin™

4 DP Nodes, Front I/O, 16 DIMMs



MODEL	SYS-F628R2-FC0	SYS-F628R2-FC0+ SYS-F628R2-FC0PT+	SYS-F628R2-FT+ SYS-F628R2-FTPT+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Cluster Node</li> <li>• Data Center</li> <li>• HPC</li> <li>• Internet</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Compute Intensive Application</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Broadcom® 3008 SAS 3.0 (12 Gbps) support (-FC0)</li> </ul>	<ul style="list-style-type: none"> <li>• 2x PCI-E Gen 3.0 x8 (LP)</li> <li>• 16 DIMM slots</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• SAS3 (12 Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>• 2x PCI-E Gen 3.0 x8 (LP)</li> <li>• 16 DIMM slots</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• SAS3 (12 Gbps) support</li> </ul>
Serverboard	SUPERMICRO® X10DRFF-C	-FC0+: SUPERMICRO® X10DRFF-CG -FC0PT+: SUPERMICRO® X10DRFF-CGT	-FT+: SUPERMICRO® X10DRFF-iG -FTPT+: SUPERMICRO® X10DRFF-iGT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 (low-profile)	Quad set of 2 PCI-E 3.0 x8 (low-profile)	Quad set of 2 PCI-E 3.0 x8 (low-profile)
Onboard Storage Controller	Quad set of Broadcom® 3008 controller for 8 SAS 3.0 (12Gbps) ports; RAID 0,1,10	Quad set of Broadcom® 3008 controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Quad set of Dual Intel® i210 single port Gigabit Ethernet LAN	<ul style="list-style-type: none"> <li>-FC0+: Quad set of Dual 1GbE LAN ports and 1x Dedicated IPMI port</li> <li>-FC0PT+: Quad set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller</li> </ul>	<ul style="list-style-type: none"> <li>-FT+: Quad set of Dual 1GbE LAN ports and 1x Dedicated IPMI port</li> <li>-FTPT+: Quad set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller</li> </ul>
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 8x 2.5" hot-swap SAS3 drive bays	Quad set of 6x 2.5" SAS3/SATA3 drive bays	Quad set of 6x 2.5" SAS3/SATA3 drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I²C & PMBus	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I²C & PMBus	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I²C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Twin

**FatTwin™**  
4 DP Nodes, 12x 2.5" HDD/Node

**FatTwin™**  
8-Node Front I/O, Serviceability & Efficiency!

**FatTwin™**  
4 DP Nodes, Front I/O, 16 DIMMs



MODEL	SYS-F628R2-RT+ SYS-F628R2-RTB+ SYS-F628R2-RTBPT+	SYS-F628R3-FC0	SYS-F628R3-FC0+ SYS-F628R3-FCOPT+
Processor Support	Quad set of Intel® Xeon® processor E5-2600 v3 with UPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Cluster Node</li> <li>• Data Center</li> <li>• Storage Nodes</li> </ul>	<ul style="list-style-type: none"> <li>• Cluster Node</li> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Email Server</li> <li>• Mail Server</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Compute Intensive Application</li> <li>• Cluster Node</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> <li>• 16 DIMM sockets</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Broadcom® 2208 controller onboard</li> <li>• RAID 0,1,5,6,10,50,60</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• 4x 3.5" SATA or SAS drives per node</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Broadcom® 3008 SAS 3.0 (12 Gbps) support (-FC0)</li> </ul>	<ul style="list-style-type: none"> <li>• 2x PCI-E Gen 3.0 x8 (LP)</li> <li>• RAID 0,1</li> <li>• Supports 16 DIMM DDR4 up to 2400MHz</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> <li>• Broadcom® 3008 controller</li> </ul>
Serverboard	SUPER● X10DRFR	SUPER● X10DRFF-C	-FC0+: SUPER● X10DRFF-CG -FCOPT+: SUPER● X10DRFF-CGT
Chipset	Intel® C612 chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of 1TB Registered ECC, DDR4-2133MHz in 16 DIMM slots	Quad set of up to 1TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	<p>-RT+: Quad set of 1 PCI-E 3.0 x16; 1 PCI-E 3.0 x8 connector for SMC add-on cards; 1 PCI-E 3.0 x8 (Micro Low Profile);</p> <p>-RTB+: Quad set of 1 PCI-E 3.0 x16 (LP) + 1x Micro LP</p>	Quad set of 1 PCI-E 3.0 x16 (low-profile)	Quad set of 2 PCI-E 3.0 x8 (low-profile)
Onboard Storage Controller	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Quad set of Broadcom® 3008 controller for 4 SAS 3.0 (12Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom® 3008 SW controller for 8 SAS3 (12Gbs) ports; RAID 0,1,10
Connectivity	2x 1GigE LAN Ports	Quad set of Dual Intel® i210 single port Gigabit Ethernet LAN	Quad set of 1x Dedicated IPMI port 1x Dedicated 1GbE LAN ports and 1x Dedicated IPMI port
VGA/Audio	Quad set of 1 VGA, 1 Aspeed AST2400 BMC;	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of Intel® Node Manager; IPMI2.0; NMI; SMBCU and SMM; SuperDoctor V; Watch Dog;	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 12x 2.5"	Quad set of 4x 3.5" hot-swap SAS3 drive bays	Quad set of 2x 3.5" SAS3/SATA3 drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus
Cooling System	2x 8cm 11k RPM middle fans per node	8x 80mm heavy duty hot-swap fans with air shroud & PWM fan speed control	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	null	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-F628R3-FT	SYS-F628R3-FTPT+ SYS-F628R3-FTPT+	SYS-F628R3-R72B+ SYS-F628R3-R72BPT+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Cluster Node</li> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Email Server</li> <li>• Mail Server</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Compute Intensive Application</li> <li>• Cluster Node</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Compute Intensive Storage Environments</li> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Applications</li> <li>• Server Appliance</li> <li>• Virtualization Server</li> <li>• Web/Collocation Services</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• 4x 3.5" SATA or SAS drives per node</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Broadcom® 3008 SAS 3.0 (12 Gbps) support (-FCO)</li> </ul>	<ul style="list-style-type: none"> <li>• 2x PCI-E Gen 3.0 x8 (LP)</li> <li>• RAID 0,1</li> <li>• 16 DIMM slots</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>• 145W CPU support</li> <li>• 16 DIMM slots</li> <li>• 8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>• IPMI 2.0 management with dedicated LAN</li> <li>• Broadcom® 2208 controller for 8 SAS2 hot-swappable drives</li> </ul>
Serverboard	SUPER● X10DRFF	-FT+: SUPER● X10DRFF-iG -FTPT+: SUPER● X10DRFF-iGT	-R72B+: SUPER● X10DRFR -R72BPT+: SUPER● X10DRFR-NT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 1TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 (low-profile)	Quad set of 2 PCI-E 3.0 x8 (low-profile)	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 Micro LP PCI-E 3.0 x8
Onboard Storage Controller	Quad set of Intel® C612 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10;	Quad set of Intel® C612 controller; RAID 0,1	Quad set of Broadcom® 2208 controller for 8 SAS2 (6Gbps) ports; RAID 0,1,5,6,10,50,60
Connectivity	Quad set of Dual Intel® i210 single port Gigabit Ethernet LAN	-FT+: Quad set of Dual 1GbE LAN ports and 1x Dedicated IPMI port -FTPT+: Quad set of Dual 10GbBased-T LAN ports and 1x Dedicated IPMI port	-R72B+: Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller -R72BPT+: Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GbBase-T Connector
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 4x 3.5" hot-swap SATA3 drive bays	Quad set of 2x 3.5" SATA3 drive bays	Quad set of 8x 3.5" hot-swap SAS2/SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 80mm heavy duty hot-swap fans with air shroud & PWM fan speed control	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**FatTwin™**  
4-Node Rear I/O, 8 Hot-swap 3.5" HDDs per 1U



Rear View

MODEL	SYS-F628R3-RC0B+ SYS-F628R3-RC1B+	SYS-F628R3-RC0BPT+ SYS-F628R3-RC1BPT+	SYS-F628R3-RTBN+ SYS-F628R3-RTBPTN+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Compute Intensive Storage Environments</li> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Applications</li> <li>• Server Appliance</li> <li>• Virtualization Server</li> <li>• Web/Collocation Services</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Compute Intensive Storage Environments</li> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Applications</li> <li>• Server Appliance</li> <li>• Virtualization Server</li> <li>• Web/Collocation Services</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Cluster Node</li> <li>• Compute Intensive Storage Environments</li> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Applications</li> <li>• Server Appliance</li> <li>• Virtualization Server</li> <li>• Web/Collocation Services</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>• 145W CPU support</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• 8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>• IPMI 2.0 management with dedicated LAN</li> <li>• Broadcom® 3108 controller (-RC1B+)</li> <li>• Broadcom® 3008 controller (-RC0B+)</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>• 145W CPU support</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• 8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>• IPMI 2.0 management with dedicated LAN</li> <li>• Broadcom® 3108 controller (-RC1BPT+)</li> <li>• Broadcom® 3008 controller (-RC0BPT+)</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>• 145W CPU support</li> <li>• 16 DIMM slots</li> <li>• 8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>• IPMI 2.0 management with dedicated LAN</li> <li>• NVMe Support</li> </ul>
Serverboard	SUPER● X10DRFR-N	SUPER● X10DRFR-NT	SUPER● X10DRFR-N
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 Micro LP PCI-E 3.0 x8	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 Micro LP PCI-E 3.0 x8	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 PCI-E 3.0 x8 (Micro LP)
Onboard Storage Controller	<p>-RC0B+: Quad set of Broadcom 3008 SAS 3.0 (12Gbps); SW RAID 0, 1, 10 support</p> <p>-RC1B+: Quad set of Broadcom 3108 SAS 3.0 (12Gbps); HW RAID 0, 1, 5, 6, 10, 50, 60</p>	<p>-RC0BPT+: Quad set of Broadcom 3008 SAS 3.0 (12Gbps); SW RAID 0, 1, 10 support</p> <p>-RC1BPT+: Quad set of Broadcom 3108 SAS 3.0 (12Gbps); HW RAID 0, 1, 5, 6, 10, 50, 60</p>	<p>Quad set of Intel® C612 chipset SATA3 (6Gbps) with RAID 0, 1, 5, 10</p> <p>-RTBN+: Quad set of Intel® i350-AM2 Dual Port Gigabit Ethernet</p> <p>-RTBPTN+: Quad set of Intel® X540 Dual Port 10GbE</p>
Connectivity	Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GbE-T Connector	
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 8x 3.5" hot-swap SAS3/SATA drive bays; or 6x SAS/SATA + 2x NVMe optional	Quad set of 8x 3.5" hot-swap SAS3/SATA drive bays; or 6x SAS/SATA + 2x NVMe optional	Quad set of 8x 3.5" hot-swap SATA3 drive bays; or 6x SATA + 2x NVMe
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 1280W Platinum Level (95++) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W Platinum Level (95++) Digital power supplies with I <sup>2</sup> C & PMBus	Quad set of Redundant 1280W Platinum Level (95++) Digital power supplies with I <sup>2</sup> C & PMBus
Cooling System	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details

**FatTwin™**  
2 DP Nodes, 6 GPUs per Node, Front I/O, 16 DIMMs



MODEL	SYS-F648G2-FC0+ SYS-F648G2-FCOPT+	SYS-F648G2-FT+ SYS-F648G2-FTPT+
Processor Support	Twin set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Twin set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> <li>• 145W CPU support</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> <li>• 145W CPU support</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 8x 2.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 6 GPUs per node* (*4x K80 per node)</li> <li>• Broadcom® 3008 controller (-FC0+/-FCOPT+)</li> </ul>	<ul style="list-style-type: none"> <li>• 8x 2.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 6 GPUs per node* (*4x K80 per node)</li> <li>• Broadcom® 3008 controller (-FC0+/-FCOPT+)</li> </ul>
Serverboard	<ul style="list-style-type: none"> <li>-FC0+: SUPERIO® X10DRFF-CG</li> <li>-FCOPT+: SUPERIO® X10DRFF-CTG</li> </ul>	<ul style="list-style-type: none"> <li>-FT+: SUPERIO® X10DRFF-iG</li> <li>-FTPT+: SUPERIO® X10DRFF-iTG</li> </ul>
Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Twin set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Twin set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Twin set of 6 PCI-E 3.0 x16 FHFL Double Width; 2 PCI-E 3.0 x8 FH/HL	Twin set of 6 PCI-E 3.0 x16 FHFL Double Width; 2 PCI-E 3.0 x8 FH/HL
Onboard Storage Controller	<ul style="list-style-type: none"> <li>Twin set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1;</li> <li>Twin set of Broadcom® 3008 SW Controller for 8 SAS3 (12Gbs) ports; RAID 0,1,10</li> </ul>	Twin set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1
Connectivity	<ul style="list-style-type: none"> <li>-FC0+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller;</li> <li>-FCOPT+: Quad set of Dual 10GbE-T with Intel® X540 10GbE Controller</li> </ul>	<ul style="list-style-type: none"> <li>-FT+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller;</li> <li>-FTPT+: Quad set of Dual 10GbE-T with Intel® X540 10GbE Controller</li> </ul>
VGA/Audio	Twin set of AST2400 VGA	Twin set of AST2400 VGA
Management	Twin set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Twin set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Twin set of 8x 2.5" hot-swap SATA3/SAS3 drive bays	Twin set of 8x 2.5" hot-swap SATA3/SAS3 drive bays
Peripheral Bays	N/A	N/A
Power Supply	4x Redundant 2000W Titanium Level power supplies	4x Redundant 2000W Titanium Level power supplies
Cooling System	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional internal fans available	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional internal fans available
Form Factor	4U Rackmount 448 x 177 x 889mm (17.63" x 6.96" x 35")	4U Rackmount 448 x 177 x 889mm (17.63" x 6.96" x 35")

Twin

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 DCO/Short-Depth

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



SYS-1029P-MTR

- A Full Range of Processors Up to 140 watt TDP CPUs
- Power Efficient Platinum Level Power Supplies
- Multiple SKUs Available



SYS-1029P-MT    SYS-1029P-MTR    SYS-6019P-MT    SYS-6019P-MTR

# X11 UP



SYS-5019S-L



SYS-5019S-ML

- Double the memory (up to 64GB ECC DDR4-2133 MHz)
- All Gen 3.0 Expansion and I/O (PCI-E 3.0, SATA 3.0, USB 3.0)
- Quick Release Rails
- Front USB 3.0 Ports
- SAS 3.0 Ready
- 7-Year lifespan Models



SYS-5019S-WR    SYS-5019S-M    SYS-5019S-MR    SYS-5019S-MN4

# X11 Mainstream

- Variety of SKUs available
- Mainstream Application Optimized
- Highest Density and Flexibility



SYS-7049P-TR(T)



SYS-2029P-C1R(T)

SYS-6029P-TR(T)

SYS-5019P-MT

SYS-5019P-MTR

# X11 Max I/O

- Application Optimized and I/O Maximized for Space-constrained Application



SYS-2029P-TXRT

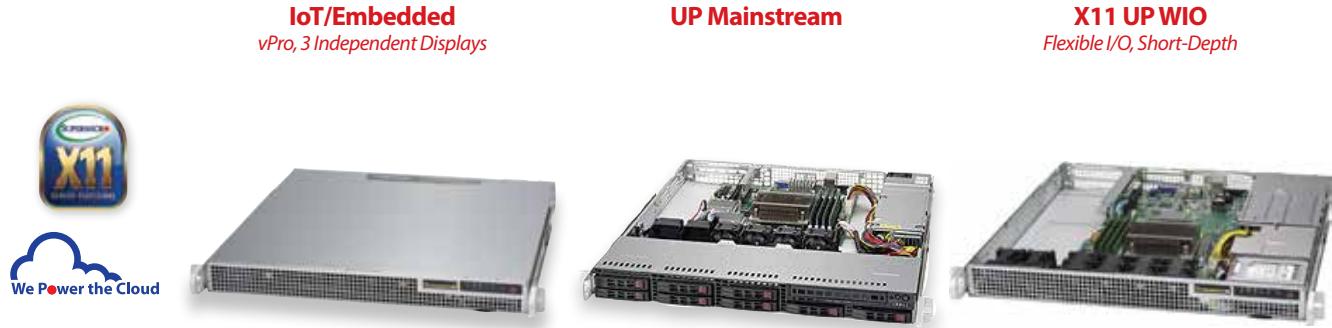
SYS-6039P-TXRT



SYS-2028R-TXR

SYS-6038R-TXR

SYS-6048R-TXR



MODEL	SYS-1019S-M2	SYS-1019S-MC0T	SYS-1019S-WR
Processor Support	Intel® 6th/7th Generation Core™ i3, i5, i7 series Intel®, Pentium®, Celeron®	Intel® 7th/6th Generation Core i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5. Socket H4 (LGA 1151) supported, CPU TDP support 80W	Intel® 7th/6th Generation Core i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5. Socket H4 (LGA 1151) supported, CPU TDP support 80W
Key Applications	<ul style="list-style-type: none"> <li>Industrial Automation &amp; Control</li> <li>Military Compact Server</li> <li>VOIP and Network Appliances</li> <li>Medical Applications</li> <li>7 Years Life Cycle</li> </ul>	<ul style="list-style-type: none"> <li>Storage HN, VM, Hosting Server</li> <li>Compact File Server</li> </ul>	<ul style="list-style-type: none"> <li>Appliance Server</li> <li>Embedded Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>6th/7th Generation Intel Core i7, i5, i3, Pentium and Celeron Processor</li> <li>Remote management via IPMI or vPro</li> <li>2x Gigabit LAN ports, HDMI/DP/DVI-I, 3 independent displays</li> <li>Full Height and Full Length add on card support</li> <li>Power redundancy or BBP support</li> </ul>	<ul style="list-style-type: none"> <li>Quick Release Rails</li> <li>Intel Node Management</li> </ul>	<ul style="list-style-type: none"> <li>1 x4, and 2 x8 or 1 x16 optional expansion slots</li> <li>Support 1 double wide GPU cards</li> </ul>
Serverboard	SUPER● X11SSZ-QF	SUPER● X11SSH-CTF	SUPER● X11SSW-F
Chipset	Intel® Q170 Express chipset	Intel® C236 Express chipset	Intel® C236 chipset
System Memory (Max.)*	Up to 64GB Unbuffered non-ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	64GB Unbuffered ECC, DDR4-2400MHz in 4 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16	1 PCI-E 3.0 x8 (in x16) add-on card slot	1 PCI-E 3.0 x16 or 2 x8 Left Riser Slot; 1 PCI-E 3.0 x4 (in x8 slot);
Onboard Storage Controller	Intel® Q170 Express controller for 2 SATA3 (6 Gbps) ports; RAID 0,1	Intel® C236 Express chipset Avago/Broadcom 3008 SAS3 built-in	Intel® C236 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x 1GbE, 1 dedicated IPMI LAN, 2 USB3.0, 2 USB2.0	2 USB 2.0, USB 3.0, VGA, Serial, Dual LAN with Intel® X550 10GBase-T Ethernet	Dual LAN with Intel® Ethernet Controller I210-AT
VGA/Audio	2 DP (DisplayPort), 1 DVI-I, 1 VGA, Intel® HD Graphics, Aspeed AST2400 BMC	Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC;
Management	AMT, IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, vPro, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;
Drive Bays	2x 2.5" fixed with bracket	Up to 8x hot-swap 2.5" HDD	Internal 2x 2.5" SATA
Peripheral Bays	N/A	1x slim DVD-ROM drive bay(option)	N/A
Power Supply	1x PWS-407P-1R, Platinum Level and support 2nd redundant PSU PWS-407P-1R or battery backup unit PWS-206B-1R	1U 340W Multi-output power supply W/ PMbus, Platinum level	400W Platinum Level 1U Redundant Power Supplies with PMbus
Cooling System	4x 40x56mm PWM fan; 2x fans for AOC cooling	4x 40x28mm PWM fan; 2x fans for AOC cooling(option)	4x 40x56mm PWM fan; 2x fans for AOC cooling(option)
Form Factor	437 x 43 x 429mm (17.2" x 1.7" x 16.9") Package: 686 x 203 x 610mm (27" x 8" x 24")	1U Rackmount 437 x 43 x 507mm (17.2" x 1.7" x 19.98") Package: 610 x 203 x 749mm (24" x 8" x 29.5")	1U Rackmount 437 x 43 x 429mm (17.2" x 1.7" x 16.9") Package: 605 x 203 x 686mm (23.8" x 8" x 27")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-1029P-MT SYS-1029P-MTR	SYS-5019C-L	SYS-5019C-FL
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support Up to 140W, 2 UPI up to 10.4 GT/s	8th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® Processor E-2100 series. Single Socket LGA 1151 supported, CPU TDP support Up to 95W TDP	8th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® Processor E-2100 series. Single Socket LGA 1151 supported, CPU TDP support Up to 95W TDP
Key Applications	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Web Server</li> <li>• Enterprise Server</li> <li>• Managed Hosting</li> </ul>	<ul style="list-style-type: none"> <li>• Appliance Server</li> <li>• Network Security Appliance</li> <li>• Office Server</li> </ul>	<ul style="list-style-type: none"> <li>• Appliance Server</li> <li>• Network Security</li> <li>• Office Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Short-Depth</li> <li>• 2x 1GbE LAN Marvell 88E1512 PHY</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• -MTR: Redundant Platinum Level Power</li> </ul>	<ul style="list-style-type: none"> <li>• Coffee Lake-S, Xeon E-2100, 8th Gen Core i3, Pentium, Celeron</li> <li>• Remote management via dedicated IPMI BMC</li> <li>• Short-depth, space saving design</li> <li>• 2x 3.5" SATA3 or 4x 2.5" SATA3 w/ optional kits</li> </ul>	<ul style="list-style-type: none"> <li>• Coffee Lake-S, Xeon E-2100, 8th Gen Core i3, Pentium, Celeron</li> <li>• Short-depth, space saving design</li> <li>• Front I/O</li> </ul>
Serverboard Chipset	SUPERMICRO X11DPL-i Intel® C621 chipset	SUPERMICRO X11SCL-IF Intel® C242 chipset	SUPERMICRO X11SCL-IF Intel® C242 chipset
System Memory (Max.)*	Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 64GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 2 DIMM slots	Up to 64GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 2 DIMM slots
Expansion Slots	1 PCI-E 3.0 x8(FHHL)	1 PCI-E 3.0 x16(in x16 slot)	1 PCI-E 3.0 x16(in x16 slot)
Onboard Storage Controller	SATA3 (6Gbps); RAID 0, 1, 5, 10	Intel® C242 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C242 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x 1GbE LAN Marvell 88E1512 PHY	Dual LAN with 1GbE with Intel® I210	Dual LAN with 1GbE with Intel® I210
VGA/Audio	AST2500 VGA	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	IPMI2.0, KVM with dedicated LAN, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI2.0, KVM with dedicated LAN, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	8 Hot-Swap 2.5" SATA3 6Gb/s	1x 3.5" Internal Drive Bay with 1 Full-height, Half-length PCI 2x 3.5" Internal Drive Bay 2x 2.5" Internal Drive Bay with 1 Full-height, Half-length PCI 4x 2.5" Internal Drive	1x 3.5" Internal Drive Bay with 1 Full-height, Half-length PCI 2x 3.5" Internal Drive Bay 2x 2.5" Internal Drive Bay with 1 Full-height, Half-length PCI 4x 2.5" Internal Drive
Peripheral Bays	-MT: Optional PCIe/SATA M.2 drive 1x Slim DVD-ROM drive (optional) -MTR: 1x Slim DVD-ROM drive (optional) Optional PCIe/SATA M.2 drive	N/A	N/A
Power Supply	-MT: 600W Single Power Supply, 80PLUS Platinum -MTR: 600W Redundant Power Supply, 80PLUS Platinum	1U 200W Multi-output power supply Gold level w/20pin	1U 200W Multi-output power supply Gold level w/20pin
Cooling System	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan	2x 40x40x28mm PWM fans	2x 40x40x28mm PWM fans
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 19.98" (507mm)	Mini-1U Rackmount 432 x 43 x 229mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3")	Mini-1U Rackmount 25 x 25 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**X11 Mainstream**  
UP



**X11 Mainstream**  
UP



**X11 Mainstream**  
UP



MODEL	SYS-5019C-M	SYS-5019C-MR	SYS-5019P-M SYS-5019P-MR
Processor Support	8th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® Processor E-2100 series. Socket LGA 1151 supported, CPU TDP support Up to 95W TDP	8th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® Processor E-2100 series. Socket LGA 1151 supported, CPU TDP support Up to 95W TDP	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake) Single Socket P (LGA 3647) supported, CPU TDP support 165W
Key Applications	<ul style="list-style-type: none"> <li>General purpose, SMB, Web Hosting</li> <li>Application and data serving</li> <li>Archiving, Mail/Finance, Security</li> </ul>	<ul style="list-style-type: none"> <li>General purpose, SMB, Web Hosting</li> <li>Application and data serving</li> <li>Archiving, Mail/Finance, Security</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Web Hosting, VM</li> <li>Compact Network Appliance</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Short-Depth(19.8"D)</li> <li>Quick Release Rails</li> </ul>	<ul style="list-style-type: none"> <li>Redundant 400W high-efficiency power supplies w/BBP module support</li> <li>Short-Depth(19.8"D)</li> </ul>	<ul style="list-style-type: none"> <li>Integrated IPMI 2.0 and KVM with Dedicated LAN</li> <li>High-efficiency Power Supply Platinum Level Certified</li> <li>Quick Release Rails</li> <li>2x 1GbE LAN</li> </ul>
Serverboard	SUPERMICRO® X11SCM-F	SUPERMICRO® X11SCM-F	SUPERMICRO® X11SPM-F
Chipset	Intel® C246 chipset	Intel® C246 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16	1 PCI-E 3.0 x16	1 PCI-E 3.0 x16(FH.HL)
Onboard Storage Controller	Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with Intel® Ethernet Controller I210-AT	Dual LAN with Intel® Ethernet Controller I210-AT	Dual LAN with 1GbE
VGA/Audio	Aspeed AST2500 BMC	Integrated video from Aspeed BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SAS/SATA	4x 3.5" hot-swap SAS/SATA	4x 3.5" hot-swap SAS/SATA
Peripheral Bays	1x Slim DVD-ROM Drive(option)	1x Slim DVD-ROM Drive 1x USB + COM port tray(Option)	-M: 1x Slim DVD-ROM Drive(option) -MR: Option for 1x Slim DVD-ROM Drive 1x USB + COM port tray
Power Supply	1U 350W Multi-output power supply Platinum level	1U 400W Redundant Power Supply Platinum with PMBUS, W54.5xL220xH40mm	-M: 1U 350W Multi-output power supply Platinum level -MR:
Cooling System	4x 40x28mm PWM fan	4x 40x28mm PWM fan; 2x fans for AOC cooling(option)	4x 40x28mm PWM fan; 2x 40x28mm PWM fan(option)
Form Factor	1U Rackmount 25 x 25 x 483mm (17.2" x 1.7" x 19.8") Package: 584 x 216 x 762mm (23.5" x 8.5" x 30")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8") Package: 594 x 216 x 754mm (23.4" x 8.5" x 29.7")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5019P-MT SYS-5019P-MTR	SYS-5019S-M-G1585L SYS-5019S-MR-G1585L	SYS-5019S-L
Processor Support	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake) Single Socket P (LGA 3647) supported, CPU TDP support 205W	Intel® Xeon® processor E3-1585L v5. Socket FCBGA1440 supported, CPU TDP support 45W	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported
Key Applications	<ul style="list-style-type: none"> <li>Web Hosting, VM</li> <li>Application and data serving</li> <li>Database Applications</li> <li>Mission-critical applications</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>Cloud and Virtualization needs</li> <li>Network Video Compression</li> <li>Network Security Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Low Power, Low Cost Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 TB LRDIMM 3DS</li> <li>M.2 2280, 22110 SUPPORT</li> <li>Quick Release Rails</li> </ul>	<ul style="list-style-type: none"> <li>IRIS PRO OPTIMIZARIONS GT4e BUILD-IN</li> </ul>	<ul style="list-style-type: none"> <li>Supports Low Power CPU</li> <li>Compact Form Factor</li> <li>Less than 12 inches depth</li> <li>1x PCI-E 3.0 x8 expansion slot</li> <li>Up to 1x internal 3.5", 2x 2.5" drives (option)</li> </ul>
Serverboard	SUPERMICRO® X11SPi-TF	SUPERMICRO® X11SSH-GF-1585L	SUPERMICRO® X11SSL-F
Chipset	Intel® C622 chipset	Intel® C236 chipset	Intel® C232 Express chipset
System Memory (Max.)*	Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots	64GB Unbuffered ECC SO-DIMM, DDR4-2133MHz, in 4 DIMM slots	64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 slot	1 PCI-E 3.0 x8(in x16) add-on card slot	1x PCI-E 3.0 x8 expansion slot
Onboard Storage Controller	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C236 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C232 Express chipset
Connectivity	4 USB 3.0 (front/rear), USB 2.0, VGA, Serial PORT	2 USB 3.0 (front/rear), USB 2.0, VGA, Serial	2x USB 2.0, USB 3.0, VGA, Serial
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2400 BMC	Integrated video from Aspeed BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Built-in Aspeed BMC with IPMI 2.0, KVM, and more
Drive Bays	4x 3.5" Hot-swap SATA3 bays w/ RAID	4x 3.5" Hot-swap SATA3 bays	Up to 1x internal 3.5", 2x 2.5" drives (option)
Peripheral Bays	Optional slim optical device bay, optional FDD/USB bay	1x Slim DVD-ROM Drive	N/A
Power Supply	<ul style="list-style-type: none"> <li>-MT: 1U 350W Multi-output power supply Platinum level</li> <li>-MTR:</li> </ul>	<ul style="list-style-type: none"> <li>-M-G1585L: 1U 350W Multi-output power supply Platinum level</li> <li>-MR-G1585L: 1U 400W Redundant single output power supply, W/PMBus, gold level</li> </ul>	200W high-efficiency power supply
Cooling System	4x 40x28mm PWM fan; ; 2x fans for AOC cooling(option)	4x 40x28mm PWM fan; 2x 40x28mm PWM fan(option)	2x 4cm chassis internal fan
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U rackmount 437 x 43 x 287mm (17.2 " x 1.7" x 11.3")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



### UP Mainstream

### UP Mainstream

### UP Mainstream

*Quad LAN*



MODEL	SYS-5019S-M	SYS-5019S-ML	SYS-5019S-MN4
Processor Support	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported
Key Applications	<ul style="list-style-type: none"> <li>High Flexibility, VM, Communication</li> <li>File/Print, Web Hosting</li> </ul>	<ul style="list-style-type: none"> <li>Entry level, Cost effective</li> </ul>	<ul style="list-style-type: none"> <li>General purpose, SMB, Web Hosting</li> <li>Domain Controller, File/Print</li> <li>Front USB 3.0 ports</li> <li>Quick Release Rails</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>M.2 mini-PCI-E support 2280 form factor</li> <li>Up to 4 hot-swap 3.5" drives</li> <li>Front USB 3.0 ports</li> <li>Quick Release Rails</li> <li>1x PCI-E 3.0 x8 (x16) expansion slot</li> <li>SuperDOM support (SATA DOM support)</li> <li>2x GbE port, 1x dedicated IPMI port</li> </ul>	<ul style="list-style-type: none"> <li>Support Intel® VHD (with selected CPU) and NM</li> <li>M.2 mini-PCI-E connector: Support 2280</li> <li>Compact, less than 15 inches depth</li> <li>Up to 2x internal 3.5", 3x 2.5" drives (option)</li> </ul>	<ul style="list-style-type: none"> <li>M.2 mini-PCI-E support 2280</li> <li>Support Intel® VHD (with selected CPU) and NM</li> <li>SATA DOM support</li> <li>4x GbE LAN ports</li> </ul>
Serverboard	SUPERMICRO X11SSH-F	SUPERMICRO X11SSH-F	SUPERMICRO X11SSH-LN4F
Chipset	Intel® C236 Express chipset	Intel® C236 Express chipset	Intel® C236 Express chipset
System Memory (Max.)*	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz
Expansion Slots	1x PCI-E 3.0 x8(in x16)	1x PCI-E 3.0 x8 add-on card slot	1x PCI-E 3.0 x8 (in x16)
Onboard Storage Controller	Intel® C236 Express chipset	Intel® C236 Express chipset	Intel® C236 Express chipset
Connectivity	2x USB 3.0 (front/rear), USB 2.0, VGA, Serial	USB 3.0, 2x USB 2.0, VGA, Serial	Quad LAN with Intel® Ethernet Controller i210-AT; 2x USB 3.0 (front/rear), USB 2.0, VGA, Serial
VGA/Audio	Integrated VGA from Aspeed BMC	Integrated VGA from Aspeed BMC	Integrated video from Aspeed BMC
Management	IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog	Built-in Aspeed BMC with IPMI 2.0, KVM, and more
Drive Bays	4x 3.5" Hot-swap SATA3 bays w/ RAID	Up to 2x internal 3.5"; 3x 2.5" drives (option)	4x 3.5" Hot-swap SATA3 bays w/ RAID
Peripheral Bays	1x slim DVD-ROM drive bay	1x slim DVD-ROM drive bay	1x slim DVD-ROM drive bay
Power Supply	350W high-efficiency power supply	350W high-efficiency power supply	350W high-efficiency power supply
Cooling System	4x 4cm chassis internal fan	2x 4cm chassis internal fan	4x 4cm chassis internal fan
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 366mm (17.2" x 1.7" x 14.4")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**UP Mainstream****UP Mainstream****IoT/Embedded**

Skylake-H, SoC, 4 Cores



MODEL	SYS-5019S-MR	SYS-5019S-MT	SYS-5019S-TN4
Processor Support	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported	Intel® Xeon® Processor Skylake-H E3-1585v5 SoC, 4 Cores, 65W
Key Applications	<ul style="list-style-type: none"> <li>• HA, File/Print Server</li> <li>• Web Hosting, VM</li> </ul>	<ul style="list-style-type: none"> <li>• Storage HN, VM, Hosting Server</li> <li>• Compact File Server</li> </ul>	<ul style="list-style-type: none"> <li>• Virtual Hosted Desktop(VHD)</li> <li>• Digital Recording System</li> <li>• Media/Content Streaming Server</li> <li>• Support Intel Quick Sync Video</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• M.2 PCI-E support 2280 form factor</li> <li>• Supermicro Battery Back Up (BBP™) option</li> <li>• Support Intel® VHD (with selected CPU) and NM</li> <li>• Redundant 400W high-efficiency power</li> <li>• Up to 4 hot-swap 3.5" drives</li> <li>• Internal fixed drive options</li> <li>• 2x GbE port, 1x dedicated IPMI port</li> <li>• Front USB 3.0 ports</li> <li>• Quick Release Rails</li> </ul>	<ul style="list-style-type: none"> <li>• 2x 10G Base-T LAN ports</li> <li>• Intel® Node Management</li> <li>• Up to 4x hot-swap 3.5" SATA3 drives</li> <li>• Optional slim optical drive or fixed internal</li> <li>• 1x PCI-E add-on card slot</li> <li>• Front USB 3.0 ports</li> <li>• Quick Release Rails</li> <li>• M.2 PCI-E x4 support 2260</li> </ul>	<ul style="list-style-type: none"> <li>• 4x SATA3(6Gbps) via C236; RAID 0, 1, 5, 10</li> <li>• Intel Iris Pro Graphics with 128M B of on-Package cache (eDRAM) for high performance graphics</li> <li>• VHD, Media CODEC (HEVC, JPEG, VP8) and IPMI 2.0 (Shared LAN)</li> <li>• Up to 18 AVC streams or 8 HEVC streams at 1080p 30FPS, or 2 HEVC streams at 4K 30FPS</li> </ul>
Serverboard	SUPER● X11SSH-F	SUPER● X11SSH-TF	SUPER● X11SSV-M4F
Chipset	Intel® C236 Express chipset	Intel® C236 Express Chipset	System On Chip
System Memory (Max.)*	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz	Up to 32GB ECC Unbuffered SO-DIMM DDR4 2133MHz; 2 DIMM slots
Expansion Slots	1x PCI-E 3.0 x8 (in x16)	1x PCI-E 3.0 x8 (in x16) add-on card slot	1 PCI-E 3.0 x16 1x M.2 (M key, 2242/80/110, PCI-E3.0 x4 or SATA3) 1x Mini PCI-E w/ mSATA
Onboard Storage Controller	Intel® C236 Express chipset	Intel® C236 Express Chipset	Intel® C236 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10 Intel RSTe
Connectivity	2x USB 3.0 (front/rear), USB 2.0, VGA, Serial	2x USB 2.0, USB 3.0(front/rear), VGA, Serial	4x 1GbE LAN, 1 dedicated IPMI LAN, 4 USB 3.0
VGA/Audio	Integrated video from Aspeed BMC	Integrated video from Aspeed BMC	DVI-A via BMC
Management	Built-in Aspeed BMC with IPMI 2.0, KVM, and more	Built-in Aspeed BMC with IPMI 2.0, KVM, and more	IPMI2.0; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;
Drive Bays	4x 3.5" Hot-swap SATA3 bays w/ RAID	Up to 4x hot-swap 3.5" SATA3 drives	1x 3.5" or 4x 2.5" HDD
Peripheral Bays	1x slim DVD-ROM drive bay	N/A	N/A
Power Supply	Redundant 400W high-efficiency power Supermicro Battery Back Up (BBP™) option	350W high-efficiency power supply	200W Low Noise AC-DC power supply with PFC
Cooling System	4x 4cm chassis internal fan	4x 4cm chassis internal fan	3x 40x28mm 4-PIN PWM FAN(FAN-0154L4, 22K RPM) with air shroud
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



### UP Mainstream



### X11 DCO 3.5" Short-Depth



### X11 Mainstream 8x 2.5" SAS3 Drive Bays



MODEL	SYS-5019S-WR	SYS-6019P-MT SYS-6019P-MTR	SYS-2029P-C1R
Processor Support	Intel® 7th/6th Generation Core i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5. Socket H4 (LGA 1151) supported, CPU TDP support 80W	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support Up to 140W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	• HA, High flexibility, VM, Communication	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Web Server</li> <li>• Enterprise Server</li> <li>• Managed Hosting</li> </ul>	<ul style="list-style-type: none"> <li>• Application and data serving</li> <li>• Big Data Analytics</li> <li>• Business Critical Applications</li> <li>• Compute Intensive Application</li> <li>• Compute Intensive Storage Environments</li> <li>• Connectivity/Storage Computer Nodes</li> <li>• 8x 2.5" SAS &amp; 2x SATA3 2.5" HDD Bay</li> <li>• 2 SATA DOM support with embedded power</li> <li>• 16 DIMM sockets</li> <li>• 1200W Redundant Power, Titanium Level (96% typical efficiency )</li> <li>• Independent power &amp; cooling control</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2x PCI-E 3.0 x8 (or 1x16) and 1 x8 (x4 signal) add-on card slots</li> <li>• 1+1 Redundant 500W high-efficiency power</li> <li>• Up to 4 hot-swap 3.5" drives</li> </ul>	<ul style="list-style-type: none"> <li>• Short Depth</li> <li>• 2x 1GbE LAN Marvell 88E1512 PHY</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 500W Single Power Supply, 80PLUS Platinum</li> </ul>	
Serverboard Chipset	SUPERMICRO X11SSW-F Intel® C236 chipset	SUPERMICRO X11DPL-i Intel® C621 chipset	SUPERMICRO X11DPi-N Intel® C621 chipset
System Memory (Max.)*	64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	2 PCI-E 3.0 x8 or 1 PCI-E 3.0 x16 (by jumper), 1 PCI-E 3.0 x4 (x8) add-on card slot	1 PCI-E 3.0 x8(FHHL)	Supports total 5x low profile add-on cards in 4 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 slots RAID 0,1,5,10; Broadcom® 3108 HW with 2G Cache controller (AOC-S3108L-H8iR-16DD) for 8 SAS3 (12Gbs) ports; RAID 0,1,5,6,10,50,60; Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom 3108 HW with 2G Cache controller (AOC-S3108L-H8iR-16DD) for 8 SAS3 (12Gbs) ports; RAID 0,1,5,6,10,50,60; Dual LAN RJ45 ports with Intel® X722 Gigabit Ethernet Controller; 1x Dedicated IPMI LAN RJ45 port
Onboard Storage Controller	Intel® C236 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	SATA3 (6Gbps); RAID 0, 1, 5, 10	Aspeed AST2500 BMC Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog 8x 2.5" 12Gbps SAS3 and 8x 2.5" 6Gbps SATA3, total 16 hot-swap drives USB Support: Rear: 2x3.0 + 2x2.0, Front: 2x2.0, and 1x Type A; optional DVD-ROM drive: support either 1x slim or 1x 5.25" DVD drive.
Connectivity	USB 2.0, USB 3.0, VGA, Serial	2x 1GbE LAN Marvell 88E1512 PHY	
VGA/Audio	Integrated video from Aspeed BMC	AST2500 VGA	
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	
Drive Bays	4x 3.5" hot-swap drive bay	4 Hot-Swap 3.5" SATA3 6Gb/s	8x 2.5" 12Gbps SAS3 and 8x 2.5" 6Gbps SATA3, total 16 hot-swap drives
Peripheral Bays	1x Slim DVD-ROM Drive(option)	Optional PCIe/SATA M.2 drive	USB Support: Rear: 2x3.0 + 2x2.0, Front: 2x2.0, and 1x Type A; optional DVD-ROM drive: support either 1x slim or 1x 5.25" DVD drive.
Power Supply	1U 500W Redundant Single Output power supply W/PMbus 54.5mm width	<ul style="list-style-type: none"> <li>-MT: 500W Single Power Supply, 80PLUS Platinum</li> <li>-MTR: 600W Redundant Power Supply, 80PLUS Platinum</li> </ul>	2x Redundant 1200W Redundant Power, Titanium Level (96% typical efficiency )
Cooling System	4x 4cm chassis internal fan	4x 40x28mm, 22.5K RPM, SC813MF Middle Cooling Fan	3x 80mm heavy duty fans with PWM fan speed and cooling zone control; Adjustable Air Shroud with Enhanced cooling design
Form Factor	1U Rackmount 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 437 x 43 x 508mm (17.2" x 1.7" x 19.98")	437 x 89 x 630mm (17.2" x 3.5" x 24.8")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details



**X11 Mainstream**  
8x 2.5" SAS3 Drive Bays



**X11 Max I/O**  
2U 11 PCI-E Slots



**X11 Mainstream**  
8x 3.5" SATA3 Drive Bays



MODEL	SYS-2029P-C1RT	SYS-2029P-TXRT	SYS-6029P-TR SYS-6029P-TRT
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	Intel® Xeon® Scalable Processors (Cascade Lake/Skylake). Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Application and data serving</li> <li>• Big Data Analytics</li> <li>• Business Critical Applications</li> <li>• Compute Intensive Application</li> <li>• Compute Intensive Storage Environments</li> <li>• Connectivity/Storage Computer Nodes</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial Server</li> <li>• Networking Telephony</li> <li>• Surveillance DCR</li> <li>• GPU Pass-through VM server</li> <li>• Flash Array Server</li> <li>• Head-node controller</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud and Virtualization needs</li> <li>• Compute Intensive Application</li> <li>• Compute Intensive Storage Environments</li> <li>• Database Processing &amp; Storage</li> <li>• High Availability Storage Appliance Platform</li> <li>• Hosting &amp; Application delivery</li> <li>• 16 DIMM sockets</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• 2 SATA DOM support with embedded power</li> <li>• 1000W Titanium Level high-efficiency power supply</li> <li>• Cost optimized</li> <li>• 1x M.2 Support by default</li> <li>• -TR: 2 Gigabit Ethernet Ports</li> <li>• -TRT: 2x 10GbE-T Ports</li> <li>-TR: SUPER● X11DPI-N</li> <li>-TRT: SUPER● X11DPI-NT</li> <li>-TR: Intel® C621 chipset</li> <li>-TRT: Intel® C622 chipset</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 8x 2.5" SAS &amp; 2x SATA3 2.5" HDD Bay</li> <li>• 2 SATA DOM support with embedded power</li> <li>• 16 DIMM sockets</li> <li>• 1200W Redundant Power, Titanium Level (96% typical efficiency)</li> <li>• Independent power &amp; cooling control</li> </ul>	<ul style="list-style-type: none"> <li>• SKL (up to 205W), 3 UPI designed for up to 10.4 GT/s[nid:9987]</li> <li>• 11 Low-profile PCI-E slots</li> <li>• 16x Hot-swap 2.5" HDD Bays</li> <li>• 1x PCI-E 3.0 x4 M.2 Slot</li> <li>• Redundant (1+1) 1KW 1000 W Titanium level 96+%</li> </ul>	<ul style="list-style-type: none"> <li>• Supports total 5x low profile add-on cards in 4 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 slots</li> <li>• RAID 0,1,5,10; Broadcom® 3108 HW with 2G Cache controller (AOC-S3108L-H8iR-16DD) for 8 SAS (12Gbs) ports; RAID 0,1,5,10,50,60; Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom 3108 HW with 2G Cache controller (AOC-S3108L-H8iR-16DD) for 8 SAS3 (12Gbs) ports; RAID 0,1,5,6,10,50,60;</li> <li>• Supports total 6x low profile add-on cards in 4 PCI-E 3.0 x16, 2 PCI-E 3.0 x8 slots</li> <li>-TR: Intel® C621 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10</li> <li>-TRT: Intel® C622 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10</li> <li>-TR: Dual LAN RJ45 ports with Intel® X722 Gigabit Ethernet Controller; 1x Dedicated IPMI LAN RJ45 port</li> <li>-TRT: Dual LAN RJ45 ports with Intel® X722 10G Based-T Ethernet Controller; 1x Dedicated IPMI LAN RJ45 port 2x 10GBased-T ports</li> </ul>
Serverboard	SUPER● X11DPi-NT	SUPER● X11DPX-T	
Chipset	Intel® C622 chipset	Intel® C621 chipset	
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
Expansion Slots	Supports total 5x low profile add-on cards in 4 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 slots	11 Low-profile PCI-E slots 2 PCI-E 3.0 x16 slots, 2 PCI-E 3.0 x16 slots (or 4 PCI-E 3.0 x8), 4 PCI-E 3.0 x8 slots, 1 PCI-E 3.0 x4 (in x8 slot).	Supports total 6x low profile add-on cards in 4 PCI-E 3.0 x16, 2 PCI-E 3.0 x8 slots
Onboard Storage Controller	RAID 0,1,5,10; Broadcom® 3108 HW with 2G Cache controller (AOC-S3108L-H8iR-16DD) for 8 SAS (12Gbs) ports; RAID 0,1,5,10,50,60; Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom 3108 HW with 2G Cache controller (AOC-S3108L-H8iR-16DD) for 8 SAS3 (12Gbs) ports; RAID 0,1,5,6,10,50,60;	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	-TR: Intel® C621 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Dual LAN RJ45 ports with Intel® X722 10G base-T Ethernet Controller; 1x Dedicated IPMI LAN RJ45 port	Dual 10G baseT LAN(X550-AT2)	-TRT: Dual LAN RJ45 ports with Intel® X722 10G Based-T Ethernet Controller; 1x Dedicated IPMI LAN RJ45 port 2x 10GBased-T ports
VGA/Audio Management	Aspeed AST2500 BMC Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	1 VGA, Aspeed AST2500 Intel® Node Manager; IPMI2.0	Aspeed AST2500 Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" 12Gbps SAS3 and 8x 2.5" 6Gbps SATA3, total 16 hot-swap drives	16x 2.5" SATA / SAS Hot Swap HDD Bay	8x 3.5" hot-swap SATA3 drive bay
Peripheral Bays	USB Support: Rear: 2x3.0 + 2x2.0, Front: 2x2.0, and 1x Type A; optional DVD-ROM drive: support either 1x slim or 1x 5.25" DVD drive.	1x slim DVD-ROM drive bay, 1x FDD bay, 1x standard 5.25" drive bay	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x slim DVD-ROM drive bay and 2x NVMe fixed drives
Power Supply	2x Redundant 1200W Redundant Power, Titanium Level (96% typical efficiency)	Redundant 1000W Titanium Level Power Supplies	2x Redundant 1000W Redundant Power Supply Titanium Level (96% typical efficiency)
Cooling System	3x 80mm heavy duty fans with PWM fan speed and cooling zone control; Adjustable Air Shroud with Enhanced cooling design	4x middle fans	3x 80mm heavy duty fans with PWM fan speed control, Adjustable Air Shroud with Enhanced cooling design
Form Factor	437 x 89 x 630mm (17.2" x 3.5" x 24.8")	437 x 89 x 650mm (17.2" x 3.5" x 25.6")	437 x 89 x 648mm (17.2" x 3.5" x 25.5")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details



### X11 Max I/O 3U 11 PCI-E Slots



### IoT/Embedded Video Transcending and Streaming Compact Box



### X11 Mainstream



MODEL	SYS-6039P-TXRT	SYS-1019S-MP	SYS-5039C-I
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	Intel® Xeon® Processor E3-1515M v5 (Skylake-H), Single socket FCBGA 1440, 4-Core, 8 Threads, 45W	Single Intel Xeon E Family (CFL-S, up to 6cores)/ 8th Intel Core i3/Pentium/ Celeron, H4 (LGA1511), up to 95W TDP
Key Applications	<ul style="list-style-type: none"> <li>• Industrial Server</li> <li>• Surveillance DCR</li> <li>• Flash Array Server</li> <li>• Data Acquisitions</li> <li>• Video and Music Production</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Signage</li> <li>• Kiosk, Interactive information system</li> <li>• Media Streaming server</li> </ul>	<ul style="list-style-type: none"> <li>• Entry Level server for SOHO and SMB</li> <li>• Remote access for mobile users</li> <li>• Data sharing/storage and centralized backup</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Up to 11 PCI-E 3.0 FH slots</li> <li>• 8x Hot-swap 3.5" HDD Bays and 2x 5.25" Drive Bays</li> <li>• 2 SATA DOMs Support with Embedded Power</li> <li>• Redundant (1+1) 980W Platinum level 94+%</li> </ul>	<ul style="list-style-type: none"> <li>• Intel Iris Pro Graphics P580 with 128MB of on-Package cache (eDRAM) for high performance graphics</li> <li>• HDMI, Display Port, DVI-I, 3 independent displays</li> </ul>	<ul style="list-style-type: none"> <li>• Cost optimized tower server</li> <li>• Remote management with IPMI 2.0</li> <li>• Flexible and expandable</li> </ul>
Serverboard	SUPERMICRO X11DPX-T	SUPERMICRO X11SSV-M4	SUPERMICRO X11SCL-F
Chipset	Intel® C621 chipset	Intel® CM236 chipset	Intel® C242 Chipset
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 32GB ECC/Non-ECC Unbuffered SO-DIMM DDR4 2133MHz; 2 DIMM slots	4 DDR4 ECC UDIMM, Up to 2666MHz, max. capacity 64GB
Expansion Slots	2 PCI-E 3.0 x16 slots, 2 PCI-E 3.0 x16 slots (or 4 PCI-E3.0 x8 support by Mux), 4 PCI-E 3.0 x8 slots, 1 PCI-E 3.0 x4 (in x8 slot).	1 Mini-PCI-E (mSATA support), 1 M.2 PCI-E 3.0 x4 (SATA support), M Key 2242/80	1 PCI-E3.0 x8 (in x16), 2 PCI-E3.0 x4 (in x8)
Onboard Storage Controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® CM236 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Intel RSTe	6 SATA 3.0 6Gb/s connector, support RAID 0, 1, 5, 10; 1x M.2 M-key (22110/2280, PCI-E3.0x4) Dual GbE LAN, 1 LAN port for dedicated IPMI, 2 (front)USB3.0 ports, 4 (rear)USB ports, 1 COM port
Connectivity	Dual 10G baseT LAN(X550-AT2)	4x 1GbE LAN, 4 USB 3.0	
VGA/Audio	1 VGA, Aspeed AST2500	1 HDMI2.0, 1 DP1.2, 1 DVI-I, Intel Iris Pro Graphics P580, 3 independent displays	1
Management	Intel® Node Manager IPMI2.0 KVM with dedicated LAN SPM SUM SuperDoctor® 5	vPro AMT	IPMI2.0, SSM, SUM, SuperDoctor 5, SPM, Watchdog
Drive Bays	8x 3.5" hot-swap	1 internal 2.5" Hard Drive	4 internal 3.5" drive bays
Peripheral Bays	1x slim DVD-ROM drive bay, 1x FDD bay, 2x standard 5.25" drive bay	N/A	2x 5.25" external peripheral bays
Power Supply	Redundant 980W Platinum Level Power Supplies	84W DC power adapter	400W 80PLUS Gold Certified
Cooling System	3x middle fans & 1x rear exhaust fan	2x 6cm cooling fan	1x 9cm (rear) PWM fan w/ tool-less design, Optional 1x 8cm (front) cooling fan
Form Factor	437 x 132 x 648mm (17.2" x 5.2" x 25.5")	195 x 68 x 195mm (7.68" x 2.68" x 7.68") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")	184 x 362 x 425mm (7.25" x 14.25" x 16.75")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 SuperWorkstation**  
Performance Workstation  
Rich I/O and versatile storage options



We Power the Cloud



**X11 Mainstream**  
8x 3.5" SATA3 Drive Bays



**UP WIO**



MODEL	SYS-5039C-T	SYS-7049P-TR SYS-7049P-TRT	SYS-1018R-WR
Processor Support	Intel® Xeon® E processor (Coffee Lake-S) Workstation, 8th Gen Intel® Core™ i3 Processors, Intel® Celeron®, Intel® Pentium® Processors Single Socket H4 (LGA 1151), supports up to 95W TDP	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4, Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Single Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• Digital Content Creation</li> <li>• 3D Animations</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud and Virtualization needs</li> <li>• Business Critical Applications</li> <li>• Compute Intensive Storage Environments</li> <li>• Database Processing &amp; Storage</li> <li>• Application and data serving</li> <li>• Hosting &amp; Application delivery</li> <li>• 16 DIMM sockets</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• 2 SATA DOM support with embedded power</li> <li>• Super Quiet 1280W Redundant Power high-efficiency Platinum Level (94% typical efficiency)</li> <li>• Cost optimized</li> </ul> <p>-TR: SUPER● X11DPi-N -TRT: SUPER● X11DPi-NT Intel® C621 chipset Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only); 8x 288-pin DDR4 DIMM slots</p>	<ul style="list-style-type: none"> <li>• Appliance Server</li> <li>• Embedded Applications</li> </ul> <p>• 1 x8, and 2 x16 expansion slots • Support 1 double wide GPU cards</p>
Outstanding Features	<ul style="list-style-type: none"> <li>• Cost effective UP platform</li> <li>• Versatile Storage with M.2, U.2 and SATA support</li> <li>• Fast I/O with 2 GbE and USB 3.1 Gen 2</li> </ul>		
Serverboard Chipset	SUPER● X11SCA Intel® C246 chipset		SUPER● X10SRW-F Intel® C612 chipset
System Memory (Max.)*	Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots		Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, in 8 DIMM slotsUp to 1TB ECC 3DS LRDIMM Memory in memory mode (Cascade Lake only); 8x 288-pin DDR4 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 running at NA/16 or 8/8 1 PCI-E 3.0 x4 slot 1 PCI-E 3.0 x1 slot 1 PCI 32bit 5V slot	Supports total 6x full height add-on cards in 4 PCI-E 3.0 x16, 2 PCI-E 3.0 x8 slots	2 PCI-E 3.0 x16 Left Riser Slot; 1 PCI-E 3.0 x8 LP
Onboard Storage Controller	Intel® C246 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 8 SATA3 (6 Gbps) ports; Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	
Connectivity	Single LAN with Intel® Ethernet Controller I210-AT Single LAN with Intel® PHY I219LM LAN controller	-TR: Dual LAN RJ45 ports with Intel® X722 Gigabit Ethernet Controller; 1x Dedicated IPMI LAN RJ45 port -TRT: Dual LAN RJ45 ports with Intel® X722 10G Based-T Ethernet Controller; 1x Dedicated IPMI LAN RJ45 port2x 10GbE-T Ports	Dual LAN with Intel® Ethernet Controller I350-AM2;
VGA/Audio	1 HDMI 2.0a port, 1 DVI-D port, 1 DP 1.2 (DisplayPort) port	Aspeed AST2500	Aspeed AST2400 BMC
Management	AMT, SuperDoctor® 5, vPro, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI2.0, SuperDoctor® 5, Watchdog
Drive Bays	4 Fixed 3.5" drive bays Optional 4 internal 2.5" drive bays	8x 3.5" hot-swap SATA3 drive bay	2x 2.5" fixed with bracket
Peripheral Bays	2 external 5.25" drive bays 1 3.5" external device bay	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive and 2x NVMe fixed drives	N/A
Power Supply	500W 80PLUS Bronze PS/2 Power Supply	2x Super Quiet 1280W Redundant Power Supply modules, high-efficiency Platinum Level (94% typical efficiency), 2x 80mm PWM Rear Chassis Fans; 3x 80mm high-performance fan; Adjustable Air Shroud with Enhanced cooling design	1U 400W Redundant Power Supply Platinum with PMBUS, W54.5xL220xH40mm
Cooling System	1 12cm rear exhaust fan Optional 12cm front cooling fan	4x 40x56mm PWM fan; ; 2 fans for AOC cooling(option)	
Form Factor	Mid-Tower 7.6" (193mm) x 16.7" (424mm) x 20.68" (525mm)	178 x 452 x 648mm (7" x 17.8" x 25.5")	1U Rackmount 437 x 43 x 429mm (17.2" x 1.7" x 16.9")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**UP Mainstream**  
Storage UP, SAS2



**Short-Depth**  
10GbE, SAS3, Redundant Power

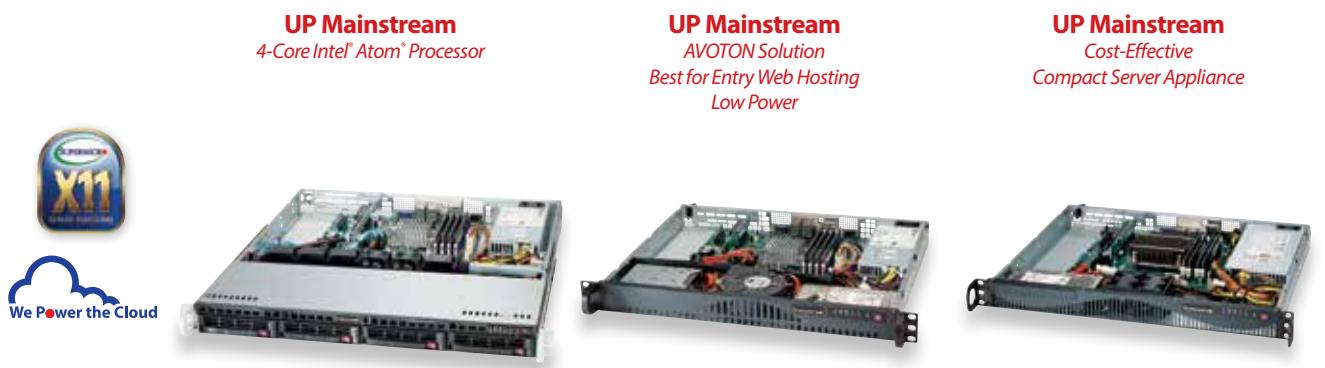


**Data Center Optimized**



MODEL	SYS-1018D-73MTF	SYS-1028R-MCT SYS-1028R-MCTR (shown)	SYS-1028R-TDW
Processor Support	Single Intel® Xeon® Processor E3-1200 v3, 4th gen. Intel® Core™ i3 Processor product families; Single socket H3 (LGA 1150) supported, up to 4C/8T	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Automation, Cloud and Virtualization needs, Cloud Computing, Corporate Database, Corporate-WINS, DNS, Print, Login, Data Center, Data Farm, Data Warehouse, Database Processing &amp; Storage, Disk Backup &amp; Recovery, Downloads</li> <li>e-Business, Email Server, Embedded Applications, Engineering Design, Hosting &amp; Application delivery</li> <li>Industrial Automation &amp; Control, Instrumentation, Large Database</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Web Server</li> <li>Enterprise Server</li> <li>Managed Hosting</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>330W Gold Level high-efficiency power supply</li> <li>8x 2.5" SAS/SATA drives</li> <li>Compact size chassis</li> <li>Cost effective UP storage platform</li> </ul>	<ul style="list-style-type: none"> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Redundant 600W Platinum Level high-efficiency power supplies</li> <li>Short-Depth</li> <li>2x 10GbE-T Ports</li> <li>Broadcom® 3108 controller for 8 SAS3 (12Gbps) hot-swappable drives</li> </ul>	<ul style="list-style-type: none"> <li>600W Platinum Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>16 DIMM DDR4-2133MHz</li> <li>Up to 3 add-on cards</li> </ul>
Serverboard Chipset	SUPERMICRO® X10SL7-F Intel® C222 chipset	SUPERMICRO® X10DRL-CT Intel® C612 Chipset	SUPERMICRO® X10DDW-i Intel® C612 Chipset
System Memory (Max.)*	Up to 32GB DDR3 ECC 1600 MHz UDIMMs in 4 slots	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	1 (x8 in 16) PCI-E 3.0 Full-Height Expansion Slot	1 PCI-E 3.0 x8	2 PCI-E 3.0 x16 (Full-Height, Half-Length) 1 PCI-E 3.0 (LP) 1 slot for SAS controller mezzanine card
Onboard Storage Controller	Broadcom® 2308 with 8x SAS 6Gbps; RAID 0, 1, 1E, 10	Broadcom® 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60; Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 8 SATA3 (6Gbps) Ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® Ethernet Controller i210AT	Dual LAN with Intel® Ethernet Controller i210; Dual LAN with Intel® X540 10GbE-T Ethernet Controller	Dual LAN with Intel® i350 Gigabit Ethernet controller
VGA/Audio	AST2400 VGA DOM power connector Optional front bezel cover; LCD option	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" SAS2/SATA3 Hot-swap Bays w/ RAID option	8x 2.5" hot-swap SATA/SAS drive bays	8x 2.5" hot-swap SATA HDD drive bays
Peripheral Bays	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)
Power Supply	330W Gold Level high-efficiency power supply	-MCT: 600W Platinum Level high-efficiency power supply -MCTR: Redundant 600W Platinum Level high-efficiency power supplies	600W Platinum Level high-efficiency power supply
Cooling System	3x 40x28mm PWM fan; 1x fans for AOC cooling	4x 4cm high performance PWM fans with optimal fan speed control	5x 4cm heavy duty counter-rotating fans with optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 507mm (17.2" x 1.7" x 19.98")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 597mm (17.2" x 1.7" x 23.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5018A-MLHN4	SYS-5018A-MLTN4	SYS-5018D-MF
Processor Support	Intel® Atom® Processor C2550	Intel® Atom® Processor C2550	Single Intel® Xeon® Processor E3-1200 v3, 4th gen. Intel® Core™ i3 Processor, Intel® Pentium® Processor, Intel® Celeron® Processor product families; Single socket H3 (LGA 1150) supported
Key Applications	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs, Cloud Computing, Corporate- WINS, DNS, Print, Login, Data Center, Database Applications, DataCenter Applications</li> <li>e-Business, Enterprise Server</li> <li>FireWall Applications, Gateway, provisioning servers, High End Enterprise Server, Server Appliance</li> <li>Virtualization Server</li> <li>Web Server, Web Server for Small and Medium Business</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs, Cloud Computing, Corporate- WINS, DNS, Print, Login, Data Center, Database Applications, DataCenter Applications</li> <li>e-Business, Enterprise Server</li> <li>FireWall Applications, Gateway, provisioning servers, High End Enterprise Server, Server Appliance</li> <li>Virtualization Server</li> <li>Web Server, Web Server for Small and Medium Business</li> </ul>	<ul style="list-style-type: none"> <li>Automation, Cloud and Virtualization needs, Cloud Computing, Corporate Database, Corporate- WINS, DNS, Print, Login, Data Center, Data Farm, Data Warehouse, Database Processing &amp; Storage, Disk Backup &amp; Recovery, Downloads</li> <li>e-Business, Email Server, Embedded Applications, Engineering Design, Hosting &amp; Application delivery</li> <li>Industrial Automation &amp; Control, Instrumentation, Large Database</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 PCI-E x8 slot</li> <li>200W low-power supply</li> <li>4 hot-swap 3.5" SATA/SAS Drive Bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Optimized for Power Saving and Improved Cooling</li> <li>SATA 3.0 (6Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>1 PCI-E x8 slot</li> <li>2 Internal 3.5" SATA drive bays</li> <li>200W low-power supply</li> <li>Compact size chassis</li> <li>Cost effective UP platform</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SATA 3.0 (6Gbps) support</li> <li>Short-depth, space saving design</li> </ul>	<ul style="list-style-type: none"> <li>350W Gold Level high-efficiency power supply</li> <li>Compact size chassis</li> <li>Cost effective UP platform</li> </ul>
Serverboard Chipset	SUPERMICRO® A1SAM-2550F System on Chip chipset	SUPERMICRO® A1SAM-2550F System on Chip chipset	SUPERMICRO® X10SLL-F Intel® C222 chipset
System Memory (Max.)*	Up to 64GB ECC/non-ECC UDIMM, DDR3-1600MHz in 4 DIMM slots	Up to 64GB Unbuffered ECC/non-ECC, DDR3-1600MHz in 4 DIMM slots	Up to 32GB DDR3 ECC 1600 MHz UDIMMs in 4 slots
Expansion Slots	1 PCI-E 2.0 x8 (FH/HL)	1 PCI-E 2.0 x8 (FH/HL)	1 (x8 in 16) PCI-E 3.0 Full-Height Expansion Slot
Onboard Storage Controller	SoC controller for 4 SATA2 (3Gbps) ports; RAID 2 SATA3 (6Gbps)	SoC controller for 4 SATA2 (3Gbps) ports; RAID 2 SATA3 (6Gbps);	2x 3.5" fixed SATA3 w/ RAID options
Connectivity	Quad LAN with SoC	Quad LAN with SoC	Dual LAN with Intel® Ethernet Controller i210AT + i217LM
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA 4x USB 2.0 DOM power connector Supports 2.5" HDD/SSD via optional bracket IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Management	IPMI2.0; NMI; SuperDoctor V; Watchdog	IPMI2.0; NMI; SuperDoctor V; Watchdog	
Drive Bays	4x 3.5" hot-swap SAS/SATA	2x 3.5" internal drive bays 4x 2.5" fixed SATA3 (optional)	2x 3.5" fixed SATA3 w/ RAID options
Peripheral Bays	N/A	N/A	1 slim DVD-ROM drive (optional)
Power Supply	200W Low Noise AC-DC power supply with PFC	200W Low Noise AC-DC power supply with PFC	350W Gold Level high-efficiency power supply
Cooling System	2x 4cm high performance PWM fan	1x 10cm 3,800 RPM PWM blower fan	2x 4cm counter-rotating PWM fan;; Dual counter-rotating fans
Form Factor	1U rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.85")	1U rackmount 426x 43 x 356mm(16.8" x 1.7" x 14")	1U Rackmount 437 x 43 x 396mm (17.2" x 1.7" x 14.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**UP Mainstream**  
Reliable Performance



**UP Mainstream**  
Reliable Performance

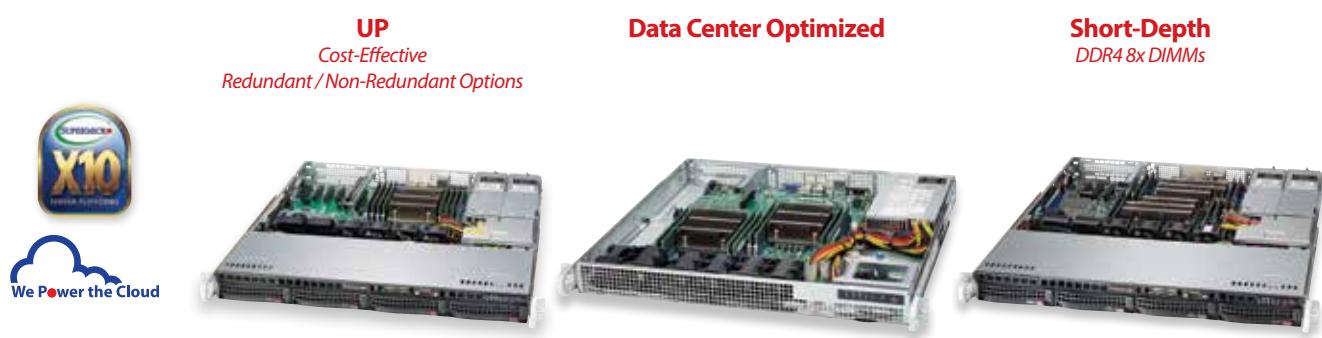


**UP Mainstream**  
High-Connectivity with Quad LAN



MODEL	SYS-5018D-MTF	SYS-5018D-MTRF	SYS-5018D-MTLN4F
Processor Support	Single Intel® Xeon® Processor E3-1200 v3, 4th gen. Intel® Core™ i3 Processor, Intel® Pentium® Processor, Intel® Celeron® Processor product families; Single socket H3 (LGA 1150) supported	Single Intel® Xeon® Processor E3-1200 v3, 4th gen. Intel® Core™ i3 Processor, Intel® Pentium® Processor, Intel® Celeron® Processor product families; Single socket H3 (LGA 1150) supported	Single Intel® Xeon® Processor E3-1200 v3, 4th gen. Intel® Core™ i3 Processor, Intel® Pentium® Processor, Intel® Celeron® Processor product families; Single socket H3 (LGA 1150) supported
Key Applications	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• HPC</li> <li>• Enterprise Server</li> <li>• Compute Intensive Storage Environments</li> <li>• 400W Redundant high-efficiency power supply w/ optional BBP® module (-MTRF)</li> <li>• 4x 3.5" SATA drives</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• HPC</li> <li>• Enterprise Server</li> <li>• Compute Intensive Storage Environments</li> <li>• 400W Redundant high-efficiency power supply w/ optional BBP® module (-MTRF)</li> <li>• 4x 3.5" SATA drives</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• HPC</li> <li>• Enterprise Server</li> <li>• Compute Intensive Storage Environments</li> <li>• 350W Gold Level high-efficiency power supply</li> <li>• 4x 3.5" SATA drives</li> <li>• Four 3.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Optimized for server appliance</li> <li>• Dual Gigabit Ethernet LAN</li> <li>• 4x SATA 3.0 (6Gbps) support</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Four 3.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Optimized for server appliance</li> <li>• Dual Gigabit Ethernet LAN</li> <li>• 4x SATA 3.0 (6Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>• Four 3.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Optimized for server appliance</li> <li>• Dual Gigabit Ethernet LAN</li> <li>• 4x SATA 3.0 (6Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>• Four 3.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Optimized for server appliance</li> <li>• Quad Gigabit Ethernet LAN</li> <li>• SATA 3.0 (6Gbps) support</li> </ul>
Serverboard	SUPERMICRO® X10SLM-F	SUPERMICRO® X10SLM-F	SUPERMICRO® X10SLM+-LN4F
Chipset	Intel® C224 chipset	Intel® C224 chipset	Intel® C224 chipset
System Memory (Max.)*	Up to 32GB DDR3 ECC 1600 MHz UDIMMs in 4 slots	Up to 32GB DDR3 ECC 1600 MHz UDIMMs in 4 slots	Up to 32GB DDR3 ECC 1600 MHz UDIMMs in 4 slots
Expansion Slots	1 PCI-E 3.0 (x8 in 16) FH expansion slot	1 PCI-E 3.0 (x8 in 16) FH expansion slot	1 PCI-E 3.0 x16 FH expansion slot
Onboard Storage Controller	Intel® C224 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C224 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C224 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® Ethernet Controller i210AT + i217LM	Dual LAN with Intel® Ethernet Controller i210AT + i217LM	Quad LAN with Intel® Ethernet Controller i210AT
VGA/Audio	<ul style="list-style-type: none"> <li>AST2400 VGA</li> <li>Supports BBP® module (-MTRF)</li> <li>Optional front bezel cover</li> </ul>	<ul style="list-style-type: none"> <li>AST2400 VGA</li> <li>Supports BBP® module (-MTRF)</li> <li>Optional front bezel cover</li> </ul>	<ul style="list-style-type: none"> <li>AST2400 VGA</li> <li>Optional front bezel cover</li> </ul>
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" SATA3 hot-swap bays w/ RAID options	4x 3.5" SATA3 hot-swap bays w/ RAID options	4x 3.5" SATA3 Hot-swap Bays w/ RAID options
Peripheral Bays	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)
Power Supply	-MTF: 350W Gold Level high-efficiency power supply	-MTRF: 400W Redundant w/ optional BBP® module	350W Gold Level high-efficiency power supply
Cooling System	4x 28mm fans standard (with optional for additional fan for add-on card)	4x 28mm fans standard (with optional for additional fan for add-on card)	4x 28mm fans standard (with option for additional fans for add-on card)
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5018R-M SYS-5018R-MR (shown)	SYS-6018R-MD (shown) SYS-6018R-MDR	SYS-6018R-MT SYS-6018R-MTR
Processor Support	Single Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• DataCenter Applications</li> <li>• Server Appliance</li> <li>• Mainstream Server Usage</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Cloud and Virtualization needs</li> <li>• Hosting &amp; Application delivery</li> <li>• Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Web Server</li> <li>• Enterprise Server</li> <li>• Managed Hosting</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• -MR: Redundant 400W high-efficiency power supplies w/ BBP™ module support</li> <li>• Short-depth (19.8"D)</li> </ul>	<ul style="list-style-type: none"> <li>• 500W Platinum Level high-efficiency power supply; or</li> <li>• Redundant 400W Gold Level high-efficiency power supplies</li> <li>• IPMI 2.0 + KVM with Dedicated LAN</li> <li>• Cost Effective</li> </ul>	<ul style="list-style-type: none"> <li>• 400W Redundant Gold Level high-efficiency power supplies</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Short-Depth</li> </ul>
Serverboard	SUPERMICRO® X10SRi-F	SUPERMICRO® X10DRD-L	SUPERMICRO® X10DRL-i
Chipset	Intel® C612 chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	1 x16 PCI-E 3.0 slot	1 PCI-E 3.0 x8 (Full-Height, Half-Length)	1 PCI-E 3.0 x8
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,10	Intel® C612 controller for 4 SATA3 (6Gbps) ports; RAID 0,1	Intel® C612 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	4x USB 2.0 (front/rear), USB 3.0, VGA, Serial	Dual LAN with Intel® i350 Gigabit Ethernet controller	Dual Intel® i210 single port Gigabit Ethernet LAN
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SATA3 bays	<ul style="list-style-type: none"> <li>-MD: 2x 2.5" or 1x 3.5" fixed SATA drive bays with bracket</li> <li>-MDR: 2x 2.5" fixed SATA drive bays with bracket</li> </ul>	4x 3.5" hot-swap SATA drive bays
Peripheral Bays	Optional slim optical device bay, optional FDD/USB bay	N/A	1 slim DVD-ROM drive (optional)
Power Supply	<ul style="list-style-type: none"> <li>-M: 350W high-efficiency power supply</li> <li>-MR: Redundant 400W high-efficiency power supplies with optional BBP™ module support</li> </ul>	<ul style="list-style-type: none"> <li>-MD: 500W Platinum Level high-efficiency power supply</li> <li>-MDR: Redundant 400W Gold Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>-MT: 480W Platinum Level high-efficiency power supply ;</li> <li>-MTR: Redundant 400W Gold Level high-efficiency power supplies</li> </ul>
Cooling System	4x 40mm mid-fan	5x 4cm heavy duty counter-rotating fans with optimal fan speed control	4x 4cm heavy duty counter-rotating fans with optimal fan speed control
Form Factor	Short-depth 1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 429mm (17.2" x 1.7" x 16.9")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**DCO**

**DCO**

**DCO**



MODEL	SYS-6018R-TD	SYS-6018R-TD8	SYS-6018R-TDW
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Cloud and Virtualization needs</li> <li>• Hosting &amp; Application delivery</li> <li>• Database Processing &amp; Storage</li> <li>• Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Cloud and Virtualization needs</li> <li>• Hosting &amp; Application delivery</li> <li>• Database Processing &amp; Storage</li> <li>• Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Data Center</li> <li>• Cloud and Virtualization needs</li> <li>• Hosting &amp; Application delivery</li> <li>• Database Processing &amp; Storage</li> <li>• Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 480W Platinum Level high-efficiency power supply</li> <li>• IPMI 2.0 + KVM with Dedicated LAN</li> <li>• Up to 3 add-on cards</li> <li>• 8x 3.5" &amp; 2x 2.5" Fixed SATA Drives</li> </ul>	<ul style="list-style-type: none"> <li>• 650W Platinum Level high-efficiency power supply</li> <li>• IPMI 2.0 + KVM with Dedicated LAN</li> <li>• 16 DIMM DDR4-2133MHz</li> <li>• Up to 3 add-on cards</li> <li>• 8x 3.5" &amp; 2x 2.5" Fixed SATA Drives</li> </ul>	<ul style="list-style-type: none"> <li>• 600W Platinum Level high-efficiency power supply</li> <li>• IPMI 2.0 + KVM with Dedicated LAN</li> <li>• 16 DIMM DDR4-2133MHz</li> <li>• Up to 3 add-on cards</li> </ul>
Serverboard	SUPERMICRO® X10DRD-L	SUPERMICRO® X10DDW-i	SUPERMICRO® X10DDW-i
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x8 (Full-Height, Half-Length)	2 PCI-E 3.0 x16 (Full-Height, Half-Length) 1 PCI-E 3.0 (LP)	2 PCI-E 3.0 x16 (Full-Height, Half-Length) 1 PCI-E 3.0 (LP) 1 slot for SAS controller mezzanine card
Onboard Storage Controller	Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet controller	Dual LAN with Intel® i350 Gigabit Ethernet controller	Dual LAN with Intel® i350 Gigabit Ethernet controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SATA HDD drive bays	8x 3.5" & 2x 2.5" Fixed SATA drive bays	4x 3.5" hot-swap SATA HDD drive bays
Peripheral Bays	1 slim DVD-ROM drive (optional)	N/A	1 slim DVD-ROM drive (optional)
Power Supply	480W Platinum Level high-efficiency power supply	650W Platinum Level high-efficiency power supply	600W Platinum Level high-efficiency power supply
Cooling System	2x blower + 1x 4cm fans with optimal fan speed control	6x 4cm heavy duty counter-rotating fans with optimal fan speed control	5x 4cm heavy duty counter-rotating fans with optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")	1U Rackmount 437 x 43 x 813mm (17.2" x 1.7" x 32")	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



## Data Center Optimized *Onboard Dual SFP+*

## Mainstream

8x SAS3 (12Gbps) and  
8x SATA3 (6Gbps)

**Mainstream**  
2U SAS3/SATA3  
Quad LAN, 24 DIMMs, 10GBase-T

Model	SYS-6018R-TDTP SYS-6018R-TDTPR (shown)	SYS-2028R-C1R SYS-2028R-C1RT	SYS-2028R-C1R4+ SYS-2028R-C1RT4+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s <ul style="list-style-type: none"> <li>Application and data serving</li> <li>Business Critical Applications</li> <li>Compute Intensive Application</li> <li>Database Processing &amp; Storage</li> <li>DataCenter Applications</li> <li>Mission-critical applications</li> <li>Simulation &amp; Automation</li> </ul>	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s <ul style="list-style-type: none"> <li>Application and data serving</li> <li>Compute Intensive Application</li> <li>Database Processing &amp; Storage</li> <li>High Availability Storage Appliance Platform</li> <li>Hosting &amp; Application delivery</li> </ul>
Key Applications	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>		
Outstanding Features	<ul style="list-style-type: none"> <li>600W Platinum Level High-Efficiency Power Supply; or</li> <li>500W Redundant Platinum Level</li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>2x 10G SFP+ onboard</li> </ul>	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>16 DIMM slots</li> <li>Redundant 920W Platinum Level high-efficiency</li> <li>Supports up to 7 expansion cards</li> </ul>	<ul style="list-style-type: none"> <li>8x 2.5" SAS/8x 2.5" SATA drive bays</li> <li>24 DIMM slots</li> <li>Redundant 920W Platinum Level high-efficiency</li> <li>Broadcom® 3108 controller for 8 SAS3 (12Gbps) hot-swappable 2.5" drives</li> <li>Up to 6 add-on cards</li> <li>2 SATA DOM support with built-in power</li> </ul>
Serverboard	SUPER● X10DRD-LTP	-C1R: SUPER● X10DRH-C -C1RT: SUPER● X10DRH-CT	-C1R4+: SUPER● X10DRC-LN4+ -C1RT4+: SUPER● X10DRC-T4+
Chipset System Memory (Max.)*	Intel® C612 Chipset Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Intel® C612 Chipset Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Intel® C612 Chipset Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	1 PCI-E 3.0 x8 (Full-Height, Half-Length)		2 PCI-E 3.0 x16; 3 PCI-E 3.0 x8; 1 PCI-E 2.0 x4 (in x8 slot) low profile add on cards
Onboard Storage Controller	Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom® 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SAS3 Broadcom® 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60
Connectivity	Dual LAN with Intel® 82599ES 10 Gigabit Ethernet w/ SFP+	Dual LAN with Intel® i350 Gigabit Ethernet Controllers; -C1RT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-C1R4+: Quad LAN with Intel® i350 Gigabit Ethernet Controllers; -C1RT4+: Quad 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SATA HDD drive bays	8x 2.5" SAS3 (12Gbps) and 8x 2.5" 6Gbps SATA3 (Total 16 hot-swap drives)	8x 2.5" 12Gbps SAS3 and 8x 2.5" 6Gbps SATA3 (Total 16 hot-swap drives)
Peripheral Bays	1 slim DVD-ROM drive (optional)	USB Support: Rear: 2x3.0 + 2x2.0, Front: 2x2.0, and 1x Type A; optional DVD-ROM drive; support either 1x slim or 1x 5.25" DVD drive	USB Support: Rear: 2x3.0 + 2x 2.0; Front: 2x 2.0, 1x Type A, optional 1x 5.25" DVD-ROM drive; support either 1x slim or 1x 5.25" DVD drive
Power Supply	<p>-TDTP: 600W Platinum Level high-efficiency power supply</p> <p>-TDTPR: 500W Redundant Platinum Level high-efficiency power supplies</p>	Redundant 920W Platinum Level (94%) high efficiency power supplies	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	5x 4cm heavy duty counter-rotating fans with optimal fan speed control 1U Backmount	3x 8cm high-performance PWM fans 2U Backmount	3x 8cm high-performance PWM fans 2U Backmount

\*Please check with your Supermicro sales representative and website for compatibility and configuration details.



MODEL	SYS-2028R-TXR	SYS-6028R-T SYS-6028R-TT	SYS-6028R-TR SYS-6028R-TRT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Surveillance DVR</li> <li>Networking Telephony</li> <li>Industrial Server Solutions</li> <li>Head-node controller</li> <li>Flash Array Server</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>16 DIMM support DDR4-2400MHz</li> <li>10x PCI-E 3.0 x8, 1x PCI-E 2.0 x4 (in x8)</li> <li>16x Hot-swap 2.5" HDD Bays (default 8x HDD Bays) and 1x 5.25" Drive Bays</li> <li>2 SATA DOMs Support with Embedded Power</li> <li>Support 1 Slim DVD-ROM and 1 COM &amp; 2 USB3.0 ports module</li> <li>145W CPU support</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>650W Gold Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>6x 3.5" hot-swap drive bays</li> <li>2 SATA DOM support with built-in power</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>Redundant 740W Platinum Level high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>8x 3.5" hot-swap SATA3 drive bays</li> <li>2 SATA DOM support with built-in power</li> </ul>
Serverboard	SUPERMICRO® X10DRX	-T: SUPERMICRO® X10DRI -TT: SUPERMICRO® X10DRI-T	-TR: SUPERMICRO® X10DRI -TRT: SUPERMICRO® X10DRI-T
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	10 Low Profile PCI-E 3.0 x8 1 Low Profile PCI-E 2.0 x4 (in x8 slot)	3 PCI-E 3.0 x16 (LP) 3 PCI-E 3.0 x8 (LP)	3 PCI-E 3.0 x16 (LP) 3 PCI-E 3.0 x8 (LP)
Onboard Storage Controller	Intel® C612 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet controller;	-T: Dual LAN with Intel® i350 Gigabit Ethernet controller; or -TT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-TR: Dual LAN with Intel® i350 Gigabit Ethernet controller; -TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	16x 2.5" hot-swap SATA3 drive bays (8x SATA3 ports by default)	6x 3.5" hot-swap drive bays	8x 3.5" hot-swap SATA3 drive bays
Peripheral Bays	1x slim DVD-ROM drive bay 1x USB + COM port tray 1x standard 5.25" drive bay	1 slim DVD/DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)
Power Supply	Redundant 1000W Titanium Level (96%) power supplies	650W high-efficiency power supply	Redundant 740W Platinum Level high-efficiency power supplies with I²C & PMBus
Cooling System	5x 8cm hot-swap PWM cooling fans with air shroud with optimal fan speed control	4x 8cm hot-swap PWM cooling fans with air shroud with optimal fan speed control	3x 8cm hot-swap PWM cooling fans with air shroud with optimal fan speed control
Form Factor	2U Rackmount 437 x 89 x 650mm (17.2" x 3.5" x 25.6")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.6")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**2U Short-Depth**  
16 DIMMs, Up to 4 AOCs  
4 NVMe

**Multi I/O**  
11 PCI-E Slots

**Multi I/O**  
11 PCI-E Slots



MODEL	SYS-6028R-TDWNR	SYS-6038R-TXR	SYS-6048R-TXR
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Networking Telephony</li> <li>Surveillance DVR</li> <li>Industrial Server Solutions</li> <li>Head-node controller</li> </ul>	<ul style="list-style-type: none"> <li>Networking Telephony</li> <li>Surveillance DVR</li> <li>Industrial Server Solutions</li> <li>Head-node controller</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Redundant 920W Platinum Level high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>Supports 16 DIMM DDR4-2133MHz</li> <li>Up to 4 add-on cards</li> <li>NVMe Support</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>10x PCI-E 3.0 x8, 1x PCI-E 2.0 x4 (in x8)</li> <li>8x Hot-swap 3.5" HDD Bays and 2x 5.25" Drive Bays</li> <li>2 SATA DOMs Support with Embedded Power</li> <li>145W CPU support</li> </ul>	<ul style="list-style-type: none"> <li>Supports 16 DIMM DDR4-2133MHz</li> <li>Up to 11 PCI-E slots</li> <li>5 hot-swap 3.5" drives bays (SATA3 ports)</li> <li>3x 5.25" Peripheral Drive Bays</li> <li>2 SATA DOMs Support with Embedded Power</li> </ul>
Serverboard	SUPERMICRO® X10DDW-iN	SUPERMICRO® X10DRX	SUPERMICRO® X10DRX
Chipset	Intel® C612 Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	3 PCI-E 3.0 x8 (FH/FL) & 1 PCI-E 3.0 (LP)	10 PCI-E 3.0 x8 (FH, FL), 1 PCI-E 2.0 x4 (in x8 slot)	10 PCI-E 3.0 x8 (FH, FL), 1 PCI-E 2.0 x4 (in x8 slot)
Onboard Storage Controller	Intel® C612 controller for 8 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet Controllers	Dual LAN with Intel® i350 Gigabit Ethernet Controller	Dual LAN with Intel® i350 Gigabit Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8x 3.5" SATA + 4x 2.5" NVMe drive bay	8x 3.5" hot-swap and 2x 5.25" drive bay	5x 3.5" hot-swap and 3x 5.25" peripheral drive bays
Peripheral Bays	N/A	1 optional Slim DVD-ROM bay	1 optional Slim DVD-ROM bay
Power Supply	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 1280W Platinum Level Digital power supplies w/PMBus supports	Redundant 600W power supplies
Cooling System	3x 80x80x38mm heavy duty counter-rotating fans with optimal fan speed control	3x middle fans & 1x rear exhaust fan	1x 92x38mm 4-pin PWM front intake fan 2x 80x38mm 4-pin PWM rear exhaust fans
Form Factor	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")	3U Rackmount 437 x 132 x 647mm (17.2" x 5.2" x 25.5")	4U Rackmount 437 x 178 x 525mm (17.2" x 7" x 20.68")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**Mainstream**  
4U Standalone/Rackmount  
SAS3, 7 PCI-E 3.0



**Mainstream**  
4U Standalone/Rackmount  
SAS3, 24 DIMMs, Quad LAN



**Mainstream**  
4U Standalone/Rackmount  
SAS3, 7 PCI-E 3.0



MODEL	SYS-7048R-C1R	SYS-7048R-C1R4+	SYS-7048R-C1RT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Big Data Analytics</li> <li>• Compute Intensive Storage Environments</li> <li>• DataCenter Applications</li> <li>• Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Big Data Analytics</li> <li>• Compute Intensive Storage Environments</li> <li>• DataCenter Applications</li> <li>• Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Big Data Analytics</li> <li>• Compute Intensive Storage Environments</li> <li>• DataCenter Applications</li> <li>• Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2 SATA DOM support with embedded power</li> <li>• 16 DIMM slots</li> <li>• 8x 3.5" SATA3/8x 2.5" SAS3 hot-swap drive bays</li> <li>• Redundant 920W Platinum Level high-efficiency</li> <li>• Independent power &amp; cooling control</li> <li>• SATA 3.0 (6Gbps) support</li> <li>• Supports up to 7 expansion cards</li> </ul>	<ul style="list-style-type: none"> <li>• 2 SATA DOM support with embedded power</li> <li>• 24 DIMM slots</li> <li>• 8x 2.5" SAS/8x 3.5" SATA hot-swap drive bays</li> <li>• Redundant 920W Platinum Level power</li> <li>• Up to 6 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>• 2 SATA DOM support with embedded power</li> <li>• 16 DIMM slots</li> <li>• 8x 3.5" SATA3/8x 2.5" SAS3 hot-swap drive bays</li> <li>• Redundant 920W Platinum Level high-efficiency</li> <li>• Independent power &amp; cooling control</li> <li>• SATA 3.0 (6Gbps) support</li> <li>• Supports up to 7 expansion cards</li> </ul>
Serverboard	SUPERMICRO X10DRH-C	SUPERMICRO X10DRC-LN4+	SUPERMICRO X10DRH-CT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	FH, FL support for 1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8 add on cards	FH/FL support for 2 PCI-E 3.0 x16; 3 PCI-E 3.0 x8; 1 PCI-E 2.0 x4 (in x8 slot) add on cards	FH, FL support for 1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8 add on cards
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SAS3 Broadcom® 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SAS3 Broadcom® 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SAS3 Broadcom® 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet Controllers;	Quad LAN with Intel® i350 Gigabit Ethernet Controllers;	Dual 1Gb Ethernet LAN with Intel® X540 and 10GbBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" 12Gbps SAS3 hot-swap drives in mobile rack and 8x 3.5" 6Gbps SATA3 hot-swap drives	8x 2.5" 12Gbps SAS3 hot-swap drives in mobile rack and 8x 3.5" 6Gbps SATA3 hot-swap drives (Total 16x hot-swap drive bays)	8x 2.5" 12Gbps SAS3 hot-swap drives in mobile rack and 8x 3.5" 6Gbps SATA3 hot-swap drives
Peripheral Bays	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive
Power Supply	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	C1R4+: Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus C1RT4+: Redundant 1000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap redundant PWM cooling fans; 2x 2x 8cm hot-swap exhaust fans air shroud	3x 8cm hot-swap cooling fans and 2x 8cm exhaust fans with air shroud with optimal fan speed control	3x 8cm hot-swap redundant PWM cooling fans; 2x 2x 8cm hot-swap exhaust fans air shroud
Form Factor	Tower/4U Rackmount 437 x 178 x 647mm (17.2" x 7" x 25.5")	Tower/4U Rackmount 452 x 178 x 648mm (17.8" x 7" x 25.5")	Tower/4U Rackmount 437 x 178 x 647mm (17.2" x 7" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

**Mainstream**  
4U Standalone/Rackmount  
SAS3, 24 DIMMs, Quad LAN



**Mainstream**  
4U Standalone/Rackmount,  
16 DIMMs



**Mainstream**  
4U Standalone/Rackmount,  
16 DIMMs



MODEL	SYS-7048R-C1RT4+	SYS-7048R-TR	SYS-7048R-TRT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Big Data Analytics</li> <li>Compute Intensive Storage Environments</li> <li>DataCenter Applications</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Powerful multi tasking workstation (financial analysis, digital video editing, engineering design, scientific computing)</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Powerful multi tasking workstation (financial analysis, digital video editing, engineering design, scientific computing)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>24 DIMM slots</li> <li>8x 2.5" SAS/8x 3.5" SATA hot-swap drive bays</li> <li>Redundant 1000W Titanium Level power</li> <li>Up to 6 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>Redundant 920W Platinum Level high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>8x 3.5" hot-swap SATA3 drive bays</li> <li>2 SATA DOM support with built-in power</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>Redundant 920W Platinum Level high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>8x 3.5" hot-swap SATA3 drive bays</li> <li>2 SATA DOM support with built-in power</li> </ul>
Serverboard Chipset	SUPERMICRO® X10DRCT4+ Intel® C612 Chipset	SUPERMICRO® X10DRI Intel® C612 Chipset	SUPERMICRO® X10DRI-T Intel® C612 Chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	FH/FL support for 2 PCI-E 3.0 x16; 3 PCI-E 3.0 x8; 1 PCI-E 2.0 x4 (in x8 slot) add on cards	3 PCI-E 3.0 x16 3 PCI-E 3.0 x8	3 PCI-E 3.0 x16 3 PCI-E 3.0 x8
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10; SAS3 Broadcom® 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60	Intel® C612 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Quad 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	Dual LAN with Intel® i350 Gigabit Ethernet controller;	Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" 12Gbps SAS3 hot-swap drives in mobile rack and 8x 3.5" 6Gbps SATA3 hot-swap drives (Total 16x hot-swap drive bays) USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive	8x 3.5" hot-swap SATA3 drive bays	8x 3.5" hot-swap SATA3 drive bays
Peripheral Bays		90-degree rotatable module: 2 x 5.25" drive bays & 1x 3.5" drive bays; Optional DVD drive	90-degree rotatable module: 2 x 5.25" drive bays & 1x 3.5" drive bays; Optional DVD drive
Power Supply	C1R4+: Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus C1RT4+: Redundant 1000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap cooling fans and 2 x 8cm exhaust fans with air shroud with optimal fan speed control	3x 8cm hot-swap cooling fans and 2 x 8cm exhaust fans with air shroud with optimal fan speed control	3x 8cm hot-swap cooling fans and 2 x 8cm exhaust fans with air shroud with optimal fan speed control
Form Factor	Tower/4U Rackmount 452 x 178 x 648mm (17.8" x 7" x 25.5")	Tower/4U Rackmount 453 x 178 x 648mm (17.8" x 7" x 25.5")	Tower/4U Rackmount 453 x 178 x 648mm (17.8" x 7" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 8-Way/4-Way

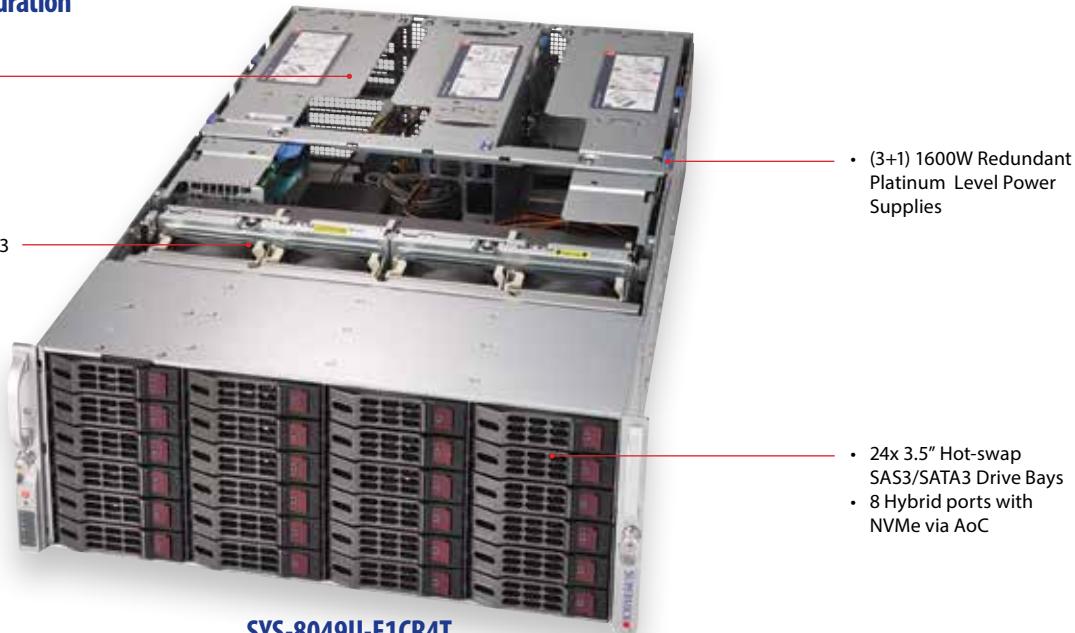
Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



## For SYS-8049U:

- Up to 12TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 48 DIMM slots; or, up to 12TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only), Support Apache Pass (AEP) DIMMs
- Up to 16 PCI-E 3.0 slots (included 6 PCI-E x16 & 10 PCI-E x8 PCI-E slots)
- Up to 24 x 3.5" SAS3 included 8 hybrid ports support U.2 NVMe via AoC
- Optional 6 GPUs Configuration

- 6 PCI-E 3.0 x16 Slots
- 10 PCI-E 3.0 x8 Slots



SYS-8049U-E1CR4T

## 7U 8-Way



SYS-7089P-TR4

## 4U 4-Way



SYS-8049U-E1CR4T

## 2U 4-Way



SYS-2049U-TR4

8/4-Way MP

## For Enterprise Mission Critical Applications and Advanced Analytics, Database, Virtualization, and Scale-Up HPC Workloads, with up to:

- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Socket P (LGA 3647) supported, CPU TDP support 205W, 3UPI up to 10.4GT/s; Supports Intel® Optane™ DC Persistent Memory
- SYS-7089P:** Up to 24TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM in 96 DIMM slots; or, up to 24TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
- SYS-2049U/8049U:** Up to 12TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 48 DIMM slots; or, up to 12TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
- 23 PCI-E 3.0 expansion slots, 32 U.2 NVMe or 8 GPUs support (SYS-7089P)
- 16 PCI-E 3.0 expansion slots, 8 U.2 NVMe, and 6 GPUs support (SYS-8049U)
- 11 PCI-E 3.0 expansion slots, 4 U.2 NVMe, and 2 GPUs support (SYS-2049U)
- 4x 10GbE ports with Intel® X550 10GbE controller (SYS-7089P)
- Redundant Titanium Level high-efficiency (96%+) power supplies
- Total Solution with Server Management Utilities including IPMI 2.0

**7U 8-Way**

*Up to 224 cores per system, 23 PCI-E 3.0 slots,  
41 NVMe/24 SAS3 option*



We Power the Cloud

**4U 4-Way**

*Up to 112 cores, 16 PCI-E 3.0 slots,  
8 NVMe/24 3.5" SAS3 option*

**2U 4-Way**

*Up to 112 cores, 11 PCI-E 3.0 slots,  
4 NVMe/24 2.5" SAS3 option*



MODEL	SYS-7089P-TR4T	SYS-8049U-E1CR4T	SYS-2049U-TR4
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Octal Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Quad Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Quad Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Virtualization</li> <li>• ERP, CRM</li> <li>• In-Memory Database Application</li> <li>• Research lab/National Lab</li> <li>• Scale-up HPC</li> </ul>	<ul style="list-style-type: none"> <li>• In-Memory Database Application</li> <li>• ERP, CRM</li> <li>• Business Intelligence</li> <li>• Scientific Computing</li> <li>• Scale-up HPC</li> <li>• Cloud and Virtualization needs</li> </ul>	<ul style="list-style-type: none"> <li>• ERP, CRM</li> <li>• High End Enterprise Server</li> <li>• Business Intelligence</li> <li>• Scientific Virtualization</li> <li>• High Performance Computer Cluster (HPCC)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 8 Sockets, up to 224 cores per system</li> <li>• 96 DDR4 Memory DIMM slots, up to 6TB</li> <li>• Up to 23 PCIE3.0 Slots</li> <li>• Up to 8 GPU</li> <li>• Optional up to 32 U.2 NVMe</li> <li>• Default 4-port 10GBASE-T Ethernet SIOM with options</li> </ul>	<ul style="list-style-type: none"> <li>• 8 NVMe SSD ports Ready</li> <li>• Up to 16 PCI-E 3.0 slots</li> <li>• 4 x 10GBASE-T + 1 Dedicated IPMI</li> <li>• Support up to 6 double width passive GPUs</li> <li>• 24 3.5" SAS3/SATA3 HDD with 8 Hybrid Ports support NVMe</li> </ul>	<ul style="list-style-type: none"> <li>• 4 NVMe SSD ports Ready</li> <li>• Up to 11 x PCIE3.0 Slots</li> <li>• 4 x GLAN + 1 Dedicated IPMI</li> <li>• 2U Rack Mount Chassis</li> </ul>
Serverboard Chipset	SUPER● X11OPi-CPU Intel® C621 chipset Up to 24TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 96 DIMM slots; Up to 24TB Intel® Optane™ DC Persistent Memory (Cascade Lake only)	SUPER● X11QPH+ Intel® C621 chipset Up to 12TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 48 DIMM slots; Up to 12TB Intel® Optane™ DC Persistent Memory (Cascade Lake only)	SUPER● X11QPH+ Intel® C621 chipset Up to 12TB 3DS ECC DDR4-2933 MHz RDIMM/LRDIMM in 48 DIMM slots; Up to 12TB Intel® Optane™ DC Persistent Memory (Cascade Lake only)
System Memory (Max.)*	23 or 39 (OEM) PCI-E 3.0 slots include 8 FH x16 PCI-E cards or 8 GPUs or 16 U.2 NVMe + 8 FHx16 PCI-E cards or 16 U.2 NVMe + 2 LP x8 (in x16 slot) PCI-E internal cards (storage module) + 5 FHHL x16 PCI-E cards (rear)	6 PCI-E 3.0 x16 and 10 PCI-E 3.0 x8 PCI-E slots	2 LPHL PCI-E 3.0 x16 (Left-internal) + 2 LPHL PCI-E 3.0 x16 (Right-internal), 2 Double Width FH PCI-E 3.0 x16 (Rear) + 1 LPHL PCI-E 3.0 x8 (Rear) + 2 FHFL PCI-E 3.0 x8 (Rear) + 2 FHHL PCI-E 3.0 x8 (Rear)
Expansion Slots			
Onboard Storage Controller	Intel C621 including 2 SATA3 (SATA DOM), 2 M.2 (SATA3/NVMe), 8HDD (SATA3), 1TPM Header, and 1 VROC key header	Intel® C621 including 2 SATA3 (SATA DOM), 1 TPM header, and 1 VROC key header	Intel® C621 including 2 SATA3 (SATA DOM), 12 SATA3 (HDD/SSD), 1 TPM header, and 1 VROC key header
Connectivity	4-port 10GBASE-T Ethernet SIOM (Intel® X550 10GbE controller)	4x 10GBASE-T ports via AOC-4UR66-I4XTF-P	4x Gigabit Ethernet ports via AOC-2UR66-i4G
VGA/Audio	1 VGA by Aspeed AST2500 BMC	1 x VGA, 1 Aspeed AST2500 BMC	1 x VGA, 1 Aspeed AST2500 BMC;
Management	Aspeed 2500 1 Port IPMI on AOM	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor® 5; Watchdog;	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor® 5; Watchdog;
Drive Bays	16 hot swap 2.5" SAS3/HDDs (w/ RAID cards) 8 2.5" or 6 3.5" internal HDDs (w/ RAID cards)	24 hot-swap 3.5" SAS3/SATA3 drives supported via optional Add-on RAID controller card; 8 Hybrid ports with NVMe supported via optional Add-on card	24 hot-swap 2.5" SAS3/SATA3 drives supported via optional Add-on RAID controller card; 4 Hybrid ports with NVMe supported via optional Add-on card
Peripheral Bays	N/A	No Peripheral Drive	No Peripheral Drive;
Power Supply	5x 1600W (N+2 Redundant), Titanium Level power supply w/ PMBus	3+1 1600W Redundancy Platinum Level Power Supply	1600W Redundant Titanium Level Power Supply;
Cooling System	8 92x92x76 mm, 10.5K-10.8K RPM, Counter-rotating Exhaust Hot-Swappable Rear Fans	8x 9CM Heavy Duty Fans with Speed Control	4 X 8cm Heavy Duty Fan
Form Factor	448 x 310 x 733mm (17.63" x 12.2" x 28.87")	4U Rackmount	437 x 89 x 780mm (17.2" x 3.5" x 30.7")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

**7U 8-Way**  
Up to 24TB memory capacity, 15 PCI-E 3.0 slots  
16 NVMe/12SAS3 option



**2U 4-Way**  
48 DDR4 DIMMs  
11PCI-E 3.0 slot, SAS/NVMe available



MODEL	SYS-7088B-TR4FT	SYS-2048U-RTR4
Processor Support	Eight Intel® Xeon® Processor E7-8800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® processor E5-4600 v4/v3 product families supported, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>High End Enterprise Server</li> <li>ERP, CRM</li> <li>Database Applications</li> <li>Research lab/National Lab</li> <li>Virtualization</li> <li>High-performance computing</li> <li>X10 EX 8-Way 192 cores</li> <li>Up to 192 DDR4 Memory DIMMs</li> <li>Up to 24TB (Broadwell), or 12 TB (Haswell)</li> <li>Up to 15 PCI-E FH slots</li> <li>Up to 16 optional U.2 NVMe support</li> <li>Optional up to 8 GPUs</li> <li>4x 10G LAN + 1 dedicated IPMI</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>High End Enterprise Server</li> <li>Cloud Computing</li> <li>DataCenter Applications</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 88 cores per system</li> <li>48 DDR4 up to 6TB Memory</li> <li>4 NVMe SSD ports Ready</li> <li>Up to 11 PCI-E3.0 Slots</li> <li>4 GLAN + 1 Dedicated IPMI</li> <li>2U Rack Mount Chassis</li> </ul>	
Serverboard	SUPER● X10BI-CPU	SUPER● X10QRH+
Chipset	Intel® C602J chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 24TB DDR4 (128GB LRDIMM); 192 DIMM slots	Up to 6TB DDR4 (128GB LRDIMM); up to 2400MHz; 48 DIMM slots
Expansion Slots	15 PCI-E 3.0 FH slots (8 PCI-E 3.0 x16 + 7 PCI-E 3.0 x8) (16 2.5" NVMe optional support + 7 PCI-E slots)	9 PCI-E 3.0 x8; 2 PCI-E 3.0 x16
Onboard Storage Controller	Intel® C602J including 2 SATA3 (SATA DOM) + 4 SATA2 (2 M.2, 2 HDD)	Intel® C612 for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10, including 8 HDD and 2 SATADOM
Connectivity	4-port 10GbE-T Ethernet SIOM (Intel® X550 10GbE controller); 1 Port IPMI	Quad LAN with Intel® i350 Gigabit Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	12x hot swap 2.5" SAS3 HDDs (w/ RAID cards); 20x 2.5" or 6x 3.5" internal HDDs (w/ RAID cards)	24 hot-swap 2.5" SAS3 drive support via extra Add-on RAID controller card; 4 Hybrid ports with NVMe support via extra Add-on card
Peripheral Bays	7U Rackmountable Rackmount Kit	N/A
Power Supply	5x 1600W (N+1 Redundant) Titanium Level power supplies with PMBus	1000W Redundant Titanium Level power supplies; 2000W power supply options available
Cooling System	8x 9cm Hot-Swappable Counter-Rotating Rear Fans	4x 8cm heavy duty fans with speed control
Form Factor	7U Rackmount 448 x 310 x 733mm (17.63" x 12.2" x 28.87") Gross Weight: 208lbs (94.35kg)	2U Rackmount 437 x 89 x 780mm (17.2" x 3.5" x 30.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

**EX 4-Way**  
E7-8800/4800 v4/v3,  
32 DDR4 DIMMs in 2U



**EX 4-Way**  
E7-8800/4800 v4/v3,  
32 DDR4 DIMMs in 2U



MODEL	SYS-8028B-TR4F	SYS-8028B-C0R4FT
Processor Support	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Mission-critical applications</li> <li>Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Finance, Banking, e-Commerce</li> <li>Compute Intensive Application</li> <li>Mission-critical applications</li> <li>Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 96 cores per system</li> <li>Up to 4TB DDR4 memory capacity in 32 DIMM slots</li> <li>2U 4-way system</li> <li>4 PCI-E 3.0 support</li> <li>1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I<sup>2</sup>C &amp; PMBus</li> </ul>	<ul style="list-style-type: none"> <li>Up to 96 cores per system</li> <li>Up to 4TB DDR4 memory capacity in 32 DIMM slots</li> <li>2U 4-way system</li> <li>4 PCI-E 3.0 support</li> <li>Broadcom® 3008 on board</li> <li>1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I<sup>2</sup>C &amp; PMBus</li> </ul>
Serverboard	SUPERMICRO® X10QLB-4	SUPERMICRO® X10QLB-4CT
Chipset	Intel® C602J chipset	Intel® C602J chipset
System Memory (Max.)*	Up to 4TB ECC DDR4 (128GB LRDIMM), speed up to 1866MHz; 32 DIMM slots	Up to 4TB ECC DDR4 (128GB LRDIMM), speed up to 1866MHz; 32 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 LP slot; 2 PCI-E 3.0 x8 LP slot	2 PCI-E 3.0 x16 LP slot; 2 PCI-E 3.0 x8 LP slot
Onboard Storage Controller	Intel® C602J for 2 SATA3 (6 Gbps) ports; 4 SATA2 (3 Gbps); RAID 0,1,5,10	Intel® C602J for 2 SATA3 (6 Gbps) ports; 4 SATA2 (3 Gbps); RAID 0,1,5,10; Broadcom® 3008 SW controller on board
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet Controller	Dual LAN with Intel® X540 10GbE-T Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	6x 3.5" hot-swap SATA drive bays	6x 3.5" hot-swap SAS2 drive bays (through SAS2 Backplane)
Peripheral Bays	N/A	N/A
Power Supply	1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies	1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies
Cooling System	3x 8cm heavy duty fans with speed control	3x 8cm heavy duty fans with speed control
Form Factor	2U Rackmount 437 x 89 x 709mm (17.2" x 3.5" x 27.9")	2U Rackmount 437 x 89 x 709mm (17.2" x 3.5" x 27.9")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**EX 4-Way**

*E7-8800/4800 v4/v3,  
32 DDR4 DIMMs in 4U Tower/Rackmount*

**EX 4-Way**

*E7-8800/4800 v4/v3,  
32 DDR4 DIMMs in 4U Tower/Rackmount*



MODEL	SYS-8048B-TR4F	SYS-8048B-C0R4FT
Processor Support	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Mission-critical applications</li> <li>• Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>• Finance, Banking, e-Commerce</li> <li>• Compute Intensive Application</li> <li>• Mission-critical applications</li> <li>• Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Up to 96 cores per system</li> <li>• Up to 4TB DDR4 memory capacity in 32 DIMM slots</li> <li>• 4U 4-way system</li> <li>• 4 PCI-E 3.0 support</li> <li>• 1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I²C &amp; PMBus</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 96 cores per system</li> <li>• Up to 4TB DDR4 memory capacity in 32 DIMM slots</li> <li>• 4U 4-way system</li> <li>• 4 PCI-E 3.0 support</li> <li>• Broadcom® 3008 on board</li> <li>• 1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I²C &amp; PMBus</li> </ul>
Serverboard	SUPERMICRO® X10QLB-4	SUPERMICRO® X10QLB-4CT
Chipset	Intel® C602J chipset	Intel® C602J chipset
System Memory (Max.)*	32 DIMM slots, Up to 4TB ECC DDR4 (128GB LRDIMM), speed up to 1866MHz; 32 DIMM slots	32 DIMM slots, Up to 4TB ECC DDR4 (128GB LRDIMM), speed up to 1866MHz; 32 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 FH slot; 2 PCI-E 3.0 x8 FH slot	2 PCI-E 3.0 x16 FH slot; 2 PCI-E 3.0 x8 FH slot
Onboard Storage Controller	Intel® C602J for 2 SATA3 (6 Gbps) ports; 4 SATA2 (3 Gbps); RAID0,1,5,10	Intel® C602J for 2 SATA3 (6 Gbps) ports; 4 SATA2 (3 Gbps); RAID0,1,5,10; Broadcom® 3008 SW controller on board
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet Controller	Dual LAN with Intel® X540 10GbE-T Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	5x 3.5" hot-swap SATA/SAS drive bays	5x 3.5" hot-swap SAS2 drive bays (through SAS2 Backplane)
Peripheral Bays	3x 5.25" peripheral bays; Optional 2x M28SAB-OEM (SAS3 Mobile Rack)	3x 5.25" peripheral bays; Optional 2x M28SAB-OEM (SAS3 Mobile Rack)
Power Supply	1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I²C & PMBus	1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I²C & PMBus
Cooling System	3x 9cm mid fans + 3x 8cm rear fans with speed control	3x 9cm mid fans + 3x 8cm rear fans with speed control
Form Factor	4U Rackmount/Tower 462 x 178 x 721mm (18.2" x 7" x 28.4")	4U Rackmount/Tower 462 x 178 x 721mm (18.2" x 7" x 28.4")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**EX 4-Way**

E7-8800/4800 v4/v3, 32 DDR3 DIMMs in 2U

**EX 4-Way**

E7-8800/4800 v4/v3, 32 DDR3 DIMMs in 4U Tower/Rackmount



MODEL	<b>SYS-8028B-TR3F</b> <b>SYS-8028B-COR3FT</b>	<b>SYS-8048B-TR3F</b> <b>SYS-8048B-COR3FT</b>
Processor Support	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Mission-critical applications</li> <li>Enterprise Server</li> <li>Up to 96 cores per system</li> <li>Up to 2TB DDR3 memory capacity in 32 DIMM slots</li> <li>2U 4-way system</li> <li>4 PCI-E 3.0 support</li> <li>-COR3FT: Broadcom® 3008 on board</li> <li>1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I<sup>2</sup>C &amp; PMBus</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Mission-critical applications</li> <li>Enterprise Server</li> <li>Up to 96 cores per system</li> <li>Up to 2TB DDR3 memory capacity in 32 DIMM slots</li> <li>4U 4-way system</li> <li>4 PCI-E 3.0 support</li> <li>-COR3FT: Broadcom® 3008 on board</li> <li>1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I<sup>2</sup>C &amp; PMBus</li> </ul>
Outstanding Features	<p><b>Serverboard</b></p> <ul style="list-style-type: none"> <li>-TR3F: SUPER● X10QBL</li> <li>-COR3FT: SUPER● X10QBL-CT</li> </ul>	<p><b>Serverboard</b></p> <ul style="list-style-type: none"> <li>-TR3F: SUPER● X10QBL</li> <li>-COR3FT: SUPER● X10QBL-CT</li> </ul>
Chipset	Intel® C602J chipset	Intel® C602J chipset
System Memory (Max.)*	Up to 2TB ECC DDR3 (64GB LRDIMM), speed up to 1600MHz (32GB LRDIMM); 32 DIMM slots	32 DIMM slots, Up to 2TB ECC DDR3 (64GB LRDIMM), up to 1600MHz (32GB LR-DIMM); 32 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 LP slot; 2 PCI-E 3.0 x8 LP slot	2 PCI-E 3.0 x16 FH slot; 2 PCI-E 3.0 x8 FH slot
Onboard Storage Controller	Intel® C602J for 2 SATA3 (6 Gbps) ports; <b>-TR3F:</b> 4 SATA2 (3 Gbps); RAID0,1,5,10; <b>-COR3FT:</b> 4 SATA2 (3 Gbps); RAID0,1,5,10; Broadcom® 3008 SW controller on board	Intel® C602J for 2 SATA3 (6 Gbps) ports; <b>-TR3F:</b> 4 SATA2 (3 Gbps); RAID0,1,5,10; <b>-COR3FT:</b> 4 SATA2 (3 Gbps); RAID0,1,5,10; Broadcom® 3008 SW controller on board
Connectivity	<b>-TR3F:</b> Dual LAN with Intel® i350 Gigabit Ethernet Controller; <b>-COR3FT:</b> Dual LAN with Intel® X540 10GBase-T Ethernet Controller	<b>-TR3F:</b> Dual LAN with Intel® i350 Gigabit Ethernet Controller; <b>-COR3FT:</b> Dual LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	6x 3.5" hot-swap SATA drive bays	5x 3.5" hot-swap SATA/SAS drive bays
Peripheral Bays	N/A	3x 5.25" peripheral bays; Optional 2x M28SAB-OEM (SAS3 Mobile Rack)
Power Supply	1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies	1400W Redundant Platinum Level Digital (94%+) high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm heavy duty fans with speed control	3x 9cm mid fans + 3x 8cm rear fans with speed control
Form Factor	2U Rackmount 437 x 89 x 709mm (17.2" x 3.5" x 27.9")	4U Rackmount/Tower 462 x 178 x 721mm (18.2" x 7" x 28.4")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**EX 4-Way**  
E7-8800/4800 v4/v3, 96 DDR4 DIMMs,  
Up to 12TB memory capacity, 11 PCI-E 3.0 slots; SAS2 (6 Gbps)



**EX 4-Way**  
E7-8800/4800 v4/v3, 96 DDR4 DIMMs,  
Up to 12TB memory capacity, 11 PCI-E 3.0 slots; SAS3 (12 Gbps)



MODEL	SYS-8048B-TR4FT	SYS-4048B-TR4FT
Processor Support	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Business Intelligence</li> <li>ERP, CRM</li> <li>Database Applications</li> <li>Research lab/National Lab</li> <li>Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>Business Intelligence</li> <li>ERP, CRM</li> <li>Database Applications</li> <li>Research lab/National Lab</li> <li>Virtualization</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 96 CPU cores per system</li> <li>Up to 12TB in 96 memory DIMMs</li> <li>Up to 11 PCI-E 3.0 slots</li> <li>Up to 24 3.5" HDDs, SAS 2.0 (6Gbps)</li> <li>Up to 4x 1620W Redundant Platinum Level (94%) power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Up to 96 CPU cores per system</li> <li>Up to 12TB in 96 memory DIMMs</li> <li>Up to 11 PCI-E 3.0 slots</li> <li>Up to 48 SAS 3.0 (12Gbps) 2.5" drive bays</li> <li>Up to 4x 1620W Redundant Platinum Level (94%) power supplies</li> </ul>
Serverboard	SUPER● X10QBi	SUPER● X10QBi
Chipset	Intel® C602J chipset	Intel® C602J chipset
System Memory (Max.)*	Up to 12TB ECC DDR4 with 128GB 3DS LRDIMM (8x memory module board: X10QBi-MEM2), speed up to 1866MHz; 96 DIMM slots	Up to 12TB ECC DDR4 with 128GB 3DS LRDIMM (8x memory module board: X10QBi-MEM2), speed up to 1866MHz; 96 DIMM slots
Expansion Slots	11 PCI-E 3.0 slots (4x PCI-E3.0 x16 + 7x PCI-E3.0 x8) with 4 memory module boards; 8 PCI-E 3.0 slots (4x PCI-E3.0 x16 + 4x PCI-E3.0 x8) with 8 memory module boards	11 PCI-E 3.0 slots (4x PCI-E3.0 x16 + 7x PCI-E3.0 x8) with 4 memory module boards; 8 PCI-E 3.0 slots (4x PCI-E3.0 x16 + 4x PCI-E3.0 x8) with 8 memory module boards
Onboard Storage Controller	Intel® C602J for 2 SATA3 (6 Gbps) ports and 4 SATA2 (3 Gbps)	Intel® C602J for 2 SATA3 (6 Gbps) ports and 4 SATA2 (3 Gbps)
Connectivity	Dual 10GBase-T ports with Intel® X540 controller on AOM card	Dual 10GBase-T ports with Intel® X540 controller on AOM card
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24 hot-swap 3.5" SAS2 drive support via extra Add-on RAID controller card	24 hot-swap 2.5" SAS3 drive support via extra Add-on RAID controller card; optional: up to 48 hot-swap 2.5" SAS3 drives support via extra backplane + add-on RAID controller card
Peripheral Bays	N/A	N/A
Power Supply	(N+1) Redundant 1620W up to 4 Platinum Level (94%) power supplies	(N+1) Redundant 1620W up to 4 Platinum Level (94%) power supplies
Cooling System	4x 9cm mid fans + 3x 8cm rear fans with speed control; optional 2 additional 8cm rear fans	4x 9cm mid fans + 3x 8cm rear fans with speed control; optional 2 additional 8cm rear fans
Form Factor	4U Rackmount 437 x 178 x 846mm (17.2" x 7" x 33.3")	4U Rackmount 437 x 178 x 795mm (17.2" x 7" x 31.3")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**EX 4-Way**  
*E7-8800/4800 v4/v3, 96 DDR3 DIMMs,  
 up to 6TB memory capacity, 11 PCI-E 3.0 slots; SAS2 (6 Gbps)*



**EX 4-Way**  
*E7-8800/4800 v4/v3, 96 DDR3 DIMMs,  
 up to 6TB memory capacity, 11 PCI-E 3.0 slots; SAS3 (12 Gbps)*



MODEL	SYS-8048B-TRFT	SYS-4048B-TRFT
Processor Support	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Business Intelligence</li> <li>• ERP CRM</li> <li>• Database</li> <li>• Virtualization</li> <li>• Research Lab/National Lab</li> </ul>	<ul style="list-style-type: none"> <li>• Business Intelligence</li> <li>• ERP CRM</li> <li>• Database</li> <li>• Virtualization</li> <li>• Research Lab/National Lab</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Up to 96 CPU cores per system</li> <li>• Up to 6TB in 96 memory DIMMs</li> <li>• Up to 11 PCI-E 3.0 slots</li> <li>• Up to 24 SAS 2.0 (6Gbps) 3.5" drive bays</li> <li>• Independent power and cooling controls</li> <li>• Up to 4x 1620W Redundant Platinum Level (94%) power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 96 CPU cores per system</li> <li>• Up to 6TB in 96 memory DIMMs</li> <li>• Up to 11 PCI-E 3.0 slots</li> <li>• Up to 48 SAS 3.0 (12Gbps) 2.5" drive bays</li> <li>• Independent power and cooling controls</li> <li>• Up to 4x 1620W Redundant Platinum Level (94%) power supplies</li> </ul>
Serverboard	SUPERMICRO® X10QBI / X10QBI-MEM1 / AOM-X10QBI-A	SUPERMICRO® X10QBI / X10QBI-MEM1 / AOM-X10QBI-A
Chipset	Intel® C602J chipset	Intel® C602J chipset
System Memory (Max.)*	Up to 6TB ECC DDR3 RDIMM/LRDIMM (8x memory module board: X10QBI-MEM2), speed up to 1866MHz; 96 DIMM slots	Up to 6TB ECC DDR3 RDIMM/LRDIMM (8x memory module board: X10QBI-MEM2), speed up to 1866MHz; 96 DIMM slots
Expansion Slots	11 PCI-E 3.0 slots (4x PCI-E3.0 x16 + 7x PCI-E3.0 x8) with 4 memory module boards; 8 PCI-E 3.0 slots (4x PCI-E3.0 x16 + 4x PCI-E3.0 x8) with 8 memory module boards	11 PCI-E 3.0 slots (4x PCI-E3.0 x16 + 7x PCI-E3.0 x8) with 4 memory module boards; 8 PCI-E 3.0 slots (4x PCI-E3.0 x16 + 4x PCI-E3.0 x8) with 8 memory module boards
Onboard Storage Controller	Intel® C602J for 2 SATA3 (6 Gbps) ports and 4 SATA2 (3 Gbps)	Intel® C602J for 2 SATA3 (6 Gbps) ports and 4 SATA2 (3 Gbps)
Connectivity	Dual 10GBase-T ports with Intel® X540 controller on AOM card	Dual 10GBase-T ports with Intel® X540 controller on AOM card
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24 hot-swap 3.5" SAS2 drive support via extra Add-on RAID controller card  optional: up to 48 hot-swap 2.5" SAS3 drives support via extra backplane + add-on RAID controller card	24 hot-swap 2.5" SAS3 drive support via extra Add-on RAID controller card;  optional: up to 48 hot-swap 2.5" SAS3 drives support via extra backplane + add-on RAID controller card
Peripheral Bays	N/A	N/A
Power Supply	(N+1) Redundant 1620W Platinum Level (94%) power supplies	(N+1) Redundant 1620W Platinum Level (94%) power supplies
Cooling System	4x 9cm mid fans + 3x 8cm rear fans with speed control; optional 2 additional 8cm rear fans	4x 9cm mid fans + 3x 8cm rear fans with speed control; optional 2 additional 8cm rear fans
Form Factor	4U Rackmount 437 x 178 x 846mm (17.2" x 7" x 33.3")	4U Rackmount 437 x 178 x 795mm (17.2" x 7" x 31.3")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# MicroCloud

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



24/12/8 Modular UP Server Nodes in 3U • High-Density, High-Performance

- High-Efficiency, and Cost-Effective • Easy-to-Service
- Space Saving, Optimized for Cloud Computing and Web Hosting



SYS-5039MD8-H8TNR  
SYS-5039MD18-H8TNR

8 UP Nodes

65W 8-core / 86W 18-core SoC  
8 sets of 2x 3.5" SATA3 HDD; or 2x 2.5" Hybrid SATA3/NVMe  
w/ optional kits, 2x M.2 support  
1x PCI-E 3.0 x16 (low profile)



SYS-5039MA8-H12RFT  
SYS-5039MA16-H12RFT

12 UP Nodes

21W 8-core / 32W 16-core  
12 set of 2x 3.5" SATA3 HDD; or 4x 2.5" SATA3; or 2x 2.5" NVMe + 2x 2.5" SATA3;  
or 2x 2.5" NVMe + 1x 3.5" SATA3  
2x M.2 support



SYS-5039MS-H8TRF (Kabylake)  
SYS-5038MD-H8TRF (XeonD)  
SYS-5038MR-H8TRF (Broadwell)  
SYS-5038ML-H8TRF (Haswell)

8 Hot-pluggable Nodes in 3U  
(Rear I/O)  
2x 2.5"/3.5" HDD per node



SYS-5039MS-H12TRF (Kabylake)  
SYS-5038ML-H12TRF (Haswell)

12 Hot-pluggable Nodes in 3U  
(Front I/O)  
2x 2.5" or 4x 2.5" HDD per node



SYS-5038MD-H24TRF (XeonD)  
SYS-5038MA-H24TRF (Avoton)  
SYS-5038ML-H24TRF (Haswell)

24 UP Nodes  
24 set of 2 x 2.5" SATA3 HDD; or  
24 set of 4x 2.5" Slim SSD w/ optional kit

MicroCloud

The Supermicro MicroCloud modular server system provides the high density, performance, efficiency and cost effectiveness required for today's demanding server deployments. The 24/12/8 modular server nodes are conveniently integrated into a compact 3U chassis that is less than 30 inches deep, saving over 76% of rack space when compared to traditional 1U servers. The cable-less, hot-pluggable server nodes operate independently. Each node provides up to Up to 128GB DDR4-2400/1866/1600MHz of ECC Unbuffered DIMM or 128GB RDIMM / 256GB LRDIMM / 512GB LRDIMM ECC DDR4 memory, one PCI-E 3.0 x16 expansion slot for low-profile add-on card, and 2x 2.5" NVMe, 2x 3.5", or 4x 2.5" HDDs. The MicroCloud system utilizes redundant Titanium Level (96%) high-efficiency power supplies and sophisticated cooling zone controls for a Green energy profile. Each node is powered by the latest Intel® Xeon® Processor E3-1200 v6 (up to 85W) or Intel® Xeon® Processor E5-2600 v4/v3 (up to 145W) or Intel® Xeon® processor D (65W/86W) product families.



**MicroCloud**  
3U 12 nodes Intel® Xeon® E2100



**MicroCloud**  
3U 12 nodes Intel® Xeon® E2100



MODEL	SYS-5039MC-H8TRF	SYS-5039MC-H12TRF
Processor Support	Single socket H4 (LGA 1151) supports Intel® Xeon® Processor E-2100 series, 8th Gen. Intel® Core™ i3/Pentium®/Celeron®, Intel® C246 chipset	12 set of Intel® Coffee Lake Xeon® processor E2100, Intel® 8th Gen Core™ i3,6 cores, support up to 95W
Key Applications	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Web Cache</li> <li>• Web Hosting, VM</li> <li>• Social Networking</li> <li>• Corporate-WINS, DNS, Print, Login</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Web Cache</li> <li>• Web Hosting, VM</li> <li>• Social Networking</li> <li>• Corporate-WINS, DNS, Print, Login</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Up to 8x hot-pluggable node in 3U chassis</li> <li>• 1 PCI-E 3.0 (x8) Low-profile</li> <li>• High density, enterprise performance, cost effective</li> <li>• Redundant 2000W Titanium Level high-efficiency power supplies</li> <li>• Hot-swappable SAS/SATA3 HDDs</li> <li>• 2 NVMe M.2 Support</li> </ul>	<ul style="list-style-type: none"> <li>• 12 UP hot-pluggable nodes in 3U</li> <li>• Flexible HDD selection, 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3 or 2x 2.5" NVME plus 1x 3.5" SATA 3</li> <li>• 1 M.2 SATA3 or NVMe support</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>• UID LED</li> <li>• Centralized dedicated management switch port</li> </ul>
Serverboard	SUPER●®	SUPER●® X11SC-E-F
Chipset	Intel® C246 chipset	Intel® C246 chipset
System Memory (Max.)*	8 set of up to 128GB Unbuffered ECC Low Profile DDR4 2666MHz in 4 DIMM sockets	12 set of up to 128GB Unbuffered ECC Very Low Profile DDR4 2666MHz in 4 DIMM sockets
Expansion Slots	8 set of PCI-E 3.0 x8 LP slot and 8 set of Micro-LP slots (MicroLP upgradable)	12 set of Micro-LP slots (MicroLP upgradable)
Onboard Storage Controller	8 set of Intel® C246 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1,5,10: Selected low-profile RAID or HBA RAID card to support SAS HDD	12 set of Intel® C246 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1, 5,10
Connectivity	8 set of Dual LAN Intel® i350 Gbe LAN controller (via MLP)	12 set of Dual LAN Intel® i350 Gbe LAN controller (via MLP)
VGA/Audio	8 set of Aspeed AST2500 graphics	12 set of Aspeed AST2500 graphics
Management	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog
Drive Bays	8 set of 2x 3.5" SATA3 HDD or 2x 2.5" SATA3 w/ option kits	12 set of 2x 3.5" SATA3 HDD; or 4x 2.5" SATA3; or 2x 2.5" NVME plus 2x 2.5" SATA3; or 2x 2.5" NVME plus 1x 3.5" SATA3
Peripheral Bays	N/A	N/A
Power Supply	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies
Cooling System	4x 8cm Heavy duty fans with optimal cooling zone	4x 9cm Heavy duty fans with optimal cooling zone
Form Factor	(17.26" x 5.21" x 23.2")	(17.5" x 5.21" x 29.5") (28.35" x 16.1" x 42.36")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

**MicroCloud**  
3U 12 nodes Denverton



**MicroCloud**  
3U 12 nodes Denverton



**MicroCloud**

3U 8 nodes Intel® Xeon® D 2100



MODEL	SYS-5039MA8-H12RFT	SYS-5039MA16-H12RFT	SYS-5039MD8-H8TNR
Processor Support	Intel® Atom® Processor C3750, Single Socket FCBGA1310 supported, CPU TDP support 21W <ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>Corporate- WINS, DNS, Print, Login</li> <li>12 UP hot-pluggable nodes in 3U</li> <li>Flexible HDD selection, 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3 or 2x 2.5" NVME plus 1x 3.5" SATA 3</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>UID LED</li> <li>Centralized dedicated management switch port</li> </ul>	Intel® Atom® Processor C3955, Single Socket FCBGA1310 supported, CPU TDP support 32W <ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>Corporate- WINS, DNS, Print, Login</li> <li>12 UP hot-pluggable nodes in 3U</li> <li>Flexible HDD selection, 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3 or 2x 2.5" NVME plus 1x 3.5" SATA 3</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>UID LED</li> <li>Centralized dedicated management switch port</li> </ul>	Intel® Xeon® Processor D-2141I, 8-Cores, 16 Threads, CPU TDP support 65W <ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>CDN</li> <li>Intel® Xeon® Processor D-2141I, 8-Cores, 16 Threads, CPU TDP support 65W</li> <li>2x 3.5" SATA3 or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits</li> <li>Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2133MHz; in 4 DIMM slots</li> <li>1x PCIe3.0 x16, 1x Micro-LP, and 2x M.2</li> <li>2x 1GbE port, 1x 1GbE centralized IPMI management port</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPER● A2SD1-3750F	SUPER● A2SD1-3955F	SUPER● X11SDD-8C-F
Chipset	Intel® Denverton SoC	Intel® Denverton SoC	Intel® Xeon® Processor D SoC
System Memory (Max.)*	12 set of up to 128GB ECC VLP RDIMM Or 64GB ECC VLP UDIMM, DDR4-2400MHz, in 4 DIMM slots	12 set of up to 128GB ECC VLP RDIMM or 64GB ECC VLP UDIMM, DDR4-2400MHz, in 4 DIMM slots	Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2133MHz; in 4 DIMM slots
Expansion Slots	no PCI-E support	no PCIe support	8 set of 1 PCI-E 3.0 x16 (low profile)
Onboard Storage Controller	no RAID support	no RAID support	8 set of Intel® Xeon® Processor D SoC
Connectivity	Dual LAN Intel® 10GbE-T on board controller	Dual LAN Intel® 10GbE-T on board controller	8 set of Dual LAN Intel(R) i350 GbE LAN controller
VGA/Audio	12 set of Aspeed AST2400 graphics	12 set of Aspeed AST2400 graphics	on board VGA by KVM connector
Management	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel(R) Node Manager, SUM, SPM, SSM, SuperDoctor(R) 5, Watchdog
Drive Bays	12 set of 2x 3.5" SATA3; or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3 (cannot support M.2); or 2x 2.5" NVME plus 1x 3.5" SATA3 (support only 1 M.2)	12 set of 2x 3.5" SATA3; or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3; or 2x 2.5" NVME plus 1x 3.5" SATA3	8 set of 2x 3.5" SATA3 HDD; or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits
Peripheral Bays	N/A	N/A	N/A
Power Supply	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies	1600W Redundant Titanium Level high-efficiency power supplies
Cooling System	4x 9cm power efficient fans with optimal cooling zone	4x 9cm power efficient fans with optimal cooling zone	4x 8cm hot-swap cooling fans with fan speed control
Form Factor	(17.5" x 5.21" x 29.5") (28.35" x 16.1" x 42.36")	3U Rackmount 444.5mm x 132.5mm x 749.3mm (17.5" x 5.21" x 29.5") (17.5" x 5.21" x 29.5") (28.35" x 16.1" x 42.36")	438 x 132 x 589mm (17.26" x 5.21" x 23.2") Package: 667 x 296 x 864mm (26.26" x 11.65" x 34")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

MicroCloud



We Power the Cloud

### MicroCloud 3U 8 nodes Intel® Xeon® D 2100



### MicroCloud 3U 12 nodes Intel® Xeon® E3-1200 v6



MODEL	SYS-5039MD18-H8TNR	SYS-5039MS-H12TRF
Processor Support	Intel® Xeon® Processor D-2191, 18-Cores, 36 Threads, CPU TDP support 86W	12 set of Intel® Xeon® processor E3-1200 v5/v6, Intel® 7th Gen Core™ i3, Intel® Pentium®, Intel® Celeron® processors product family BIOS version 2.0 or above is required to support 7th Generation Intel® Core™ Processors and Intel® Xeon® Processor E3
Key Applications	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Web Cache</li> <li>• Web Hosting, VM</li> <li>• Social Networking</li> <li>• CDN</li> </ul> <ul style="list-style-type: none"> <li>• Intel® Xeon® Processor D-2191, 18-Cores, 36 Threads, CPU TDP support 86W</li> <li>• 2x 3.5" SATA3 or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits</li> <li>• Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2400Mz; in 4 DIMM slots</li> <li>• 1x PCIe3.0 x16, 1x Micro-LP, and 2x M.2</li> <li>• 2x 1GbE port, 1x Gbe centralized IPMI management port</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Web Cache</li> <li>• Web Hosting, VM</li> <li>• Social Networking</li> <li>• Corporate- WINS, DNS, Print, Login</li> </ul> <ul style="list-style-type: none"> <li>• 12 UP hot-pluggable nodes in 3U</li> <li>• Flexible HDD selection, 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3 or 2x 2.5" NVME plus 1x 3.5" SATA 3</li> <li>• 2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>• UID LED</li> <li>• Centralized dedicated management switch port</li> </ul>
Serverboard	SUPERMICRO X11SDD-18C-F	SUPERMICRO X11SSE-F
Chipset	Intel® Xeon® Processor D SoC	Intel® C236 chipset
System Memory (Max.)*	Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2400Mz; in 4 DIMM slots	12 set of up to 64GB Unbuffered ECC Very Low Profile DDR4 2400MHz in 4 DIMM sockets
Expansion Slots	8 set of 1 PCI-E 3.0 x16 (low profile)	12 set of Micro-LP slots (MicroLP upgradable)
Onboard Storage Controller	8 set of Intel® Xeon® Processor D SoC	12 set of Intel(R) C236 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1, 5,10
Connectivity	8 set of Dual LAN Intel(R) i350 GbE LAN controller	12 set of Dual LAN Intel® i350 Gbe LAN controller
VGA/Audio	on board VGA by KVM connector	12 set of Aspeed AST2400 graphics
Management	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel(R) Node Manager, SUM, SPM, SSM, SuperDoctor(R) 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog
Drive Bays	8 set of 2x 3.5" SATA3 HDD; or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits	12 set of 2x 3.5" SATA3 HDD or 4x 2.5" SATA3 or 2x 2.5" NVME + 2x 2.5" SATA3
Peripheral Bays	N/A	N/A
Power Supply	1600W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies
Cooling System	4x 8cm hot-swap cooling fans with fan speed control	4x 9cm Heavy duty fans with optimal cooling zone
Form Factor	438 x 132 x 589mm (17.26" x 5.21" x 23.2") Package: 667 x 296 x 864mm (26.26" x 11.65" x 34")	(17.5" x 5.21" x 29.5") (28.35" x 16.1" x 42.36")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5039MS-H8TRF	SYS-5038MD-H8TRF
Processor Support	8 set of Intel® Xeon® processor E3-1200 v5/v6, Intel® 7th Gen Core™ i3, Intel® Pentium®, Intel® Celeron® processors product family BIOS version 2.0 or above is required to support 7th Generation Intel® Core™ Processors and Intel® Xeon® Processor E3-	8 set of Intel® Xeon® processor D-1541, 8-Core, 45W
Key Applications	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Web Cache</li> <li>• Web Hosting, VM</li> <li>• Social Networking</li> </ul> <p>• Up to 8x hot-pluggable node in 3U chassis • 1 PCI-E 3.0 (x8) Low-profile</p>	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Web Cache</li> <li>• Web Hosting, VM</li> <li>• Social Networking</li> <li>• CDN</li> </ul> <p>• 4x M.2 support (3x 22110, 1x 2240) • Up to 8x hot-pluggable node in 3U chassis • 1 PCI-E 3.0 (x8) low-profile</p>
Outstanding Features	<ul style="list-style-type: none"> <li>• High density, enterprise performance, cost effective</li> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>• Hot-swappable SAS/SATA3 HDDs</li> <li>• UID LED</li> </ul>	<ul style="list-style-type: none"> <li>• Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>• Hot-swappable SAS/SATA3 HDDs</li> <li>• UID LED</li> </ul>
Serverboard	SUPERMICRO® X11SSD-F	SUPERMICRO® X10SDD-F
Chipset	Intel® C236 chipset	Intel® Xeon® Processor D SoC
System Memory (Max.)*	8 set of up to 64GB Unbuffered ECC Low Profile DDR4 2400MHz in 4 DIMM sockets	8 set of up to 128GB DDR4 ECC RDIMM, 64GB DDR4 ECC/non-ECC UDIMM, in 4 DIMM slots
Expansion Slots	8 set of PCI-E 3.0 x8 low profile slot and 8 set of Micro-LP slots (MicroLP upgradable)	8 set of PCI-E 3.0 x8 low profile slot and 8 set of Micro-LP slots (MicroLP upgradable)
Onboard Storage Controller	8 set of Intel® C236 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1,5,10: Selected low-profile RAID or HBA RAID card to support SAS HDD	8 set of System on Chip
Connectivity	8 set of Dual LAN Intel® i350 Gbe LAN controller	8 set of Dual LAN Intel® i350 GbE LAN controller
VGA/Audio	8 set of Aspeed AST2400 graphics	8 set of AST2400 VGA
Management	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8 set of 2x 3.5" SATA3 HDD or 2x 2.5" SATA3 w/ option kits	8 set of 2x 3.5" SATA3 HDD; or 2x 2.5" SATA3 w/ option kits
Peripheral Bays	N/A	N/A
Power Supply	1600W Redundant Titanium Level high-efficiency power supplies	1600W Redundant Titanium Level high-efficiency power supplies
Cooling System	4x 8cm Heavy duty fans with optimal cooling zone	4x 8cm hot-swap cooling fans with fan speed control
Form Factor	(17.26" x 5.21" x 23.2") (26.26" x 11.65" x 34")	3U Rackmount 438.4 x 132.5 x 589mm (17.26" x 5.21" x 23.2")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**MicroCloud**  
8 UP Nodes



**MicroCloud**  
24 UP Nodes



MODEL	SYS-5038MR-H8TRF	SYS-5038MD-H24TRF
Processor Support	8 set of Intel® Xeon® Processor E5-2600 v4/v3 product families, and Intel® Xeon® Processor E5-1600 v4/v3 product families	24 set of Intel® Xeon® Processor D-1531, 6-core, 45W
Key Applications	<ul style="list-style-type: none"> <li>CDN</li> <li>Cloud Computing</li> <li>Social Networking</li> <li>Video Streaming</li> <li>Web Cache</li> </ul> <ul style="list-style-type: none"> <li>8 x Hot-plug UP nodes in 3U</li> <li>1 x PCI-E x8 slot</li> <li>1620W Redundant Platinum Level high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Hot-swappable SAS/SATA3 (6Gbps) HDDs</li> <li>UID LED</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>CDN</li> </ul> <ul style="list-style-type: none"> <li>Low Power Xeon® D SoC 6 Core</li> <li>Dual Intel® i350 GbE LAN</li> <li>128GB DDR4 ECC RDIMM/64GB ECC UDIMM</li> <li>Redundant 1600W Platinum Level power supply</li> <li>UID LED</li> </ul>
Serverboard	SUPERMICRO X10SRD-F	SUPERMICRO X10SDE-DF
Chipset	Intel® C612 Chipset	Intel® Xeon® Processor D SoC
System Memory (Max.)*	4 DIMMs per node, support up to 512GB ECC 3DS LRDIMM / 256GB ECC LRDIMM / 128GB ECC RDIMMs 2400/2133/1866/1600 MHz Memory	24 set of up to 128GB DDR4 VLP ECC RDIMM/64GB DDR4 VLP ECC UDIMM in 4 DIMM slots
Expansion Slots	8 set of 1 PCI-E 3.0 x8 (low profile) and 8 set of Micro-LP slots (Micro-LP upgradable)	N/A
Onboard Storage Controller	8 set of Intel® C612 for 2 SATA3 (6Gbps) ports; RAID 0, 1; Selected low-profile RAID or HBA RAID card to support SAS HDD	24 set of SoC controller for 2 SATA3 (6 Gbps) port
Connectivity	8 set of Dual LAN with 2x Intel® I350 Gigabit Ethernet controllers	24 set of Dual port GbE and 1 dedicated IPMI per node
VGA/Audio	8 set of AST2400 VGA	24 set of AST2400 VGA
Management	8 set of Dedicated Management LAN port	12 set of IPMI 2.0 + KVM with dedicated LAN (1 set shared between 2 nodes)
Drive Bays	8 set of 2 x 3.5" hot-swap SATA3/SAS (6Gbps) drive bays	24 set of 1x 2.5" HDD fixed per node.
Peripheral Bays	N/A	N/A
Power Supply	1620W Redundant Platinum Level high-efficiency power supplies	1600W Redundant Platinum Level High-Efficiency power supplies
Cooling System	4x 8cm hot-swap cooling fans with fan speed control	4x 9cm Heavy duty fan with optimal cooling zone
Form Factor	3U Rackmount 387 x 132 x 585mm (15.25" x 5.2" x 23")	3U Rackmount 438 x 132 x 749.3mm (17.5" x 5.21" x 29.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**MicroCloud**  
24 UP Nodes



  
We Power the Cloud

**MicroCloud**  
24 UP Nodes



MODEL	SYS-5038MA-H24TRF	SYS-5038ML-H24TRF
Processor Support	24 set of Intel® Atom® processor C2750 (20W, 8-Core)	24 set of 4th Generation Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor or Intel® Xeon® processor E3-1200 v3 product families; Socket H3 (LGA 1150) up to 80W CPU
Key Applications	<ul style="list-style-type: none"> <li>CDN</li> <li>Hosting &amp; Application delivery</li> <li>Web Cache</li> <li>Web Server</li> <li>Memcache</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache, CDN, Video Streaming</li> <li>Web/Collocating Service</li> <li>Social networking/download</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24x Intel® Atom® processor Nodes in 12 hot-plug sleds, 2 nodes per sled</li> <li>1620W Redundant Platinum Level high-Efficiency power supplies</li> <li>2x 2.5" SATA 3.0 (6Gbps) HDDs per node</li> <li>2 Gigabit Ethernet Ports per Node</li> <li>32GB of DDR3 Unb. VLP ECC Memory per Node</li> </ul>	<ul style="list-style-type: none"> <li>24x UP Nodes in 12 hot-plug sleds, 2 nodes per sled</li> <li>2000W Redundant Platinum Level Digital high-efficiency power supplies</li> <li>2x 2.5" SATA3 (6Gbps) HDDs or 4x 2.5" slim SDD w/ optional kit per sled</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Multi-node UP server</li> <li>UID LED</li> </ul>
Serverboard	SUPERMICRO A1SA2-2750F	SUPERMICRO X10SLE-DF
Chipset	Intel® Atom® processor SoC	Intel® C224 chipset
System Memory (Max.)*	24 set of up to 32GB ECC UDIMM, VLP DDR3-1600MHz in 4 DIMM Slots	24 set of up to 32GB ECC UDIMM, VLP DDR3-1600 MHz in 4 DIMM slots
Expansion Slots	N/A	N/A
Onboard Storage Controller	24 set of Intel® Atom® processor SoC for SATA3 (6Gbps) ports; RAID 0,1	24 set of Intel® C224 controller for 2 SATA 3 *6Gbps) ports; RAID 0, 1,5, 10
Connectivity	24 set of Dual port GbE	24 set of Dual LAN Intel® i350 GbE LAN controller
VGA/Audio	24 set of AST2400 VGA	24 set of AST2400 VGA
Management	12 set of IPMI 2.0 + KVM with dedicated LAN (1 set shared between 2 nodes)	12 set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24 set of 2x 2.5" SATA3 fixed HDDs per node	24 set of 1x 2.5" SATA3 fixed HDDs; or 2x 2.5" slim SSD w/ optional kit
Peripheral Bays	N/A	N/A
Power Supply	1620W Redundant Platinum Level High-Efficiency power supplies	2000W Redundant Platinum Level Digital high-efficiency power supplies
Cooling System	4x 9cm Heavy duty fans with optimal cooling zone	4x 9cm Heavy duty fans with optimal cooling zone
Form Factor	3U Rackmount 444.5 x 132.5 x 749.3mm (17.5" x 5.21" x 29.5")	3U Rackmount 444.5 x 132.5 x 791.2mm (17.5" x 5.21" x 31.15")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	<b>SYS-5038ML-H12TRF</b> <b>SYS-5038ML-H12TRFG</b>	<b>SYS-5038ML-H8TRF</b>
Processor Support	12 set of 4th Generation Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor or Intel® Xeon® processor E3-1200 v4/v3 product families; Socket H3 (LGA 1150) up to 80W CPU	Intel® 4th Generation Core™ i3 series Intel® Celeron® Intel® Pentium®v Intel® Xeon® processor E3-1200 v3 series
Key Applications	<ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• Web Cache, CDN, Video Streaming</li> <li>• Web/Collocating Service</li> <li>• Social networking/download</li> </ul>	<ul style="list-style-type: none"> <li>• CDN</li> <li>• Cloud Computing</li> <li>• Corporate- WINS, DNS, Print, Login</li> <li>• Data Center</li> <li>• Hosting &amp; Application delivery</li> <li>• Simulation Computer</li> <li>• 1 PCI-E x8 slot</li> <li>• 1620W Redundant Platinum Level high-efficiency power supplies</li> <li>• High-density, Enterprise Performance, Cost-effective</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Multi-node UP server</li> <li>• SATA 3.0 (6Gbps) support</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 12x Hot-plug UP Nodes in 3U</li> <li>• 1620W Redundant Platinum Level high-efficiency power supplies</li> <li>• 4x 2.5" SATA / 2x 3.5 HDDs per node</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• UID LED</li> </ul>	<ul style="list-style-type: none"> <li>• 12x Hot-plug UP Nodes in 3U</li> <li>• 1620W Redundant Platinum Level high-efficiency power supplies</li> <li>• 4x 2.5" SATA / 2x 3.5 HDDs per node</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Multi-node UP server</li> <li>• SATA 3.0 (6Gbps) support</li> </ul>
Serverboard	<b>-H12TRF:</b> SUPER● X10SLE-F <b>-H12TRFG:</b> SUPER● X10SLE-HF (-OEM)	SUPER● X10SLE-F
Chipset	<b>-H12TRF:</b> Intel® C224 chipset <b>-H12TRFG:</b> Intel® C226 chipset	Intel® C224 chipset
System Memory (Max.)*	12 set of up to 32GB ECC UDIMM, VLP DDR3-1600 MHz in 4 DIMM slots	32GB Unbuffered ECC, DDR3-1600MHz in 4 DIMM slots
Expansion Slots	12 set of Micro-LP slots (Micro-LP upgradable)	8 sets of 1 (x8) PCI-E 3.0 low-profile slot and 1 (x8) PCI-E 3.0 Micro-LP slot
Onboard Storage Controller	12 set of Intel® C224 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10	8 sets of Intel® C224 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1
Connectivity	12 set of Dual LAN Intel® i350 GbE LAN controller	2 x USB 2.0; 1 x COM; 2 x GB LAN Ports(Micro-LP Up-gradable); 1 x Dedicated IPMI Port
VGA/Audio	12 set of AST2400 VGA	8 sets of 1 VGA
Management	12 set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI2.0; NMI; SuperDoctor III; Watchdog;
Drive Bays	12 set of 2x 3.5" SATA3 fixed HDDs or 4x 2.5" fixed SATA3 HDDs w/ optional kit	8 sets of 2x 3.5" hot-swap SAS/SATA3 (6Gbps) HDDs
Peripheral Bays	N/A	N/A
Power Supply	1620W Redundant Platinum Level high-efficiency power supplies	1620W Redundant 80Plus Platinum Level power supplies
Cooling System	4x 9cm Heavy duty fans with optimal cooling zone	4x 8cm Heavy duty fans with optimal cooling zone
Form Factor	3U Rackmount 444.5 x 132.5 x 749.3mm (17.5" x 5.21" x 29.5")	3U Rackmount 444.5 x 132.5 x 749.3mm (17.5" x 5.21" x 29.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 SuperWorkstation

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



- Supports the 2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake)
- Supports Intel® Optane™ DC Persistent Memory
- Server Grade Quality Workstations for High Performance Workloads
  - Compact DP Workstation ([SYS-7039A-I](#))
  - High End DP Workstation ([SYS-7049A-T](#))
  - GPUs Optimized DP Workstation ([SYS-7049GP-TRT](#))



SYS-7039A-I



SYS-7049A-T



SYS-7049GP-TRT

## Server Grade Quality for Knowledge Workers

Supermicro's new generation X11 SuperWorkstations are optimized for applications requiring powerful graphics capabilities including rendering, image processing, scientific and engineering tasks. With rich multimedia features, these systems are also the perfect choice for digital entertainment.

Supermicro's server grade SuperWorkstation motherboards support up to: 4TB ECC DDR4-2933MHz memory in 16 DIMM slots, 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only), 6 PCI-E slots including 4 PCI-E 3.0 x16 slots and 2 PCI-E x8 for GPUs/Coprocessor cards, 8 ports of Broadcom® 3008 SAS 3.0 (12Gbps) with Software RAID, and dual Gigabit Ethernet LAN ports. The extremely feature-rich workstations also feature Other useful workstation features include 7.1 HD audio, 8 USB ports (6 USB 3.0), 7+ year product life cycle, and 205W CPU support for exceptional performance.

The workstations are available in Compact DP, High-End DP and GPUs-Optimized workstation configurations.

## X11 SuperWorkstation

*Compact High-Performance*



## X11 SuperWorkstation

*High-Performance*



MODEL	SYS-7039A-I	SYS-7049A-T
Processor Support	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Digital Content Creation</li> <li>• Oil and Gas Simulation</li> <li>• Research lab/National Lab</li> </ul>	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Digital Content Creation</li> <li>• Oil and Gas Simulation</li> <li>• Research lab/National Lab</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Whisper quiet and compact</li> <li>• Multiple GPU support</li> <li>• Versatile Storage with M.2, U.2 and SATA support</li> </ul>	<ul style="list-style-type: none"> <li>• Tower or 4U Rackmount System</li> <li>• Multiple GPU support</li> <li>• Versatile Storage with M.2, U.2 and SATA support</li> </ul>
Serverboard	SUPERMICRO® X11DAI-N	SUPERMICRO® X11DAI-N
Chipset	Intel® C621 chipset	Intel C621
System Memory (Max.)*	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).
Expansion Slots	4 PCI-E 3.0 x16; 2 PCI-E 3.0 x8	4 PCI-E 3.0 x16; 2 PCI-E 3.0 x8
Onboard Storage Controller	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual GbE LAN from C621	Dual GbE LAN from C621
VGA/Audio	1 VGA D-Sub Connector	1 VGA D-Sub Connector
Management	Intel® Node Manager, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" fixed drive bay, optional 4x 2.5" fixed drive bay	8x 3.5" hot-swap SAS/SATA drive bays (SAS requires optional RAID card)
Peripheral Bays	2x 5.25 drive bays	3x 5.25 drive bays
Power Supply	1200W High-efficiency (Platinum level) PWS	1200W High-efficiency (Platinum level) PWS
Cooling System	1x 12cm rear exhaust fan; 1x 12cm (front) cooling fan	2 Super quiet PWM chassis fan & 1 Super quiet rear fan with Optimal Fan Speed Control
Form Factor	Mid Tower 193 x 424 x 525mm (7.6" x 16.7" x 20.68")	4U Tower 178 x 452 x 648mm (7" x 17.8" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**X11 SuperServer®**  
Cost Effective Workstation  
Great for 2D/3D CAD applications



We Power the Cloud



**X11 SuperWorkstation**  
High Performance UP Workstation  
Ideal for 3D rendering applications



MODEL	SYS-5039A-IL	SYS-5039A-I
Processor Support	Intel® 7th/6th Gen Core i7/i5/i3 series, Intel® Celeron®, Intel® Pentium® processor Intel® Xeon® processor E3-1200 v6/v5 series Socket H4 (LGA 1151), supports up to 95W TDP † BIOS version 2.0 or above is required	Intel® Xeon® Processor W Family. Single Socket R4 (LGA 2066), supports up to 140W
Key Applications	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• Digital Content Creation</li> <li>• CAD/CAM/CAE</li> </ul>	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Simulation and Rendering</li> <li>• Digital Content Creation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Cost effective UP platform</li> <li>• Rich I/O ports</li> <li>• 2 PCI 32bit 5V slots for legacy AOC support</li> </ul>	<ul style="list-style-type: none"> <li>• Supports up to 18 cores, 36 threads and 512GB of memory</li> <li>• Fast and versatile I/O and storage options</li> <li>• Multi-GPU support</li> </ul>
Serverboard	SUPERMICRO® X11SAE	SUPERMICRO® X11SRA
Chipset	Intel® C236 chipset	Intel® C422 chipset
System Memory (Max.)*	64GB Unbuffered ECC/non-ECC, DDR4-2400MHz in 4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2666MHz; Up to 512GB Registered ECC LRDIMM, in 8 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 (x16/NA or x8/x8) 2 PCI-E 3.0 x1 (in x4) 2 PCI 32bit 5V slot	3 PCI-E 3.0 x16 (x8/x16/x16) 1 PCI-E 3.0 x4
Onboard Storage Controller	Intel® C236 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10+ 1 PCIe M.2(PCIe x4, 2242/2260/2280)(No Raid Support);	Intel® C422 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10*IRST enabled, only SATA2 to SATA5 support RAID;
Connectivity	Single LAN with Intel® Ethernet Controller i210-AT Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® PHY I219LM LAN controller Single LAN with Aquantia 5G LAN chip AQC108
VGA/Audio	DVI - D port, 1 DP (DisplayPort), 1 HDMI port ALC 888S HD Audio	
Management	AMT, SuperDoctor® 5, vPro, Watchdog	AMT, SuperDoctor® 5, Watchdog
Drive Bays	4 Fixed 3.5" drive bays  Optional 4 internal 2.5" drive bays	4 Fixed 3.5" drive bays  Optional 4 internal 2.5" drive bays
Peripheral Bays	2 external 5.25" drive bays 1 3.5" external device bay	2 external 5.25" drive bays 1 3.5" external device bay
Power Supply	500W 80PLUS Bronze PS/2 Power Supply	900W High-efficiency (80PLUS Gold) PS/2 Power Supply
Cooling System	1 12cm rear exhaust fan Optional 12cm front cooling fan	1 12cm rear exhaust fan Optional 12cm front cooling fan
Form Factor	Mid-Tower 7.6" (193mm) x 16.7" (424mm) x 20.68" (525mm)	Mid-Tower 16.7" (424mm) x 7.6" (193mm) x 20.68" (525mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

### X11 SuperWorkstation

*High-End Desktop  
Designed For Power Users*



### SuperWorkstation

*Thunderbolt Support,  
Supports 2 GPUs*



### SuperWorkstation

*Thunderbolt Support  
Supports 2 GPUs*



MODEL	SYS-5039AD-I	SYS-7038A-I	SYS-7048A-T
Processor Support	Intel® Core™ X-series Processors. Socket R4 (LGA 2066), supports up to 165W TDP	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s (up to 160W)	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s (up to 160W)
Key Applications	<ul style="list-style-type: none"> <li>Professional VR and Gaming</li> <li>Digital Content Creation</li> <li>2D/3D and CAD Applications</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>CAD/CAM/CAE</li> <li>Digital Content Creation</li> <li>Digital Imaging</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>CAD/CAM/CAE</li> <li>Digital Content Creation</li> <li>Digital Imaging</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>CPU and Memory Overclocking Support</li> <li>Multi-GPU support</li> <li>IPMI 2.0 Management</li> </ul>	<ul style="list-style-type: none"> <li>Thunderbolt 2.0 AOC Support</li> <li>Support 2 double width GPUs + 1 single width graphic card</li> <li>6x USB 3.0 ports</li> <li>Up to 160W CPU support</li> </ul>	<ul style="list-style-type: none"> <li>Tower or 4U Rackmount System</li> <li>Thunderbolt 2.0 AOC Support</li> <li>Support 2 double-width + 1 single-width GPUs/Coprocessor</li> <li>8x 3.5" hot-swap drive bays</li> <li>Up to 160W CPU support</li> </ul>
Serverboard	SUPER● C9X299-PGF	SUPER● X10DAi	SUPER● X10DAi
Chipset	Intel® X299 chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 128GB Unbuffered non-ECC UDIMM, DDR4-2666MHz, in 8 DIMM slots	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS RDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	4 PCI-E 3.0 x16* and 1 PCI-E 3.0x1 slots *(8/NA/16/16 or 8/8/8/16); or (NA/4/8/16 with Skylake-X 28 Lanes); or (NA/4/4/8 with Kabylake-X CPUs).	3 PCI-E 3.0 x16 (2 double-width, 1 single-width), 2 PCI-E 3.0 x8 (1 in x16 slot), 1 PCI-E 3.0 x4 (1 in x16 slot), Support Thunderbolt 2.0 AOC	3 PCI-E 3.0 x16 (2 double-width, 1 single-width), 2 PCI-E 3.0 x8 (1 in x16 slot), 1 PCI-E 3.0 x4 (1 in x16 slot), Support Thunderbolt 2.0 AOC
Onboard Storage Controller	6 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Single LAN with Intel® Ethernet Controller I210-AT Single LAN with Aquantia 5G LAN chip AQC108	Dual LAN with Intel® i210 Gigabit Ethernet Controller	Dual LAN with Intel® i210 Gigabit Ethernet Controller
VGA/Audio	1 VGA ALC 1220 HD Audio	7.1 HD Audio	7.1 HD Audio
Management	IPMI 2.0	NMI, SuperDoctor® 5, Watchdog	NMI, SuperDoctor® 5, Watchdog
Drive Bays	6 3.5" fixed drive bays and 4 2.5" fixed drive bays	4x 3.5" internal fixed drive bays; optional 4x 2.5" internal fixed drive bays	8x 3.5" hot-swap SAS/SATA drive bay
Peripheral Bays	2 external 5.25" drive bays	2x standard 5.25" drive bays; 1x 3.5" device bay	3x standard 5.25" drive bays
Power Supply	750W High-efficiency (80PLUS Gold) PS/2 Power Supply	900W Gold Level Multi-Output Power Supply	1200W Platinum Level Multi-Output Power Supply
Cooling System	2 12cm front PWM intake fan; 1 12cm rear PWM exhaust fan	2x 12cm (1859 RPM)	2x 2800 RPM fan; 1x 2700 RPM fan
Form Factor	Mid-Tower 7.9" (200mm)x 18.1" (460mm)x 19.4" (493mm)	Mid-Tower 424 x 193 x 525mm (16.7" x 7.6" x 20.68")	Tower/4U Rackmount 452 x 178 x 647mm (17.8" x 7" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5038A-i	SYS-5038A-iL	SYS-5038AD-T
Processor Support	Single Intel® Xeon® Processor E5-2600 v3, Intel® Xeon® Processor E5-1600 v3, 4th gen. Intel® Core™ i7 processor product families	4th Generation Intel® Core™ i7 Processor, Intel® Core™ i5 Processor, Intel® Core™ i3 Processor, Intel® Xeon® processor E3-1200 v3 product families	4th Generation Intel® Core™ i7 Processor, Intel® Core™ i5 Processor, and Intel® Core™ i3 Processor product families
Key Applications	<ul style="list-style-type: none"> <li>Powerful Multitasking Workstation</li> <li>2D/3D and CAD Applications</li> <li>High Performance Computer Cluster (HPCC)</li> </ul>	<ul style="list-style-type: none"> <li>CAD/CAM/CAE</li> <li>Digital Imaging</li> <li>Entry-Level Workstation</li> <li>High-performance computing</li> <li>Medical Applications</li> <li>Oil &amp; Gas</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Gaming</li> <li>HPC</li> <li>Media/Streaming</li> <li>Multimedia Appliance</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Whisper-quiet operation (21dB)</li> <li>SATA 3.0 (6Gbps) support</li> <li>900W Gold Level Multi-Output power supply</li> </ul>	<ul style="list-style-type: none"> <li>Cost effective UP platform</li> <li>SATA 3.0 (6Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>SATA 3.0 (6Gbps) support</li> <li>900W Gold Level Multi-Output power supply</li> </ul>
Serverboard	SUPERMICRO X10SRA	SUPERMICRO X10SAE	SUPERMICRO C7Z87-OCE
Chipset	Intel® C612 chipset	Intel® C226 chipset	Intel® Z87 chipset
System Memory (Max.)*	Up to 512GB ECC DDR4 2133MHz LRDIMM or 64GB ECC/non-ECC UDIMM (available with Core i7 only); 8 DIMM slots	Up to 32GB ECC/Non-ECC UDIMM in 4 slots; DDR3 up to 1600 MHz	Up to 32GB Unbuffered non-ECC, DDR3-1600 MHz in 4 DIMM slots(support overclocking up to 2133MHz (OC**)/2200MHz (OC**)/2400MHz(OC**)/2600MHz (OC*)/2800MHz (OC**)/3000MHz (OC**)
Expansion Slots	4x PCI-E 3.0 x16 slots (runs at 16/16/NA/8 or 16/8/8/8) 2x PCI-E 2.0 x1 (in x4) slots	2 PCI-E 3.0 x16 (x16/NA or x8/x8); 3 PCI-E 2.0 x1 in x4 slots 2 PCI-E 32-bit	3 PCI-E 3.0 x16 slots (16/NA/NA or 8/8/NA or 8/4/4); 3 PCI-E 2.0 x1 (in x4 slot)
Onboard Storage Controller	SATA3 (6Gbps) via C612 controller (RAID 0, 1, 5, 10 support)	Intel® C226 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10; ASMI061 controller for 2 SATA3 (6Gbps) ports; RAID 0,1	Intel® Z87 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10; ASMI061 controller for 2 SATA3 (6Gbps) ports
Connectivity	Dual Gigabit LAN with Intel® Ethernet Controller I210-AT	Single LAN with Intel® Ethernet Controller I210; Single LAN with Intel® Ethernet Controller I217	Single LAN with Intel® Ethernet Controller I210AT; Single LAN with Intel® Ethernet Controller I217V
VGA/Audio	ALC 1150 HD Audio	1 DVI, 1 VGA, 1 HDMI, 1 Display Port; Triple Display Capable, ALC 1150HD	1 DVI, 1VGA, 1 HDMI and 1 Thunderbolt port; ALC 1150HD
Management	SuperDoctor III; SuperDoctor® 5; Watchdog	AMT; SuperDoctor III; vPro; Watchdog	SuperDoctor III; Watchdog
Drive Bays	4x 3.5" internal fixed drive bays; Optional 4x 2.5" internal fixed drive bays	4x 3.5" internal fixed drive bays; Optional 4x 2.5" internal fixed drive bays	3x 3.5" internal hot-swap drive bays, 2x 3.5" front hot-swap drive bays & optional front 4x 2.5" hot-swap drive bay cage
Peripheral Bays	2x standard 5.25" optical device bays; 1x standard 3.5" device bay	2x standard 5.25" optical device bays; 1x standard 3.5" device bay	2x standard 5.25" drive bays; 1x standard 3.5" drive bay
Power Supply	900W Gold Level high-efficiency power supply	500W high-efficiency power supply	900W Gold Level Multi-Output power supply
Cooling System	1x 12cm (1859 RPM) rear exhaust fan	1x 12cm (1859 RPM) rear exhaust fan	1x 12cm rear exhaust fan, 1x 12cm front cooling fan; Support liquid cooling ready
Form Factor	Mid-Tower 424 x 193 x 525mm (16.7" x 7.6" x 20.68")	Mid-Tower 424 x 193 x 525mm (16.7" x 7.6" x 20.68")	Gaming Mid-Tower 220 x 510 x 580mm (8.66" x 20.08" x 22.83")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/Embedded & Edge Computing Solutions

Intel® Xeon® Scalable  
Processors Supported  
(Cascade Lake/Skylake)



Connecting the Intelligent World from Devices to the Cloud

- Long Life Cycle • High-Efficiency • Compact Form Factor • High Performance • Global Services

## High-Density Processing Power at the Edge - Intel® Xeon® D-1500/2100



SYS-E300-9D



SYS-5019D-FN8TP



SYS-E200-8D



SYS-5028D-TN4T

## Low Power Processing Power - Intel® Atom® C3000



SYS-E300-9A-8CN8/4CN8



SYS-E200-9A



SYS-E300-9A



SYS-5019A-FTN4



SYS-5029A-2TN4

## Fanless Embedded Systems - Intel® Atom® E3900/Pentium® N4200/7<sup>th</sup> Gen. Core™ i7



SYS-E100-9S



SYS-E100-9AP/9APP



SYS-E100-9AP-IA



SYS-E50-9AP



SYS-E50-9AP-WIFI

## Expanding our Product Portfolio to address emerging IoT/Embedded Edge Market

Supermicro provides innovative and first-to-market technologies that are the building blocks for today's embedded computing platforms. Rapid growth in the embedded markets and open standards are driving the need for higher levels of product integration and optimization through network connectivity, remote management, mobile communication, expanded I/O, and device to device communications using space and power efficient configurations.

Supermicro's family of high-performance embedded products are optimized for a wide range of applications and solutions:



Communication & Networking



Digital Signage



Digital Surveillance



Industrial Automation



Intelligent Transportation



Cloud Storage



Medical Imaging



On Demand Video



Retail Sales

Supermicro offers many flexible and customized solutions for critical OEM projects, as well as advanced designs for stringent environments, firmware customization, BOM enhancements, and a wider range of legacy I/O support.

<b>IoT/Embedded</b> <i>Intel® Gen 8th Coffee Lake-S Compact 1U Embedded System</i>		<b>IoT/Embedded</b> <i>Intel® Gen 8th Coffee Lake-S Compact</i>
 		
MODEL	<b>SYS-1019C-HTN2</b>	<b>SYS-1019C-FHTN8</b>
Processor Support	Intel® Xeon® E processor, 8th Generation Intel® Core™ i3/Pentium®/Celeron® Processor(Coffee Lake-S). Single Socket H4 (LGA 1151) supported, CPU TDP support Up to 80W TDP	8th Generation Intel® Core™ i3 Processors, Intel® Xeon® E processor (Coffee Lake-S) Server. Socket LGA 1151 supported, CPU TDP support Up to 80W TDP
Key Applications	<ul style="list-style-type: none"> <li>• Digital Signage</li> <li>• DVR/NVR</li> <li>• POS</li> <li>• Office Server</li> <li>• Network Security</li> <li>• Security Appliance and Video Surveillance</li> </ul>	<ul style="list-style-type: none"> <li>• uCPE Network Appliance</li> <li>• Network Security Appliance</li> <li>• Virtualization Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Coffee Lake-S, Xeon E-2100, 8th Gen Core i3, Pentium, Celeron</li> <li>• Remote management via dedicated IPMI BMC</li> <li>• 4 USB 3.1</li> <li>• 2 DP, DVI-I, VGA, Audio</li> <li>• PCIe 3.0 x16,</li> </ul>	<ul style="list-style-type: none"> <li>• Coffee Lake-S, Xeon E-2100</li> <li>• 8x 1GbE, 1 dedicated IPMI LAN</li> <li>• 1 VGA, 2 USB3.1, 2 USB2.0</li> <li>• 1 PCIe3.0 x16</li> <li>• Dual M.2 M key (22110/2280)</li> <li>• 2x 2.5" Hot Swap, 2x 2.5" Internal SATA3 Drive Bay</li> </ul>
Serverboard	SUPERMICRO® X11SCZ-F	SUPERMICRO® X11SCM-LN8F
Chipset	Intel® C246 chipset	Intel® C246 chipset
System Memory (Max.)*	Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	Up to 64GB ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots
Expansion Slots	PCI-E 3.0 x 16 half height half length expansion slot; M.2 (M key, 22110/80, PCI-E3.0 x4/SATA)	PCI-E 3.0 x 16 full height full length expansion slot (limited to two drives populated);
Onboard Storage Controller	Intel® C246 controller for 2 SATA3 (6 Gbps) ports; RAID 0,1;	Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual GbE LAN, 1 dedicate IPMI, 4 USB3.1 (3 TYPE A and 1 TYPE C)	8x 1GbE LAN, 1 dedicate IPMI LAN, 2 USB3.1, 2 USB2.0
VGA/Audio	VGA via BMC	VGA via BMC
Management	IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	2x 2.5" hot swap HDD (SATA3)	2x 2.5" Hot Swap, 2x 2.5" Internal(SSD recommended) SATA3 Drive Bay
Peripheral Bays	N/A	N/A
Power Supply	200W Low Noise AC-DC power supply with PFC, Gold Certified	350W AC-DC multiple output power supply, Platinum Level
Cooling System	4x 40x28mm chassis fan 4-PIN PWM FAN	4x 40x28mm PWM fan
Form Factor	437 x 43 x 287mm (17.2" x 1.7" x 11.3")	437 x 43 x 381mm (17.2" x 1.7" x 15") Package: 610 x 203 x 686mm (24" x 8" x 27")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



### IoT/Embedded

*Intel® Xeon® Processor Skylake D-2146NT  
SoC, 8 Cores*



### IoT/Embedded

*Intel® Atom® Processor Denverton C3850,  
SoC, 12 Cores, Rear I/O Short-Depth Server*



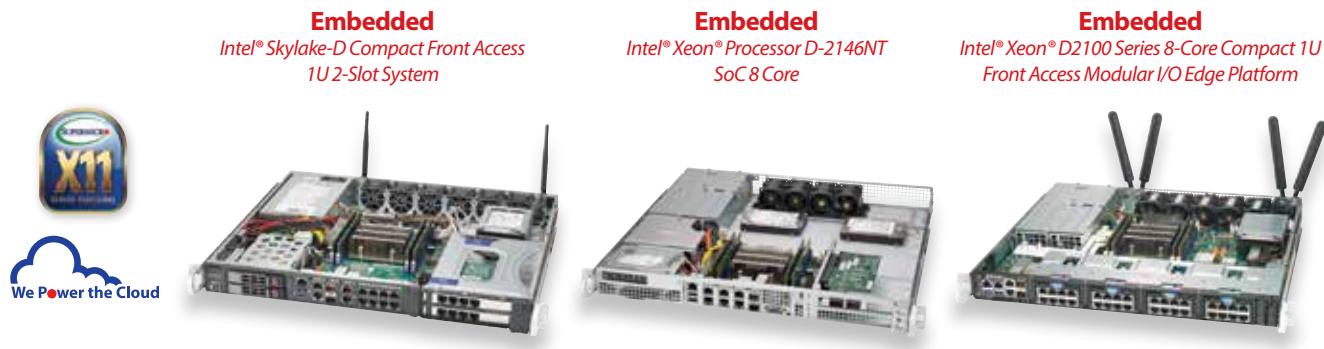
### IoT/Embedded

*Intel® Atom® Processor Denverton C3758,  
SoC, 8 Cores, Front I/O, Short-Depth Server*



MODEL	SYS-5019D-FN8TP	SYS-5019A-12TN4	SYS-5019A-FTN4
Processor Support	Intel Skylake Xeon D-2146NT SoC, 2.3GHz, 8 Core, 80W † BIOS version 2.0 or above is required	Intel® Atom™ Processor Denverton C3850, SoC, 12 Cores, 25W	Intel® Atom™ Processor Denverton C3758, SoC, 8 Cores, 25W
Key Applications	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>SDN-WAN, vCPE controller box</li> <li>NFV Edge Computing Server</li> <li>Virtualization Server</li> <li>IoT Edge Computing</li> <li>Built in Intel QAT up to 40Gbps Crypto/Compression</li> <li>Supports up to 8C high Density SKL-D SoC processor for edge network computing</li> <li>High Memory Bandwidth-Supports 4 DDR4 channel DIMMs(ECC LRDIMM or ECC RDIMM) with up to 2133 MHz memory speed , Max memory capacity up to 512GB on LRDIMM</li> <li>8 LAN ports support(2 x 10G SFP+, 2 x 10GBase-T, 4 x GbE)</li> <li>Support on board 1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support</li> <li>2 x USB 3.0, 4 x SATA 3.0 ports(SATA/SAS HDD/SSD)</li> </ul>	<ul style="list-style-type: none"> <li>Virtual Router</li> <li>FireWall Applications</li> <li>Virtualization</li> <li>Low Power, Low Cost Applications</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>Edge Computing Server</li> <li>Virtualization Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Short Depth</li> <li>Low Power</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Quick Assist Technology</li> <li>256GB DDR4 ECC RDIMM/64GB ECC UDIMM</li> </ul>	
Serverboard Chipset	SUPERMICRO® X11SDV-8C-TP8F System On Chip	SUPERMICRO® A2SDi-LN4F System on Chip	SUPERMICRO® A2SDi-8C-HLN4F System on Chip
System Memory (Max.)*	4 x DDR4 DIMM 512 GB up to 2667MHz LRDIMM or 256GB RDIMM, ECC/non-ECC	Up to 64GB Unbuffered ECC/non-ECC SO-DIMM, DDR4-2400MHz, in 4 DIMM slots	Up to 256GB Registered ECC DDR4-2400MHz or 64GB Unbuffered ECC/Non-ECC DDR4-2400MHz; in 4 DIMM slots
Expansion Slots	1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support, 1 PCI-E 3.0x8 slots,	1 PCI-E 3.0 x4, 1 mini-PCI-E with mSATA supports (half card only), 1 M.2(M Key for SSD 2242/80, PCI-E/SATA3.0)	1 PCI-E 3.0 x4, 1 x M.2 (M key for SSD, 2242/80, PCI-E3.0 x2 or SATA3)
Onboard Storage Controller	SoC controller for 4 SATA3 (6 Gbps) ports	SoC controller for 4 SATA3 (6 Gbps) ports	SoC controller for 4 SATA3 (6 Gbps) ports
Connectivity	2x 10G SFP+, 2x 10GbE LAN, 4x 1GbE LAN, 1x dedicated IPMI LAN, 2 USB 3.0	4x 1GbE LAN, 1 dedicated management port, 2 USB3.0	4x 1GbE LAN, 1x dedicated IPMI LAN, 2 USB 2.0
VGA/Audio Management	VGA via BMC IPMI 2.0	VGA via BMC IPMI 2.0	VGA via BMC IPMI 2.0
Drive Bays	1x 3.5" or 4x 2.5"	1x 3.5" or 4x 2.5" HDD	1x 3.5" or 4x 2.5" HDD
Peripheral Bays	N/A	N/A	N/A
Power Supply	200W Low Noise AC-DC power supply with PFC	200W Low Noise AC-DC power supply with PFC	200W Low Noise AC-DC power supply with PFC
Cooling System	3x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM)	2x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM)	2x 40x28mm 4-PIN PWM Fan (FAN-0065L4, 13K RPM), Optional 1x 40x28mm 4-PIN PWM Fan
Form Factor	1U Short Depth Rackmount; Enclosure: 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3")	1U Short Depth Rackmount; Enclosure: 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-1019D-FHN13TP	SYS-1019D-FRN8TP	SYS-1019D-FRN5TP
Processor Support	Intel® Skylake D-2146NT Processor, 8 Cores, 16 Threads, 2.3 GHz, 80W	Intel 2nd Gen Xeon D-2146NT Processor 8 Core/16 Thread with built in QAT	Intel® Skylake D-2146NT Processor, 8C/16T, 2.3GHz, 80W
Key Applications	<ul style="list-style-type: none"> <li>• Multi-Access Edge Computing (MEC)</li> <li>• Centralized/Cloud Radio Access Network (C-RAN)</li> <li>• Universal Customer Premise Equipment (uCPE)</li> <li>• Software Defined WAN (SD-WAN)</li> <li>• Network Function Virtualization (NFV)</li> <li>• Artificial Intelligence (AI)</li> </ul>	<ul style="list-style-type: none"> <li>• Network Security Appliance</li> <li>• FireWall Applications</li> <li>• Virtualization</li> <li>• SD-WAN and vCPE/uCPE</li> <li>• vCPE</li> </ul>	<ul style="list-style-type: none"> <li>• Centralized/Cloud Radio Access Network (C-RAN)</li> <li>• Universal Customer Premise Equipment (uCPE)</li> <li>• Software Defined WAN (SD-WAN)</li> <li>• Network Function Virtualization (NFV)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Intel® Skylake D-2146NT Processor, 8 Cores, 16 Threads, 2.3 GHz, 80W</li> <li>• Dual PCIe3.0 x16 FHFL</li> <li>• 2x 10GbE, 2x SFP+, 9x GbE (one for management), 1x dedicated IPMI LAN, 1x COM via RJ45</li> <li>• 1x M.2 M-Key 2280/110, 1x M.2 B-Key 3042, 1x M.2 E-Key</li> </ul>	<ul style="list-style-type: none"> <li>• 400W Redundant Platinum PSU</li> <li>• Built in Intel QAT upto 40 Gbps Crypto/ Compresion</li> <li>• 8 LAN w/ 2x10G SPF + 2x10Gbase-T and 4x1GbE LAN</li> <li>• 4x 2.5" HDD</li> <li>• 256GB DDR4-2133MHz Registered ECC RDIMM or 512GB LRDIMM LRDIMM</li> </ul>	<ul style="list-style-type: none"> <li>• Intel® Skylake D-2146NT Processor, 8 Cores, 16 Threads, 2.3 GHz, 80W</li> <li>• 4x PCIe3.0 x8 slots for AIOM</li> <li>• 2x 10GbE(share with IPMI), 2x SFP+, 1x Ethernet Management Port, 1x COM via RJ45/micro USB</li> <li>• 2x M.2 M-Key 2280/110, 1x M.2 B-Key 3042, 1x M.2 E-Key</li> <li>• 2x EDSFF</li> </ul>
Serverboard	SUPERMICRO® X11SDW-8C-TP13F	SUPERMICRO® X11SDV-8C-TP8F	SUPERMICRO®
Chipset	System on Chip (SoC)	SoC chipset	System on Chip (SoC)
System Memory (Max.)*	Up to 256GB Registered ECC RDIMM, DDR4-2133MHz; Up to 512GB LRDIMM LRDIMM, in 4 DIMM slots	DDR4-2666 512 LRDIMM or 256 Registered ECC RDIMM in 4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2133MHz; Up to 512GB LRDIMM LRDIMM, in 4 DIMM slots
Expansion Slots	Dual PCI-E 3.0 x 16 full height full length expansion slot	1 PCI-E 3.0 x16, 1 M.2 M-Key for storage with 2242/2280, 1 M.2 B-Key for SSD & WAN with 2242, 1 Mini PCI-E x1	4 PCI-E3.0 x8 slots for AIOM
Onboard Storage Controller	SoC controller for 4 SATA3 (6 Gbps) ports	SoC with 12 SATA3 for RAID 0,1,5,10	SoC controller for 2 SATA3 (6 Gbps) ports
Connectivity	2x 10GbE, 2x SFP+, 9x GbE (one for Ethernet management), 1x dedicated IPMI LAN, 1x COM via RJ45, 2 USB 3.0	4x 1GbE, 2x 10 GBase-T, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0	2x 10GbE(share with IPMI), 2x SFP+, 1x Ethernet Management Port, 1x COM via RJ45/ micro USB, 2 USB 3.0
VGA/Audio	VGA via BMC (option)	VGA via BMC	VGA via BMC (option)
Management	IPMI 2.0	IPMI 2.0 (RJ45) with dedicated LAN port and KVM via BMC VGA	IPMI 2.0
Drive Bays	2x External Hot-swap 2.5" Drive Bays, 2x Internal 2.5" Drive Bays	2x 2.5" Internal Fixed HDD bracket	2x External Hot-swap 2.5" Drive Bays, 2x EDSFF (option)
Peripheral Bays	N/A	4 x 2.5" HDD	N/A
Power Supply	350W Multi-output power supply Platinum level	Redundant 400W 80Plus Platinum Level	Redundant PWS-407P-1R, 400W Platinum level power supply
Cooling System	4x 40x28mm PWM fans (up to 6)	4x 40x56mm cooling fan	5x 40x40x56 mm 13K-11K RPM Counter-rotating Fans
Form Factor	1U Rackmount 437 x 43 x 381mm (17.2" x 1.7" x 15")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")	1U Rackmount 437 x 43 x 381mm (17.2" x 1.7" x 15")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5019S-M2	SYS-1019S-M2	SYS-E300-9A	SYS-E200-9A
Processor Support	Intel® 6th Generation Core™ i3 series, Intel® 6th Generation Core™ i5 series, Intel® 6th Generation Core™ i7 series, Intel® 7th Generation Core™ i3 series, Intel® 7th Generation Core™ i5 series, Intel® 7th Generation Core™ i7 series, Intel® Celeron®, Intel® Pentium®, Intel® Celeron® Processor U2247, Intel® Atom™ Processor Denverton C3858, SoC 12 Cores, 25W, 2.0 GHz	Intel® 6th/7th Generation Core™ i3, i5, Intel® Atom™ Processor Denverton C3858, SoC 12 Cores, 25W, 2.0 GHz	Intel® Atom™ Processor C3558, SoC 4 Cores, 16W, 2.2 GHz	Intel® Atom™ Processor C3558, SoC 4 Cores, 16W, 2.2 GHz
Key Applications	<ul style="list-style-type: none"> <li>• Security and Surveillance</li> <li>• Appliance Server</li> <li>• Secure Storage</li> <li>• Rack Workstation</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial Automation &amp; Control</li> <li>• Military Compact Server</li> <li>• VOIP and Network Appliances</li> <li>• Medical Applications</li> <li>• 7 Years Life Cycle</li> </ul>	<ul style="list-style-type: none"> <li>• Embedded Networking Applications</li> <li>• Network Security Appliance</li> <li>• FireWall Applications</li> <li>• Virtualization Server</li> </ul>	<ul style="list-style-type: none"> <li>• Virtualization Server</li> <li>• Virtual-CPE White Box</li> <li>• Entry-level Network Appliance</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 4x 3.5" SATA3 hot-swap drive bays</li> <li>• Intel vPro™ and AMT</li> <li>• 2x Gigabit LAN with AMT</li> <li>• 6th/7th Generation Intel Core i7, i5, i3, Pentium and Celeron Processor</li> <li>• Remote management via IPMI or vPro</li> <li>• 2x Gigabit LAN ports, HDMI/DP/ DVI-I, 3 independent displays</li> <li>• Full Height and Full Length add on card support</li> <li>• Power redundancy or BBP support</li> <li>• 7 year life cycle</li> </ul>	<ul style="list-style-type: none"> <li>• Best Performance per Watt</li> <li>• 7 year life cycle</li> <li>• IPMI 2.0 management with dedicated LAN</li> </ul>		<ul style="list-style-type: none"> <li>• NEW flexible I/O model for peripheral connectivity</li> <li>• TDP lowered and increased from Rangeley</li> <li>• 8 or more SATA III ports – Potentially with port multiplier support*</li> <li>• Significantly improved IPC compared to the Avonton/ Rangeley cores. We expect a 70% or so raw performance improvement per core</li> </ul>
Serverboard Chipset	SUPER● X11SSZ-F	SUPER● X11SSZ-QF	SUPER● A2SDi-TP8F	SUPER● A2SDi-4C-HLN4F
System Memory (Max.)*	Intel® C236 chipset Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	Intel® Q170 Express chipset Up to 64GB Unbuffered non-ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	System on Chip Up to 64GB Unbuffered ECC/non-ECC SO-DIMM, DDR4-2400MHz, in 4 DIMM slots 1 PCI Express 3.0 x4 AOC slot (LP), 1 M.2(M Key for SSD 2242/80, PCI-E/SATA3.0), 1 Mini-PCI-E /w mSATA Half Size	System on Chip 256GB Registered ECC, DDR4-2133MHz 64GB Unbuffered ECC/non-ECC, DDR4-2133MHz in 4 DIMM slots
Expansion Slots	1 PCI Express 3.0 x16 FH, HL slot	1 PCI-E 3.0 x16		1 M.2 (M key , 2242/2280, PCI-E3.0 x2 or SATA3)
Onboard Storage Controller	Intel® C236 chipset	Intel® Q170 Express controller for 2 SATA3 (6 Gbps) ports; RAID 0,1	SoC controller for 4x SATA3.0	SoC controller for 4x SATA 3.0
Connectivity	4 USB 3.0 (2x rear), 9 USB 2.0 (2x rear) 1 USB 2.0 Type A 2x Serial header 1x SuperDOM (shared) Audio header	2x 1GbE, 1 dedicated IPMI LAN, 2 USB3.0, 2 USB2.0	2x 10GbE SFP+, 2x 10GbE LAN, 4x 1GbE LAN, 1 dedicated IPMI LAN, 2 USB 3.0	4x 1GbE LAN, 1 dedicated IPMI LAN, 2 USB 2.0, 1 USB 3.0 type A
VGA/Audio	Intel® HD Graphics, Aspeed AST2400 BMC	2 DP (DisplayPort), 1 DVI-I, 1 VGA, Intel® HD Graphics, Aspeed AST2400 BMC	VGA via BMC	VGA via BMC
Management	AMT, IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, vPro, Watchdog	AMT, IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, vPro, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SAS/SATA	2x 2.5" fixed with bracket	2x 2.5" fixed drive bay: one with bracket, one on base mount. (1x 2.5" fixed drive bay when AOC area is occupied.)	1x 2.5" SSD fixed drive bay
Peripheral Bays	1x Slim DVD-ROM Drive(option)	N/A	N/A	N/A
Power Supply	1U 350W Multi-output power supply Platinum level	1x PWS-407P-1R, Platinum Level and support 2nd redundant PSU PWS-407P-1R or battery backup unit PWS-206B-1R	Lockable 12V DC 84W power adapter	Lockable 12V DC 60W power adapter
Cooling System	4x 40x28mm PWM fan; 2x 40x28mm PWM fan(option) 1U Rackmount	4x 40x56mm PWM fan; 2x fans for AOC cooling	2x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM) 1U Compact Box; Enclosure: 254 x 43 x 226mm (10" x 1.7" x 8.9")	2x 40x28mm 4-PIN PWM FAN(FAN-0065L4, 13K RPM) 1U Compact Box; Enclosure: 195 x 43 x 226mm (7.68" x 1.7" x 8.9")
Form Factor	437 x 43 x 594mm (17.2" x 1.7" x 23.4") Package: 610 x 216 x 762mm (24" x 8.5" x 30")	437 x 43 x 429mm (17.2" x 1.7" x 16.9") Package: 686 x 203 x 610mm (27" x 8" x 24")	Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")	Package: 381 x 142 x 276mm (15" x 5.59" x 10.87")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-E300-9A-4CN10P SYS-E300-9A-8CN10P	SYS-E300-9A-4CN8 SYS-E300-9A-8CN8	SYS-E300-9A-4C SYS-E300-9A-8C
Processor Support	-4CN10P: Intel® Atom™ Processor Denverton C3558, SoC 4 Cores, 16W, 2.2 GHz -8CN10P: Intel® Atom™ Processor Denverton C3758, SoC 8 Cores, 25W, 2.2 GHz	-4CN8: Intel® Atom™ Processor Denverton C3558, SoC 4 Cores, 16W, 2.2 GHz -8CN8: Intel® Atom™ Processor Denverton C3758, SoC 8 Cores, 25W, 2.2 GHz	-4C: Intel® Atom™ Processor Denverton C3558, SoC 4 Cores, 16W, 2.2 GHz -8C: Intel® Atom™ Processor Denverton C3758, SoC 8 Cores, 25W, 2.2 GHz
Key Applications	<ul style="list-style-type: none"> <li>Virtual-CPE White Box Solution</li> <li>Network Security Appliance</li> <li>Embedded IoT Gateway</li> <li>Networking Edge Device</li> </ul>	<ul style="list-style-type: none"> <li>Virtual-CPE White Box Solution</li> <li>Network Security Appliance</li> <li>Embedded IoT Gateway</li> <li>Networking Edge Device</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>Embedded IoT Gateway</li> <li>Networking Edge Device</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>
Serverboard	-4CN10P: SUPER● A2SDV-4C-LN10PF -8CN10P: SUPER● A2SDV-8C-LN10PF	-4CN8: SUPER● A2SDV-4C-LN8F -8CN8: SUPER● A2SDV-8C-LN8F	-4C: SUPER● A2SDi-4C-HLN4F -8C: SUPER● A2SDi-8C-HLN4F
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	Up to 256GB Registered ECC DDR4-2400MHz, Up to 64GB Unbuffered ECC/Non-ECC DDR4-2400MHz; in 4 DIMM slots  -4CN10P: 1 PCI Express 3.0 x2 AOC slot (LP) when SSD isn't populated, 1 M.2 B Key 3042/2280(PCI-E 3.0 x2)  -8CN10P: 1 PCI Express 3.0 x4 AOC slot (LP) when SSD isn't populated, 1x M.2 M Key 2242/2280 (PCI-E 3.0 x2 or SATA3.0), 1x M.2 B Key 3042/2280(PCI-E 3.0 x2)	Up to 256GB Registered ECC DDR4-2400MHz, Up to 64GB Unbuffered ECC/Non-ECC DDR4-2400MHz; in 4 DIMM slots  -4CN8: 1x PCI Express 3.0 x2 AOC slot (LP) when only 1 SSD populated, 1 M.2 B Key 3042/2280(PCI-E 3.0 x2)  -8CN8: 1x PCI Express 3.0 x4 AOC slot (LP) when only 1 SSD populated, 1x M.2 M Key 2242/2280 (PCI-E 3.0 x2 or SATA3.0), 1x M.2 B Key 3042/2280(PCI-E 3.0 x2)	Up to 256GB Registered ECC DDR4-2400MHz, Up to 64GB Unbuffered ECC/Non-ECC DDR4-2400MHz; in 4 DIMM slots
Expansion Slots			1x PCI Express 3.0 x4 AOC slot (LP), 1x M.2 M Key 2242/2280(PCI-E 3.0 x2)
Onboard Storage Controller	SoC controller for 3x SATA3.0	SoC controller for 4x SATA3.0	SoC controller for 4x SATA3.0
Connectivity	8x 1GbE RJ45 and 2x 1G SFP, 1 dedicated IPMI LAN, 2 USB3.0, Optional Console port by request	8x 1GbE, 1 dedicated IPMI LAN, 2 USB3.0, Optional Console port by request	4x 1GbE, 1 dedicated IPMI LAN, 2 USB 2.0, Optional Console port by request
VGA/Audio	VGA via BMC	VGA via BMC	VGA via BMC
Management	OOB, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	OOB, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	OOB, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	1x 2.5" fixed drive bay when AOC area is not occupied.	1x 2.5" fixed drive bay when AOC area is not occupied.	(2x 2.5" fixed drive bay when AOC area is not occupied.)
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 84W power adapter	Lockable 12V DC 84W power adapter	Lockable 12V DC 84W power adapter
Cooling System	1x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM) , Optional 1x Fan by request	1x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM) , Optional 1x Fan by request	1x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM), Optional 1x Fan by request
Form Factor	254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")	1U Compact Box; Enclosure: 254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")	254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-E300-9C	SYS-E100-8Q
Processor Support	8th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® Processor	Intel® Quark™ SoC X1021; CPU TDP support 2.2W
Key Applications	<ul style="list-style-type: none"> <li>• IoT Edge Computing</li> <li>• DVR/NVR</li> <li>• Machine Automation</li> <li>• Digital Signage</li> <li>• Medical Applications</li> <li>• IoT Gateway</li> </ul>	<ul style="list-style-type: none"> <li>• IoT Gateway for Smart Factory, Smart Building, Smart Home</li> <li>• Long Life Cycle Support</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Coffee Lake 8th Gen Core i3/i5/i7</li> <li>• Embedded long life</li> <li>• 1U Box Edge Devices</li> <li>• TPM onboard</li> </ul>	<ul style="list-style-type: none"> <li>• 2x 1GbE LAN</li> <li>• 2 Mini PCIe sockets, 1 Zigbee socket</li> <li>• 2 USB2.0 (device and host)</li> <li>• 1 RS232, 1 RS485</li> <li>• Analog Inputs 8 channel 12 bits and Digital I/O 8 bit through screw terminal connector</li> </ul>
Serverboard	SUPER● X11SCV-Q	SUPER● A1SQN
Chipset	Intel® Q370 chipset	System on Chip
System Memory (Max.)*	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2666MHz, in 2 DIMM slots	Onboard 512MB DDR3 ECC memory
Expansion Slots	1 PCI Express 3.0 x16 AOC slot (LP)and M.2 M key: SATA/PCI-E 3.0 x4, support 2242/2280 length; M.2 E KEY: PCI-E 3.0 x1, support 2230 length	2x Mini-PCI-E slots and 1x ZigBee module socket
Onboard Storage Controller	Q370 controller for 2 SATA3 ports; RAID 0,1	Micro SDHC up to 32GB slot
Connectivity	2x 1GbE LAN with AMT, 4 USB 3.1 (2 type A & 2 type C in rear), HD Audio(Mic In/Line Out)	2x 1GbE LAN, 2 USB2.0 (device and host), RS485 & Analog Inputs 8 channel 12 bits & Digital I/O 8 bit through screw terminal connector, 1 RS232
VGA/Audio	1 DVI-D, 1HDMI, 1DP(DisplayPort), 3 Independent displays; 1 eDP(Embedded DisplayPort)	N/A
Management	AMT, NMI, SuperDoctor® 5, vPro, Watchdog	Watchdog
Drive Bays	2x 2.5" fixed drive bay	N/A
Peripheral Bays	N/A	N/A
Power Supply	Lockable 12V DC 150W power adapter	Lockable 12V DC 15W power adapter(international outlet support)
Cooling System	2x 4cm high performance PWM fan; optional for 1x fan to add-on card area cooling	Fanless
Form Factor	254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")	IOT Gateway; Enclosure: 135 x 33 x 109mm (5.3" x 1.3" x 4.3") Package: 287 x 69 x 201mm (11.3" x 2.7" x 7.9")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-E300-9D	SYS-E200-8D	SYS-E300-8D
Processor Support	Intel Skylake Xeon D-2123IT SoC, 2.2GHz, 4 Core, 8 Thread, TDP 60W <ul style="list-style-type: none"><li>• Network Security Appliance</li><li>• SDN-WAN, vCPE controller box</li><li>• NFV Edge Computing Server</li><li>• Virtualization Server</li><li>• IoT Edge Computing</li><li>• IoT Gateway</li><li>• Supports up to 4C high Density SKL-D SoC processor for edge network computing</li><li>• High Memory Bandwidth-Supports 4 DDR4 channel DIMMs(ECC LRDIMM or ECC RDIMM) with up to 2400 MHz memory speed , Max memory capacity up to 512GB</li></ul>	Intel® Xeon® Processor D-1528, SoC 6 Core, 35W, 1.9 GHz <ul style="list-style-type: none"><li>• Embedded Networking Applications</li><li>• Network Security Appliance</li><li>• FireWall Applications</li><li>• Virtualization Server</li></ul>	Intel® Xeon® Processor D-1518, SoC 4 Core, 35W, 2.2 GHz <ul style="list-style-type: none"><li>• Embedded Networking Applications</li><li>• Network Security Appliance</li><li>• FireWall Applications</li><li>• Virtualization Server</li></ul>
Key Applications			
Outstanding Features	<ul style="list-style-type: none"><li>• 1x Low Profile PCIe 3.0 x 8 slot, 1 on board Oculink port(or 1x PCle4 NVMe for NVMe SSD)</li><li>• 2 x 10GBase-T ethernet ports RMDA support</li><li>• 2 x USB 3.0, 1 x SATA 3.0 ports(SATA/SAS HDD/SSD)</li><li>• 1 x TPM 2.0 header</li></ul>	<ul style="list-style-type: none"><li>• Low Power Xeon D SoC 6 Core</li><li>• Best Performance per Watt</li><li>• 7 year life cycle</li><li>• IPMI 2.0 management with dedicated LAN</li></ul>	<ul style="list-style-type: none"><li>• Low Power Xeon D SoC 4 Core</li><li>• Best Performance per Watt</li><li>• 7 year life cycle</li><li>• IPMI 2.0 management with dedicated LAN</li></ul>
Serverboard Chipset	SUPER●(N/A)X11SDV-4CTLN2F System On Chip	SUPER● X10SDV-6G-TLN4F System on Chip	SUPER● X10SDV-TP8F System on Chip
System Memory (Max.)*	4 x DDR4 DIMM 512 GB up to 2400MHz LRDIMM or 256GB RDIMM, ECC/non-ECC	128GB Registered ECC, DDR4-2133MHz 64GB Unbuffered ECC/non-ECC, DDR4-2133MHz in 4 DIMM slots	Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/non-ECC UDIMM in 4 sockets
Expansion Slots	1 PCI-E 3.0x8(L/P)	1 M.2(M Key for SSD 2242/80,PCI-E/SATA3.0)	1 PCI-E 3.0 x8 AOC slot (LP), 1 M.2(M Key for SSD 2242/80/110,PCI-E/SATA3.0, 1 Mini-PCI-E /w mSATA
Onboard Storage Controller	SoC controller for 4 SATA3 (6 Gbps) ports; support RAID 0,1,5,10,4 SATA ports via OCuLink (or PCIE3.0x4 for NVMe)	SoC controller for 6x SATA3.0	SoC controller for 4x SATA3.0
Connectivity	2x 10GBase-T LAN, 1 dedicated IPMI LAN, 2 USB 3.0 VGA via BMC	2x GbE and 2x 10G LAN ports, 1 dedicated management port, 2 USB 3.0 VGA via BMC	6x GbE and 2 SFP+, 1 dedicated management port, 2 USB 3.0
VGA/Audio			VGA via BMC
Management	IPMI 2.0	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	1x 2.5" internal drive bay	(Design for 9.5mm thickness HDD with Low Profile Memory)	(No 2.5" fixed drive bay when AOC area is occupied.)
Peripheral Bays Power Supply	N/A MCP-250-10127-0N (120W) 3x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM), none	N/A DC power adapter Passive CPU heat sink and 2x 40mm chassis fans	N/A DC power adapter Passive CPU heat sink and 2x 40mm chassis fans
Cooling System	Tabletop 1U Box; Enclosure: 254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")	1U compact BOX; Enclosure: 193 x 43 x 226mm (7.6" x 1.7" x 8.9") Package: 381 x 276 x 127mm (15" x 10.87" x 5.59")	254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")
Form Factor			

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-E100-9S	SYS-E100-9S-E	SYS-E100-9S-L
Processor Support	7th Generation Intel® Core™ i7-7600U Processor	7th Generation Intel® Core™ i5-7300U Processor	7th Generation Intel® Core™ i3-7100U Processor
Key Applications	<ul style="list-style-type: none"> <li>• IoT Edge Computing</li> <li>• Kiosk, Interactive information system</li> <li>• Environmental Monitor</li> </ul>	<ul style="list-style-type: none"> <li>• AloT Edge Computing</li> <li>• Kiosk, Interactive information system</li> <li>• Environmental Monitor</li> </ul>	<ul style="list-style-type: none"> <li>• IoT Edge Computing</li> <li>• Kiosk, Interactive information system</li> <li>• Environmental Monitor</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 HDMI and 1 Display Port</li> <li>• 1 USB3.1, 2 USB 3.0, 4 USB 2.0</li> <li>• 4 COM (RS-232/422/485), 1 DIO via DB9</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• TPM2.0 onboard</li> </ul>	<ul style="list-style-type: none"> <li>• Support Cloud-based Management Software</li> <li>• Support Dual Independent Displays by HDMI &amp; DP</li> <li>• Fanless compact design</li> </ul>	<ul style="list-style-type: none"> <li>• 1 HDMI and 1 Display Port</li> <li>• 1 USB3.1, 2 USB 3.0, 4 USB 2.0</li> <li>• 4 COM (RS-232/422/485), 1 DIO via DB9</li> <li>• 2 Gigabit Ethernet Ports</li> <li>• TPM2.0 onboard</li> </ul>
Serverboard	SUPERMICRO X11SSN-H-WOHS	SUPERMICRO X11SSN-E-WOHS	SUPERMICRO X11SSN-L-WOHS
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots
Expansion Slots	1 Full size Mini-PCI-E; 1 M.2 2280 B-Key	1 Full size Mini-PCI-E; 1 M.2 2280 B-Key	1 Full size Mini-PCI-E; 1 M.2 2280 B-Key
Onboard Storage Controller	1 M.2 2280 B-Key for SATA SSD	1 M.2 2280 B-Key for SATA SSD	1 M.2 2280 B-Key for SATA SSD
Connectivity	Dual LAN with Intel®PHY I219LM, 1 USB3.1, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard	Dual LAN with Intel®PHY I219LM, 1 USB3.1, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard	Dual LAN with Intel®PHY I219LM, 1 USB3.1, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard
VGA/Audio	1 DisplayPort, 1 HDMI	1 DisplayPort, 1 HDMI	1 DisplayPort, 1 HDMI
Management	AMT, SuperDoctor® 5, vPro, Watchdog		SuperDoctor® 5, Watchdog
Drive Bays	N/A	N/A	N/A
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter
Cooling System	Fanless	Fanless	Fanless
Form Factor	195 x 44 x 151mm (7.68" x 1.73" x 5.94") Package: 241 x 140 x 203mm (9.5" x 5.5" x 8")	195 x 44 x 151mm (7.68" x 1.73" x 5.94") Package: 241 x 140 x 203mm (9.5" x 5.5" x 8")	195 x 44 x 151mm (7.68" x 1.73" x 5.94") Package: 241 x 140 x 203mm (9.5" x 5.5" x 8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

**IoT/Embedded**  
IP51 Fanless Compact BOXPC

**IoT/Embedded**  
Fanless Compact BOXPC, Cost Effective

**IoT/Embedded**  
Fanless Compact BOXPC



MODEL	SYS-E50-9AP	SYS-E50-9AP-L	SYS-E50-9AP-N5
Processor Support	Intel® Atom™ Processorx5-E3940	Intel® Atom™ Processorx5-E3940	Intel® Atom™ Processorx5-E3940
Key Applications	<ul style="list-style-type: none"> <li>• IoT Gateway</li> <li>• Commercial Appliance</li> <li>• Support Cloud-based Management Software</li> </ul>	<ul style="list-style-type: none"> <li>• Cost Optimized IoT Gateway</li> <li>• Commercial Appliance</li> </ul>	<ul style="list-style-type: none"> <li>• 5 LAN Fanless Embedded System</li> <li>• Entry Networking Appliance</li> <li>• IoT Gateway</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• IP51 with plastic chassis design for water/dust proof</li> <li>• Palm-size for space-limited environment</li> <li>• Built-in Antenna</li> </ul>	<ul style="list-style-type: none"> <li>• Palm-size for space-limited environment</li> <li>• Cost optimized</li> </ul>	<ul style="list-style-type: none"> <li>• 5 LAN Fanless Embedded System</li> <li>• TPM 2.0 onboard</li> <li>• Built-in Antenna</li> </ul>
Serverboard	SUPERMICRO® A2SAP-H	SUPERMICRO® A2SAP-H	SUPERMICRO® A2SAP-H
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket
Expansion Slots	1 Full size Mini-PCI-E; 1 Half size Mini-PCI-E; 1 M.2 B-Key 2242; 1 M.2 E-Key 2230	1 Half size Mini-PCI-E; 1 M.2 B-Key 2242	1 Half size Mini-PCI-E; 1 M.2 B-Key 2242; 1 M.2 E-Key 2230
Onboard Storage Controller	1 M.2 B-Key 2242 for SATA SSD, 1 SATA 3.0 for 7mm 2.5" SATA SSD	1 M.2 B-Key 2242 for SATA SSD	1 M.2 B-Key 2242 for SATA SSD, 1 SATA 3.0 for 7mm 2.5" SATA SSD
Connectivity	Dual LAN with Intel® I210-IT, 2 USB3.0, 2 USB2.0, 2 COM (RS-232/422/485), TPM2.0 onboard	Dual LAN with Intel® I210-IT, 2 USB3.0	5 LAN with Intel® I210-IT, 2 USB3.0, 2 USB2.0, 1 COM, TPM2.0 onboard
VGA/Audio	2 HDMI	1 HDMI	2 HDMI
Management	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog
Drive Bays	1 SATA 3.0 for 7mm 2.5" SATA SSD	N/A	1 SATA 3.0 for 7mm 2.5" SATA SSD
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 40W power adapter	Lockable 12V DC 40W power adapter	Lockable 12V DC 40W power adapter
Cooling System	Fanless	Fanless	Fanless
Form Factor	148 x 44 x 118mm (5.82" x 1.72" x 4.64")	148 x 44 x 118mm (5.82" x 1.72" x 4.64")	148 x 44 x 118mm (5.82" x 1.72" x 4.64")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**IoT/Embedded**  
Supports Wireless communication



**IoT/Embedded**  
Compact Embedded Box PC



MODEL	SYS-E50-9AP-Wifi**	SYS-E102-9AP-L
Processor Support	Intel® Atom® processorx5-E3940	Intel® Atom® Processorx5-E3930
Key Applications	<ul style="list-style-type: none"> <li>• IoT Gateway</li> <li>• Commercial Appliance</li> <li>• Built-in Antenna and Dual band Wireless/Bluetooth combo module</li> </ul>	<ul style="list-style-type: none"> <li>• Embedded Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• IP51 with plastic chassis design for water/dust proof</li> <li>• Cable-less design for easy maintenance</li> <li>• Fanless design with palm-size dimension</li> <li>• Support Cloud-based Management Software</li> </ul>	<ul style="list-style-type: none"> <li>• Building Block Solution for Embedded Applications</li> <li>• Easy integration</li> </ul>
Serverboard	SUPERMICRO® A2SAP-H	SUPERMICRO® A2SAN-L
Chipset	System on Chip	System on Chip
System Memory (Max.)*	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM slot
Expansion Slots	1 Full size Mini-PCI-E; 1 Half size Mini-PCI-E; 1 M.2 B-Key 2242	1 Full Size Mini-PCI-E; 1 M.2 2280 B-Key
Onboard Storage Controller	1 M.2 B-Key 2242 for SATA SSD, 1 SATA 3.0 for 7mm 2.5" SATA SSD	1 M.2 B-Key 2280 for SATA SSD, 1 SATA 3.0 for 7mm 2.5" SATA SSD
Connectivity	Dual LAN with Intel I210-IT, 2 USB3.0, 2 USB2.0, 2 COM (RS-232/422/485), TPM 2.0 onboard, Dual Band Wireless and Bluetooth 4.2	Dual LAN with Intel I210-IT, 2 USB3.0, TPM2.0 onboard
VGA/Audio	2 HDMI	1 VGA 1 HDMI
Management	SuperDoctor® 5, Watchdog	SuperDoctor® 5; Watchdog
Drive Bays	1 SATA 3.0 for 7mm 2.5" SATA SSD	1 SATA 3.0 for 7mm 2.5" SATA SSD
Peripheral Bays	N/A	N/A
Power Supply	Lockable 12V DC 40W power adapter	Lockable 12V DC 40W power adapter
Cooling System	Fanless	Passive CPU heat sink and 1x 40mm chassis fans
Form Factor	148 x 44 x 118mm (5.82" x 1.72" x 4.64")	190 x 44 x 120mm (7.48" x 1.72" x 4.72") Package: 241 x 140 x 203mm (9.5" x 5.5" x 8")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details

\*\* Only available for NA and EU region. For other regions, please contact your sale representatives



**IoT/Embedded**  
Extended Temperature  
Fanless Compact BOX PC



**IoT/Embedded**  
Fanless Compact BOX PC



**IoT/Embedded**  
Industrial Ruggedized Fanless PC



MODEL	SYS-E100-9AP	SYS-E100-9APP	SYS-E100-9AP-IA
Processor Support	Intel® Atom® Processorx5-E3940	Intel® Pentium™ Processor N4200	Intel® Atom® Processorx5-E3940
Key Applications	<ul style="list-style-type: none"> <li>IoT Gateway for Smart Factory, Smart Building, Smart Home</li> <li>Kiosk, Interactive information system</li> <li>Environmental Monitor</li> <li>Industrial Application</li> </ul>	<ul style="list-style-type: none"> <li>IoT Gateway for Smart Factory, Smart Building, Smart Home</li> <li>Kiosk, Interactive information system</li> <li>Environmental Monitor</li> </ul>	<ul style="list-style-type: none"> <li>IoT Gateway for Smart Factory, Smart Building</li> <li>Machine Automation</li> <li>Industrial Application</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Supports wide-temp: -20~60°C</li> <li>TPM2.0 onboard</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>	<ul style="list-style-type: none"> <li>Supports temp: 0~60C</li> <li>TPM2.0 onboard</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>	<ul style="list-style-type: none"> <li>Din-rail Fanless Ruggedized Box PC</li> <li>1 Flexible I/O Slot (via MiniPCI-E)</li> <li>9-36VDC wide range power input</li> <li>Supports wide-temp: -20~60C</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>
Serverboard	SUPER● A2SAN-E-WOHS	SUPER● X11SAN-WOHS	SUPER● A2SAN-E-WOHS
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket
Expansion Slots	1 Full size Mini-PCI-E; 1 M.2 2280 B-Key	1 Full size Mini-PCI-E; 1 M.2 2280 B-Key	1 Full size Mini-PCI-E; 1 M.2 2280 B-Key
Onboard Storage Controller	1 M.2 2280 B-Key for SATA SSD	1 M.2 2280 B-Key for SATA SSD	1 M.2 2280 B-Key for SATA SSD, 1 SATA3 2.5" SSD
Connectivity	Dual LAN with Intel I210-IT, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard	Dual LAN with Intel I210-IT, 1 USB3.1, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard	Dual LAN with Intel I210-IT, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard
VGA/Audio	1 VGA 1 HDMI	1 VGA 1 HDMI	1 VGA 1 HDMI
Management	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog
Drive Bays	N/A	N/A	1 SATA 3.0 for 2.5" SATA SSD
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 40W power adapter	Lockable 12V DC 40W power adapter	12V DC 60W power adapter, Terminal Block
Cooling System	Fanless	Fanless	Fanless
Form Factor	195 x 44 x 151mm (7.68" x 1.73" x 5.94")	195 x 44 x 151mm (7.68" x 1.73" x 5.94")	194 x 80 x 126mm (7.64" x 3.15" x 4.96")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



We Power the Cloud

**IoT/Embedded**  
Intel® Coffee Lake-S,  
8th Gen. Core™



**IoT/Embedded**  
Atom C3338 Denverton  
SoC, 2 Cores



**IoT/Embedded**  
Atom™ E3940 Apollo Lake  
SoC, 4 Cores



**IoT/Embedded**  
Intel® Core™ i3,i5, i7 series,  
Pentium®, Celeron®



MODEL	SYS-5029C-TN2	SYS-5029A-2TN4	SYS-5029AP-TN2	SYS-5029S-TN2
Processor Support	Intel® Xeon® Processor D-1541 SoC 8 Core 16 Thread, TDP 45W	Intel® Atom® C3338 Denverton Processor, SoC 2 Core, 9W, 1.5 GHz	Intel® Atom™ E3940 Apollo Lake Processor, SoC 4 Cores, 9.5W, 1.6 GHz	Intel® 6th/7th Generation Core™ i3 ,i5, i7 series Intel®, Pentium®, Celeron®, CPU TDP support up to 65W TDP
Key Applications	<ul style="list-style-type: none"> <li>Surveillance Security Server</li> <li>Compact Storage Appliance</li> <li>Video processing and streaming</li> <li>Small Medium Business Edge Server</li> </ul>	<ul style="list-style-type: none"> <li>7 Years Life Cycle</li> <li>Compact Cloud Server</li> <li>Edge Computing Device</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>High Performance NAS Servers</li> <li>Medical Applications</li> <li>Security Appliance and Video Surveillance</li> <li>Web Server for Small and Medium Business</li> <li>Indoor Kiosk</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>Web Server for Small and Medium Business</li> <li>Medical Applications</li> <li>Security Appliance and Video Surveillance</li> <li>Indoor Kiosk</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 32GB Non ECC SO-DIMM DDR4 2666 MHz</li> <li>TPM chip onboard with jumper disable</li> <li>Up to 4 Hot-Swap 3.5" SATA3 HDD and 2 internal 2.5" fixed HDD</li> <li>4 x USB 3.1 (2 type A &amp; 2 type C in rear)</li> <li>M.2 Key: M-Key, E-Key for WiFi (or CNVi) card</li> </ul>	<ul style="list-style-type: none"> <li>Quad Gigabit Ethernet LAN</li> <li>Up to 4x hot-swap 3.5" SATA3 drives</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/KVM over LAN</li> <li>7 year life cycle</li> </ul>	<ul style="list-style-type: none"> <li>Up to 4 Hot-Swap 3.5" SATA3 HDD, 1 internal 2.5" fixed HDD and 1 M.2 (M key 2242/80 PCIe 2.0x2)</li> <li>Embedded long life</li> <li>2x Gigabit LAN ports</li> <li>Quiet Operation</li> </ul>	<ul style="list-style-type: none"> <li>DP, HDMI and DVI-I: 3 independent displays</li> <li>Remote management via vPro technology</li> <li>2x Gigabit LAN ports</li> <li>Quiet Operation</li> </ul>
Serverboard Chipset	SUPER● X11SCV-Q System on Chip	SUPER● A2SDI-2CHLN4F System on Chip	SUPER● A2SAV System on Chip	SUPER● X11SSV-Q Intel® Q170
System Memory (Max.)*	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2666MHz, in 2 DIMM slots	Up to 128GB RDIMM or 32GB ECC/NON ECC UDIMM, DDR4-1866MHz in 2 DIMM slots	8GB Unbuffered non-ECC DDR3-1866MHz SO-DIMM in 1 DIMM slot	32GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16(Low Profile); 1 M.2 PCI-E 3.0x4 M Key 2242/2280	1x PCIe 3.0 x2 (in x4 open ended slot)	1 PCIe 2.0 x2 in x8 slot, 1 M.2 (M key 2242/80 PCIe 2.0x2), 1 Mini-Pcie with mSATA support	1 PCIe 3.0 x16 slot 1 x M.2 (M key 2242/80 PCIe 3.0x4) 1 x Mini-Pcie with mSATA support
Onboard Storage Controller	Intel® Q370 controller for 5 SATA3 (6 Gbps) ports; RAID 0,1,5,10X11SCV-Q: SoC controller for 6 SATA3 (6 Gbps) Q370 controller for 5SATA3 ports;RAID 0,1,5,10 ;	Marvel 88SE9230 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SoC controller for 2 SATA3 (6 Gbps) ports	Intel® Q170 Express controller for 5 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	
Connectivity	4 USB 3.1 (2 type A & 2 type C in rear)	4 x 1GbE LAN, 1 dedicated IPMI LAN, 2 USB2.0	2x 1GbE LAN, 2 USB3.0, 3 USB2.0(2 front, 1 Type A), 1 Serial Port (RJ45) ALC 888S HD Audio	2x 1GbE, 4 USB3.0, 3 USB2.0 (2 front, 1 Type A),2 RS232 ALC 888S HD Audio
VGA/Audio	Intel® HD Graphics	VGA via BMC	1 HDMI, 1 DP, 1 VGA or 1 eDP, Intel HD Graphic 3 independent displays	1 HDMI, 1 DP (Display Port), 1 DVI - D, 1 Intel® HD Graphics 3 Independent Displays
Management	AMT, NMI, SuperDoctor® 5, vPro, Watchdog	IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, Watchdog	vPro and AMT	vPro and AMT
Drive Bays	4x 3.5" SATA Hot Swap drive bay and 2x2.5" internal drive bay	4x 3.5"; hot-swap SAS/SATA 2x 2.5"; fixed drive bay	4x 3.5&quot; hot-swap SAS/SATA 2x 2.5&quot; fixed drive bay	4x 3.5&quot; hot-swap SAS/SATA 1x 2.5&quot; fixed drive bay
Peripheral Bays	1x slim DVD-ROM drive bay	1x slim DVD-ROM drive bay (shared with 1 x 2.5" fixed drive bay)	1x slim DVD-ROM drive bay (shared with 1 x 2.5" fixed drive bay)	1x slim DVD-ROM drive bay (shared with 1 x 2.5" fixed drive bay)
Power Supply	1U 250W Flex ATX Multi-output Bronze Power Supply, FSP FSP250-50LC	PWS-251-1H 250W Flex ATX Multi-output Bronze Power Supply	PWS-251-1H 250W Flex ATX Multi-output Bronze Power Supply	PWS-251-1H 250W Flex ATX Multi-output Bronze Power Supply
Cooling System	1x 12cm rear exhaust fan; 1x Active CPU cooler	1x 12cm rear exhaust fan;	1x 12cm rear exhaust fan;; SNK-P0046A4 - optional	1x 12cm rear exhaust fan;; SNK-P0046A4 - optional
Form Factor	210 x 240 x 279mm (8.27" x 9.45" x 11") Package: 315 x 350 x 410mm (12.4" x 13.78" x 16.14")	Mini-Tower; Enclosure: 210 x 240 x 279mm (8.27" x 9.45" x 11") Package: 315 x 350 x 410mm (12.4" x 13.78" x 16.14")	Mini-Tower; Enclosure: 210 x 240 x 279mm (8.27" x 9.45" x 11") Package: 315 x 350 x 410mm (12.4" x 13.78" x 16.14")	Mini-Tower; Enclosure: 210 x 240 x 279mm (8.27" x 9.45" x 11") Package: 315 x 350 x 410mm (12.4" x 13.78" x 16.14")

\*Please check with your Supermicro sales representative and website for compatibility and configuration details

**IoT/Embedded**  
Intel Atom™ E3940,  
Apollo Lake SoC, 4-Cores

**IoT/Embedded**  
Intel Pentium® N3700 Processor SoC, 4-Cores

**IoT/Embedded**  
Intel® Celeron™ J1900 Processor  
SoC, 4-Cores



MODEL	SYS-E200-9AP	SYS-E200-9B	SYS-E200-8B
Processor Support	Intel® Atom™ E3940 Apollo Lake Processor, SoC 4 Cores, 9.5W, 1.6 GHz	Intel® Pentium® N3700 Processor SoC, 4 Cores, 6W, 1.6GHz	Intel® Celeron™ J1900 Processor, SoC 4-Core, 10W 2.0GHz
Key Applications	<ul style="list-style-type: none"> <li>• Digital Signage</li> <li>• Security Appliance and Video Surveillance</li> <li>• Indoor Kiosk</li> </ul>	<ul style="list-style-type: none"> <li>• Embedded Applications</li> <li>• Thin Client</li> <li>• Digital Signage</li> <li>• Indoor Kiosk</li> <li>• Networking Appliance</li> </ul>	<ul style="list-style-type: none"> <li>• Embedded Applications</li> <li>• Thin Client</li> <li>• Digital Signage</li> <li>• Indoor Kiosk</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• M.2 2242, 2280, 22110 with M-key</li> <li>• (full size) mSATA support</li> <li>• Dual display for HDMI, Display Port, VGA</li> <li>• 2x Gbe LAN</li> </ul>	<ul style="list-style-type: none"> <li>• 1U Compact Mini ITX BOX System</li> <li>• Low power SoC Intel® Pentium® N3700 (10W, 4C)</li> <li>• Dual display for HDMI, Display Port, VGA</li> <li>• Intel® i210AT Quad GbE LAN</li> <li>• 2 x USB 3.0 ports , 2 x USB 2.0 (Rear I/O)</li> <li>• COM port (Rear I/O)</li> </ul>	<ul style="list-style-type: none"> <li>• 1U Compact Mini ITX BOX System</li> <li>• Low power SoC Intel® Celeron™ J1900 (10W, 4C)</li> <li>• Dual display for HDMI, Display Port, VGA</li> <li>• Intel® i210AT dual port GbE LAN</li> </ul>
Serverboard	SUPERDOCTOR® A2SAV-L	SUPERDOCTOR® X11SBA-LN4F	SUPERDOCTOR® X10SBA
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	8GB Unbuffered non-ECC DDR3L-1866MHz SODIMM	Up to 8GB 1600MHz DDR3 Non-ECC SO-DIMM in 2 sockets	Up to 8GB 1333MHz DDR3L Non-ECC SO-DIMM in 2 socket
Expansion Slots	1 M.2 PCI-E 2.0 x2, M Key 2242/2280	1 mini-PCIe slot with mSATA support	1 mini-PCI-E slot with mSATA support
Onboard Storage Controller	N/A	SoC controller for 2 SATA3 (6 Gbps) ports	SATA 2.0 (3Gbps) from Intel® SoC, SATA 3.0 (6Gbps) from Marvell 88SE9230
Connectivity	2x 1GbE LAN, 2 USB3.0, 2 USB2.0, 2 Serial Port (RJ45 and DB9)	4x 1GbE, 1 dedicate IPMI LAN, 2 USB3.0, 2 USB2.0Realtek ALC888S HD Audio	2x 1GbE LAN, 1 USB3.0, 1 USB2.0Realtek ALC888S-VD2 HD Audio
VGA/Audio	1 HDMI, 1 DP, 1 VGA or 1 eDP, Intel HD Graphic 3 independent displays	1 Display Port, 1 HDMI, 1 VGA (Two Independent Displays) ALC 888S HD Audio	1 Display Port, 1 HDMI, 1 VGA (two Independent Displays)
Management	SuperDoctor® 5; Watchdog:	IPMI 2.0 with KVM support	SuperDoctor® 5, Watch Dog
Drive Bays	N/A	1x 2.5" internal HDD support	1x 2.5" internal HDD support
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter
Cooling System	1x 4cm fan	1 x 4cm high performance PWM fan, support up to 2 chassis fans	1x 4cm high performance PWM fan, support up to 2 chassis fans
Form Factor	1U Compact Box; Enclosure: 195 x 44 x 195mm (7.68" x 1.75" x 7.68") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")	1U Compact Box; Enclosure: 195 x 44 x 195mm (7.68" x 1.75" x 7.68") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")	195 x 44 x 195mm (7.68" x 1.75" x 7.68") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



**IoT/Embedded**  
Intel Atom® C2758, 8-Cores, Rangeley, 7 LAN  
with  
3-pair LAN bypass



**IoT/Embedded**  
Intel Xeon® Processor D-1537  
SoC, 8 Core



**IoT/Embedded**  
Intel Pentium® Processor D1508  
SoC, Dual Core



MODEL	SYS-5018A-TN7B	SYS-5018D-MHR7N4P	SYS-5018D-LN4T
Processor Support	Intel® Atom™ C2758 Processor, SoC 8-Core, 20W, 2.4GHz	Intel® Xeon® Processor D-1537, SoC 8 Core, 35W, 1.7-2.3GHz	Intel® Pentium® Processor D1508, FCBGA1667 supported, CPU TDP support 25W
Key Applications	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization Server</li> <li>Embedded Applications</li> </ul>	<ul style="list-style-type: none"> <li>Hyper-Converged Appliance</li> <li>Enterprise Server</li> <li>Edge Computing Server</li> <li>Private Cloud Server</li> <li>Virtualization Server</li> </ul>	<ul style="list-style-type: none"> <li>Compact Network Appliance</li> <li>FireWall Applications</li> <li>Software Defined WAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>7xGbE LAN with 3-pair bypass</li> <li>Embedded long life</li> </ul>	<ul style="list-style-type: none"> <li>Low Power Xeon D SoC 8 Core with Dual 10GbE and Dual GbE</li> <li>Remote management via dedicated IPMI BMC</li> <li>400W high-efficiency redundant power supply</li> <li>7 year life cycle</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Xeon® processor D-1508, Dual-Core, 25W</li> <li>Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/non-ECC UDIMM in 4 sockets</li> <li>4 x 2.5" SATA3 HDD, and 1 M.2 (M key 2242/80/110 PCIe 3.0x4)</li> </ul>
Serverboard	SUPERMICRO® A1SRM-LN7F-2758	SUPERMICRO® X10SDV-7TP4F	SUPERMICRO® X10SDV-2C-TP4F
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	64GB Unbuffered ECC/non-ECC, DDR3-1600MHz in 4 DIMM slots	Up to 128GB Registered ECC RDIMM, DDR4-2133MHz Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots	128GB Registered ECC RDIMM, DDR4-2133MHz 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots
Expansion Slots	1 PCI-E 2.0 x4 (in x8) slot	PCI-E 3.0 x8 full height expansion slot; M.2 PCIe 3.0x4, M Key 2242/2280/22110, Mini-Pcie with mSATA support	1 PCI-E 3.0 x8; M.2 PCI-E 3.0x4, M Key 2242/2280/22110, Mini-PCI-E with mSATA support
Onboard Storage Controller	SoC controller for 4 SATA2 (3 Gbps) ports; 2 SATA3 ports(6 Gbps)	4 SATA3 support RAID 0,1,5,10(RSTe) or 4 SAS2 (No RAID support and require one optional cable, CBL-SAST-0811 )	SoC controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10 RSTe;
Connectivity	7x 1GbE (3-pair bypass), 1 dedicated IPMI LAN (share with one LAN), 4x USB2.0, 1 Serial Port (RJ45)	2x 1GbE LAN, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0, 1 USB2.0 Type A	2x 1GbE LAN, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0
VGA/Audio	VGA via BMC	VGA via BMC	VGA via BMC
Management	IPMI2.0; NMI; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	1x 3.5" fixed drive bay or 4x2.5"; drive bay with optional bracket	4x 3.5" hot-swap SATA3/SAS2(require one optional cable, CBL-SAST-0811)	1x 3.5" fixed drive bay or up to 4x 2.5"; fixed drive bay
Peripheral Bays	N/A	1 slim DVD-ROM drive bay	N/A
Power Supply	200W Multi-output 80Plus Gold PWS	Redundant 400W Platinum Level power supplies, PWS-407P-1R	200W Low-Noise AC-DC power supply with PFC
Cooling System	2x 4cm counter-rotating PWM fan, support up to three system fans	3x 40x28mm PWM fan for CPU and Memories; 1x 40x28mm PWM fan for AOC cooling	1x 40x28mm 13K RPM 4-PIN PWM FAN
Form Factor	Short Depth 1U Rack Mount; Enclosure: 437 x 43 x 287mm (17.2" x 1.7" x 11.3") Package: 645 x 155 x 503mm (25.4" x 6.1" x 19.8")	1U Rackmount; Enclosure: 437 x 43 x 503mm (17.2" x 1.7" x 19.8") Package: 610 x 216 x 749mm (24" x 8.5" x 29.5")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5018D-FN8T	SYS-1018D-FRN8T
Processor Support	Intel® Xeon® Processor D-1518, SoC 4 Core, 35W, 2.2 GHz	Intel® Xeon® Processor D-1587 SoC 16 Core, 65W 1.7-2.3GHz
Key Applications	<ul style="list-style-type: none"> <li>Networking Appliance</li> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Embedded Applications</li> <li>Virtualization Server</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization</li> <li>SD-WAN</li> <li>vCPE</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Low Power Xeon D SoC 4 Core</li> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>400W Redundant Platinum PSU</li> <li>1x Low Profile PCIe 3.0 x8 and 1x M.2 PCIe 3.0 x4, MiniPCIe with mSata</li> <li>4x 2.5" HDD</li> <li>8 LAN w/ 2x10G SFP+ and 6x1GbE LAN</li> <li>128G DDR4 RAM</li> </ul>
Serverboard	SUPERMICRO® X10SDV-TP8F	SUPERMICRO® X10SDV-7TP8F
Chipset	System on Chip	System on Chip
System Memory (Max.)*	Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/non-ECC UDIMM in 4 sockets	128 GB of DDR4 ECC RDIMM 2133MHz or 64 GB of DDR4 ECC UDIMM 2133MHz
Expansion Slots	1 PCI-E 3.0 x8; M.2 PCI-E 3.0x4, M Key 2242/2280/22110, Mini-PCI-E with mSATA support	1 PCI-E 3.0 x8; M.2 PCI-E 3.0x4, M Key 2242/2280/22110, Mini-PCI-E with mSATA support
Onboard Storage Controller	SoC controller for 4x SATA3.0	SoC controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10RSTe; Broadcom® 2116 SW controller for 16 SATA3/ SAS2 (6 Gbps) ports
Connectivity	6x 1GbE LAN, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0	6x 1GbE LAN, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0
VGA/Audio	VGA via BMC	VGA via BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	IPMI 2.0 (RJ45) with dedicated LAN port and KVM via BMC VGA
Drive Bays	1x 3.5" fix drive bay or 4x 2.5" fixed drive bay with bracket	4x 2.5" HDD
Peripheral Bays	N/A	N/A
Power Supply	200W Multi-output power supply Gold level w/20pin	Redundant 400W 80Plus Platinum Level
Cooling System	Passive CPU heat sink and 3x 40mm chassis fans	4x 40x56mm cooling fan
Form Factor	437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



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**IoT/Embedded**  
Best Performance per Watt,  
Less than 10" Depth



**IoT/Embedded**  
Low Power



MODEL	SYS-5018D-FN4T	SYS-5018A-TN4
Processor Support	Intel® Xeon® Processor D-1541. Socket FCBGA1667 supported, CPU TDP support 45W	Intel® Atom® Processor C2750
Key Applications	<ul style="list-style-type: none"> <li>Networking Appliance</li> <li>Edge Computing Device</li> <li>Security Gateway</li> <li>Compact Cloud Server</li> </ul>	<ul style="list-style-type: none"> <li>Application and data serving, Automation, Cloud and Virtualization needs</li> <li>Corporate- WINS, DNS, Print, Login, e-Business, Embedded Applications, Hosting &amp; Application delivery, Industrial Automation &amp; Control, NAS Servers, Security</li> <li>SOHO Entry-Level Server, Web Server, Web Server for Small and Medium Business</li> <li>1 PCI-E x8 slot</li> <li>200W Low-Noise power supply</li> <li>4x 2.5" SATA drives</li> <li>Compact size chassis, cost-effective UP platform</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Optimized for small business</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 2x 3.5" or 4x 2.5" SATA3 device</li> <li>1x PCI-E x16 Gen 3 add-on card slot</li> <li>Dedicated management port</li> </ul>	
Serverboard	SUPERMICRO® X10SDV-8CTLN4F	SUPERMICRO® A1SAi-2750F
Chipset	Intel Xeon D-1540, SoC	System on Chip
System Memory (Max.)*	Up to 128GB Registered ECC RDIMM, DDR4-2133MHz Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots	Up to 32GB ECC DDR3 1600/1333MHz SODIMM in 4 DIMM slots
Expansion Slots	1 PCI Express 3.0 x16 add-on card slot	1x PCI-E 2.0 x8 slot via riser card
Onboard Storage Controller	Intel SoC-based 2x 3.5" or 4x 2.5" SATA3 bays, SATA DOM support	SoC controller for 4 SATA2 (3Gbps) ports; 2 SATA3 (6Gbps)
Connectivity	2x GbE + 2x 10G LAN ports 1x dedicated management port 2 USB 3.0 (rear)2x USB 3.0, 4x USB 2.0 ports (via header), 1x M.2 slot (M key for SSD, 2242/2280, PCIe3.0 x4)	4x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port 4x USB 3.0 ports (2 rear, 1 Type A, 1 via header) 2x USB 2.0 ports (2 rear) 2x Fast UART 16550 Serial Port (1 rear, 1 via header)
VGA/Audio	Aspeed AST2400 BMC	AST2400 VGA 4x USB3.0, 2 x USB2.0
Management	Integrated remote management with dedicated port	IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog
Drive Bays	Intel® SoC-based 2x 3.5" or 4x 2.5" SATA3 bays	2x 3.5" fixed HDD (no expansion slot), or 1x 3.5" fixed HDD (low profile slot only), or 4x 2.5" fixed HDD (no expansion slot), or 2x 2.5: fixed HDD (full height and half length)
Peripheral Bays	N/A	N/A
Power Supply	1U 200W Multi-output power supply Gold level w/20pin	200W Low-Noise AC-DC power supply with PFC
Cooling System	Active CPU fan, 40mm chassis fan	Built-in CPU heatsink; optional 40x28mm fan; 1x high-efficiency power supply with thermal control fan
Form Factor	1U Rackmount 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3")	Mini-1U Rackmount 437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



MODEL	SYS-5018A-FTN4	SYS-5018A-MHN4
Processor Support	Intel® Atom™ C2758 Processor, SoC 8-Core, 20W, 2.4GHz	Intel® Atom™ Processor C2758, SoC 8-Core, 20W, 2.4GHz
Key Applications	<ul style="list-style-type: none"> <li>• Application and data serving</li> <li>• Automation</li> <li>• Cloud and Virtualization needs</li> <li>• Corporate-WINS, DNS, Print, Login</li> <li>• e-Business</li> <li>• Embedded Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Data Center</li> <li>• Data Warehouse</li> <li>• Database Applications</li> <li>• e-Business</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Compact size server</li> <li>• 4x 2.5" SATA drives</li> </ul>	<ul style="list-style-type: none"> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Optimized for Power Saving and Improved Cooling</li> <li>• 4 hot-swap 3.5" SATA/SAS Drive Bays</li> </ul>
Serverboard	SUPERMICRO® A1SRi-2758F	SUPERMICRO® A1SRM-2758F
Chipset	System on Chip	System on Chip
System Memory (Max.)*	Up to 64GB DDR3 1600MHz ECC SO-DIMM in 4 DIMM sockets	Up to 64GB ECC/non-ECC UDIMM, DDR3-1600MHz in 4 sockets
Expansion Slots	1 PCI-E 2.0 x8	1 PCI-E 2.0 x8(FH,HL)
Onboard Storage Controller	SoC controller for 4 SATA2 (3 Gbps); 2 SATA3 (6 Gbps);	SoC controller for 4 SATA2 (3 Gbps); 2 SATA3 (6 Gbps)
Price Connectivity	4x 1GbE LAN, 1 dedicate IPMI LAN, 2 USB3.0, 2 USB2.0, 1 serial port (DB9)	4x 1GbE LAN, 1 dedicate IPMI LAN, 4 USB2.0, 1 serial port(DB9)
VGA/Audio	VGA via BMC	VGA via BMC
Management	IPMI2.0, NMI, SuperDoctor® 5, Watchdog	IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, Watchdog
Drive Bays	2x 3.5" fixed drive bay or 4x 2.5" fixed drive bay with optional bracket	4x 3.5" hot-swap SAS/SATA
Peripheral Bays	N/A	1 slim DVD-ROM drive bay
Power Supply	High efficiency 200W power supply	200W Low Noise AC-DC power supply with PFC
Cooling System	1 x 40x28MM 4-PIN PWM FAN	2x 4cm high performance PWM fan
Form Factor	1U Short Depth Rackmount; Enclosure: 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3")	437 x 43 x 504mm (17.2" x 1.7" x 19.85") Package: 594 x 216 x 754mm (23.4" x 8.5" x 29.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



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**IoT/Embedded**  
Compact Mini Tower  
3 Independent Displays



**IoT/Embedded**  
Intel® Atom™ C2758  
8-Core, Rangeley



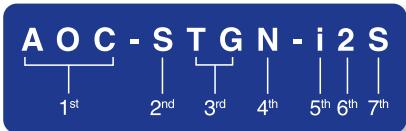
**IoT/Embedded**  
Intel® Xeon® D-1541 Processor, 8-Core,  
Dual 10GbE LAN and Dual GbE



MODEL	SYS-5028L-TN2	SYS-5028A-TN4	SYS-5028D-TN4T
Processor Support	Intel® Xeon® E3-1200 v3 and 4 Gen. Core i3/i5/i7, Celeron®, Pentium®	Intel® Atom™ C2758 Processor, SoC 8-Core, 20W, 2.4GHz	Intel® Xeon® Processor D-1541 SoC 8 Core 16 Thread, TDP 45W
Key Applications	<ul style="list-style-type: none"> <li>Compact Cloud Server</li> <li>Database Processing &amp; Storage</li> <li>High Performance NAS Servers</li> <li>Business Intelligence</li> <li>Security Appliance and Video Surveillance</li> <li>Web Server for Small and Medium Business</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Applications</li> <li>Cloud and Virtualization needs</li> <li>NAS Servers</li> <li>SOHO Entry-Level Server</li> <li>Corporate-WINS, DNS, Print, Login</li> <li>e-Business</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>Compact Cloud Server</li> <li>High Performance NAS Servers</li> <li>Virtualization Server</li> <li>Business Critical Applications</li> <li>Web Server for Small and Medium Business</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 4 Hot-Swap 3.5" SATA3 HDD and 2 internal 2.5" fixed HDD</li> <li>DP, HDMI and DVI-I: 3 independent displays</li> <li>2x Gigabit LAN ports</li> <li>TPM 1.2 Headers</li> <li>Up to 16GB DDR3 non-ECC 1600MHz SODIMM</li> <li>1x PCI-E 3.0 x16 slot</li> </ul>	<ul style="list-style-type: none"> <li>4x 3.5" SATA Hot Swap Tray and 2 x2.5" internal HDD bay</li> <li>Support up to 64G ECC SODIMM</li> <li>One low profile expansion slot for PCIe2.0x8</li> </ul>	<ul style="list-style-type: none"> <li>Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/non-ECC UDIMM in 4 sockets</li> <li>2x Gigabit + 2x 10G LAN ports</li> <li>Up to 4 Hot-Swap 3.5" SATA3 HDD and 2 internal 2.5" fixed HDD</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1x Low Profile PCIe 3.0 x16 and 1x M.2 PCIe 3.0 x4, M Key 2242/2280</li> </ul>
Serverboard	SUPERMICRO X10SLV-Q	SUPERMICRO A1SRi-2758F	SUPERMICRO X10SDV-TLN4F
Chipset	Intel® Q87 chipset	System on Chip	System on Chip
System Memory (Max.)*	16 GB, DDR3-1600MHz non-ECC SODIMM in 2 sockets	Up to 64GB DDR3 1600MHz ECC SODIMM in 4 DIMM sockets	128GB Registered ECC, DDR4-2133MHz 64GB Unbuffered ECC/non-ECC, DDR4-2133MHz in 4 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 slot 1x Mini-PCI-E w/ mSATA support	PCI-E 2.0 x8	1 PCI-E 3.0 x16(Low Profile); 1 M.2 PCI-E 3.0x4 M Key 2242/2280
Onboard Storage Controller	SoC controller for 4x SATA 3.0 ports (6Gbps) with RAID 0.1.5.10	SoC controller for 4 SATA2 (3 Gbps) ports; 2 SATA3 (6 Gbps)	SoC controller for 6 SATA3 (6 Gbps) ports
Connectivity	2x 1GbE LAN, 2 USB3.0, 2 USB2.0	4x 1GbE LAN, 1 dedicate IPMI LAN, 2 USB3.0, 2 USB2.0, 1 serial port(DB9)	2x 1GbE LAN, 2x 10GbBase-T LAN, 1 dedicate IPMI LAN, 2 USB3.0(rear), 2 USB2.0(front)
VGA/Audio	Intel HD 4600 Graphics, 1 DisplayPort, 1 HDMI, 1 DVI-I, 3 Independent Displays	VGA via BMC	VGA via BMC
Management	SuperDoctor® III Watch Dog NMI	IPMI2.0; NMI; SuperDoctor V; Watch Dog;	IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SAS/SATA drive bay	4x 3.5" SATA Hot Swap drive bay and 2 x2.5" internal drive bay	4x 3.5" SATA Hot Swap drive bay and 2x2.5" internal drive bay
Peripheral Bays	1 slim DVD-ROM drive bay (share with one 3.5" drive bay)	1 slim DVD-ROM drive bay (share with one 2.5" drive bay)	1 slim DVD-ROM drive bay (shared with 1x 2.5" fixed drive bay)
Power Supply	No Redundant 1 Qty: PWS-251-1H	250W Flex ATX Multi-output Bronze Power Supply	
Cooling System	1x 12cm rear exhaust fan, SNK-P0046A4 (optional)	1x 12cm rear exhaust fan	1x 12cm rear exhaust fan; 1x Active CPU cooler
Form Factor	210 x 240 x 279mm (8.27" x 9.45" x 11") Package: 315 x 350 x 410mm (12.4" x 13.78" x 16.14")	Mini Tower; Enclosure: 210 x 240 x 279mm (8.27" x 9.45" x 11") Package: 315 x 350 x 410mm (12.4" x 13.78" x 16.14")	210 x 240 x 279mm (8.27" x 9.45" x 11") Package: 315 x 350 x 410mm (12.4" x 13.78" x 16.14")

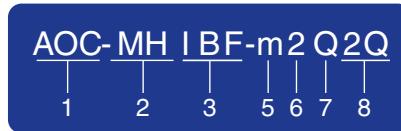
\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# PRODUCT NAMING GUIDE



**Network Adapter**

Character	Representation	Options	
<b>1st</b>	<b>Product Family</b>	<b>AOC</b> = Add On Card	
<b>2nd</b>	<b>Form Factor</b>	<b>U</b> = UIO <b>S</b> = Standard <b>P</b> = Proprietary <b>C</b> = MicroLP	<b>M</b> = Supermicro IO Module (SIOM) <b>MH</b> = SIOM Hybrid
<b>3rd</b>	<b>Product Type/ Speed</b>	<b>G</b> = GbE (1Gb/s) <b>TG</b> = 10GbE (10Gb/s) <b>IBF</b> = IB FDR (5Gb/s) <b>IBQ</b> = IB QDR (4Gb/s) <b>INF</b> = IB DDR (2Gb/s)	<b>25G</b> = 25GbE (25Gb/s) <b>40G</b> = 40GbE (40Gb/s) <b>100G</b> = 100GbE (100Gb/s) <b>HFI</b> = Host Fabric Interface (100Gb/s)
<b>4th</b>	<b>Chipset Model (optional)</b>	<b>N</b> = Niantec (82599) <b>F</b> = Fortville (XL710/X710)	<b>P</b> = Powerville (i350) <b>S</b> = Sageville (X550)
<b>5th</b>	<b>Chipset Manufacturer (optional)</b>	<b>i</b> = Intel <b>m</b> = Mellanox	<b>b</b> = Broadcom
<b>6th</b>	<b>Number of Ports</b>	<b>1</b> = 1 port <b>2</b> = 2 ports	<b>4</b> = 4 ports
<b>7th</b>	<b>Connector Type (optional)</b>	<b>S</b> = SFP+/SFP28 <b>Q</b> = QSFP+	<b>T</b> = 10GbBase-T <b>C</b> = QSFP28



**SIOM Network Adapter**

Character	Representation	Options	
<b>1st</b>	<b>Product Family</b>	<b>AOC</b> = Add On Card	
<b>2nd</b>	<b>Form Factor</b>	<b>S</b> = Standard <b>P</b> = Proprietary <b>C</b> = MicroLP	<b>M</b> = Super IO Module (SIOM) <b>MH</b> = SIOM Hybrid
<b>3rd</b>	<b>Product Type/Speed</b>	<b>G</b> = GbE (1Gb/s) <b>TG</b> = 10GbE (10Gb/s) <b>25G</b> = 25GbE (25Gb/s) <b>40G</b> = 40GbE (40Gb/s) <b>100G</b> = 100GbE (100Gb/s) <b>HFI</b> = Host Fabric Interface (100Gb/s)	<b>IBE</b> = IB EDR (100Gb/s) <b>IBF</b> = IB FDR (56Gb/s) <b>IBQ</b> = IB QDR (40Gb/s) <b>HFI</b> = Host Fabric Interface
<b>4th</b>	<b>Chipset Model (optional)</b>	<b>N</b> = Niantec (82599) <b>F</b> = Fortville (XL710/X710)	<b>P</b> = Powerville (i350) <b>S</b> = Sageville (X550)
<b>5th</b>	<b>Chipset Manufacturer (optional)</b>	<b>i</b> = Intel <b>m</b> = Mellanox	<b>b</b> = Broadcom
<b>6th</b>	<b>Number of Ports</b>	<b>1</b> = 1 port <b>2</b> = 2 ports	<b>4</b> = 4 ports
<b>7th</b>	<b>Connector Type (optional)</b>	<b>S</b> = SFP+/SFP28 <b>Q</b> = QSFP+	<b>T</b> = 10GbBase-T <b>C</b> = QSFP28
<b>8th</b>	<b>2nd Controller/ Connector Type (optional)</b>	<b>G</b> = GbE RJ45 <b>S</b> = 10G SFP+ <b>2G</b> = GbE 2x RJ45	<b>T</b> = 10GbBase-T <b>2T</b> = 2x 10GbBase-T



**NVMe Add On Card**

Character	Representation	Options	
<b>1st</b>	<b>Product Family</b>	<b>AOC</b> = Add On Card	
<b>2nd</b>	<b>Expansion slot interface</b>	<b>S</b> = Standard PCI	
<b>3rd</b>	<b>Card height</b>	<b>L</b> = Low Profile <b>M</b> = Smaller Profile	
<b>4th</b>	<b>Expansion slot interface version</b>	<b>G3</b> = PCI-E Gen3	
<b>5th</b>	<b>Ports</b>	<b>12</b> = 12 ports <b>8</b> = 8 ports <b>4</b> = 4 ports <b>2</b> = 2 ports	
<b>6th</b>	<b>Protocol</b>	<b>E</b> = NVMe <b>H</b> = Hybrid	
<b>7th</b>	Total # of PCI-E lanes per port (dedicated or distributed) or PCI-E expansion slot length	<b>2</b> = 2 lanes per port <b>4</b> = 4 lanes per port <b>8</b> = x8 slot <b>F</b> = x16 slot	
<b>8th</b>	<b>AOC type</b>	<b>R</b> = MiniSAS HD Re-driver <b>T</b> = OCuLink Re-timer <b>P</b> = OCuLink PLX switch (no "P" means MiniSAS HD PLX) <b>M2</b> = M.2 Carrier	
<b>9th</b>	<b>Additional</b>	<b>F</b> = Unique form factor	



**Ultra Networking Riser Card**

Character	Representation	Options	
<b>1st</b>	<b>Product Family</b>	<b>AOC</b> : Add On Card	
<b>2nd</b>	<b>Form Factor</b>	<b>UR</b> : Ultra Riser for 1U <b>2UR</b> : Ultra Riser for 2U	
<b>3rd</b>	<b>PCI-E Expansion Slots</b>	<b>8</b> : PCI-E x8 <b>6</b> : PCI-E x16	
<b>4th</b>	<b>NVMe Ports (Optional)</b>	<b>N2</b> : Two NVMe ports <b>N4</b> : Four NVMe ports <b>N6</b> : Six NVMe ports	
<b>5th</b>	<b>LAN Chipset Manufacturer</b>	<b>i</b> : Intel <b>m</b> : Mellanox <b>b</b> : Broadcom	
<b>6th</b>	<b>Number of Ports</b>	<b>1</b> : One port <b>2</b> : Two ports <b>4</b> : Four ports	
<b>7th</b>	<b>Controller Type</b>	<b>G</b> : GbE <b>X</b> : 10GbE <b>T</b> : 25GbE	<b>Q</b> : 40GbE <b>F</b> : 50GbE <b>C</b> : 100GbE
<b>8th</b>	<b>Connector Type (Optional)</b>	<b>S</b> : SFP+ <b>T</b> : 10GbBase-T	
<b>9th</b>	<b>Chipset Model (Optional)</b>	<b>F</b> : Fortville (XL710/X710)	

# ULTRA NETWORKING RISER CARDS



Model	AOC-UR-i4G	AOC-UR-i4XTF	AOC-UR-i4XT	AOC-UR-i2XT	AOC-URN2-i4XT	AOC-URN6-i2XT
<b>Form Factor</b>	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser
<b>Controller Type</b>	GbE	10GBase-T	10GBase-T	10GBase-T	10GBase-T	10GBase-T
<b>Chipset</b>	Intel® i350	Intel® XL710	Intel® X540	Intel® X540	Intel® X540	Intel® X540
<b>Port #</b>	4	4	4	2	4	2
<b>Connector</b>	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45
<b>PCI-E Slot</b>	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	N/A
<b>NVMe Ports</b>	0	0	0	0	2	6
<b>Compatible Motherboards</b>	X11DPU, X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+	X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X	X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+
<b>Compatible Systems</b>	SYS-1029U-TR4, SYS-1029U-E1CR4, SYS-6019U-TR4, SYS-1028U-TR4+, SYS-1028U-E1CR4+	SYS-1029U-TR4T, SYS-1029U-E1CR4T, SYS-1029U-TR4T, SYS-6019U-TN4R4T	SYS-1028U-TR4T+, SYS-6018U-TR4T+	SYS-1029U-TRT, SYS-1029U-E1CRT, SYS-6019U-TRT, SYS-6019U-TN4RT, SYS-1028U-TRT+, SYS-6018U-TRT+	SYS-1028U-TNR4T+	SYS-1029U-TN10RT, SYS-1029U-TN10RT+



Model	AOC-URN2-i2XT	AOC-URN2-i2XS	AOC-URN2-i4GXS	AOC-URN4-b2XT	AOC-URN4-i2TS	AOC-URN4-m2TS
<b>Form Factor</b>	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser
<b>Controller Type</b>	10GBase-T	10G SFP+	GbE & 10G SFP+	10GBase-T	25GbE	25GbE
<b>Chipset</b>	Intel® X540	Intel® 82599ES	Intel® i350 & Intel® X710	Broadcom® BCM57416	Intel® XXV710	Mellanox® ConnectX-4 Lx EN
<b>Port #</b>	2	2	2+2	2	2	2
<b>Connector</b>	RJ45	SFP+	RJ45 & SFP+	RJ45	SFP28	SFP28
<b>PCI-E Slot</b>	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x16 (internal)	1x PCI-E 3.0 x16 (internal)	1x PCI-E 3.0 x16 (internal)
<b>NVMe Ports</b>	2	2	2	4	4	4
<b>Compatible Motherboards</b>	X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+ X10DRU-X	X11DPU, X10DRU-i+	X11DPU	X11DPU	X11DPU, X10DRU-i+
<b>Compatible Systems</b>	SYS-1029U-TRTP, SYS-1029U-E1CRTP, SYS-6019U-TRTP, SYS-6018U-TRTP+, SYS-1028U-TNRTP+	SYS-1029U-TRTP2, SYS-1029U-E1CRTP2, SYS-6019U-TRTP2, SYS-6018U-TRTP2+, SYS-1028U-E1CRTP+	TBA	TBA	SYS-1029UZ-TN20R25M SYS-1029U-TR25M SYS-1029U-E1CR25M SYS-6019U-TR25M	

# ULTRA NETWORKING RISER CARDS



Model	AOC-2UR66-i4XTF	AOC-2UR68-i4G	AOC-2UR6-i4XT	AOC-2UR66-i4G	AOC-2UR68-i2XT
<b>Form Factor</b>	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser
<b>Controller Type</b>	10GbE-T	GbE	10GbE-T	GbE	10GbE-T
<b>Chipset</b>	Intel® XL710	Intel® i350	Intel® X540	Intel® i350	Intel® X540
<b>Port #</b>	4	4	4	4	2
<b>Connector</b>	RJ45	RJ45	RJ45	RJ45	RJ45
<b>PCI-E Slot</b>	2x PCI-E 3.0 x16	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16) 1x PCI-E 3.0 x16	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x16	2x PCI-E 3.0 x16	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16) 1x PCI-E 3.0 x16
<b>NVMe Ports</b>	0	0	0	0	0
<b>Compatible Motherboards</b>	X11DPU, X10DRU-i+	X11DPU, X10DRU-i+ X10DRU-X	X10DRU-i+ X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X
<b>Compatible Systems</b>	SYS-2029U-E1CR4T SYS-2029U-TR4T SYS-6029U-E1CR4T SYS-6029U-TR4T	SYS-2029U-TR4, SYS-2029U-E1CR4, SYS-6029U-TR4, SYS-6029U-E1CR4, SYS-6028U-TR4+, SYS-6028U-TR4+ SYS-2028U-TR4+ SYS-6028U-TR4+	SYS-2028U-TR4T+ SYS-6028U-TR4T+	SYS-2048U-RTR4	SYS-2029U-TRT, SYS-2029U-E1CRT, SYS-6029U-TRT, SYS-6029U-E1CRT, SYS-6028U-TRT+, SYS-2028U-TRT+, SYS-2048U-RTR4

<sup>†</sup> Available as integrated solutions with Supermicro servers.



Model	AOC-2URN4-i4XT	AOC-2UR8N4-i2XT	AOC-2UR68-i2XS	AOC-2UR6N4-i4XT	AOC-2UR68-m2TS
<b>Form Factor</b>	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser
<b>Controller Type</b>	10GbE-T	10GbE-T	10G SFP+	10GbE-T	25GbE
<b>Chipset</b>	Intel® X540	Intel® X540	Intel® 82599ES	Intel® X550	Mellanox® ConnectX-4 Lx EN
<b>Port #</b>	4	2	2	4	2
<b>Connector</b>	RJ45	RJ45	SFP+	RJ45	SFP28
<b>PCI-E Slot</b>	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16)	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16) 1x PCI-E 3.0 x16	1x PCI-E 3.0 x16	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16) 1x PCI-E 3.0 x16
<b>NVMe Ports</b>	4	4	0	4	0
<b>Compatible Motherboards</b>	X10DRU-i+, X10DRU-X	X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+	X11DPU, X10DRU-i+
<b>Compatible Systems</b>	SYS-2028U-TNR4T+ SYS-6028U-TNR4T+ SYS-2028U-E1CNR4T+ SYS-6028U-E1CNR4T+	SYS-2028U-TNRT+ SYS-6028U-TNRT+ SYS-2028U-E1CNRT+ SYS-6028U-E1CNRT+	SYS-2029U-TRTP, SYS-2029U-E1CRTP, SYS-6029U-TRTP, SYS-6029U-E1CRTP, SYS-6028U-TRTP+ SYS-2028U-TRTP+ SYS-2048U-RTR4	SYS-2028U-T24RT+	SYS-2029U-TN20R25M SYS-2029U-TR25M SYS-2029U-E1C25M SYS-6029U-TR25M

<sup>†</sup> Available as integrated solutions with Supermicro servers.

# NETWORK ADAPTERS

## Faster, More Flexible Networking

With outstanding performance, high power efficiency and excellent value, Supermicro's network adapters can help improve network throughput and application performance through features that maximize bandwidth and offload CPU resources. From 100G, 50G, 40G, 25G Ethernet to InfiniBand technologies, multi-port connectivity, in SiOM, Ultra, microLP and standard form factors, Supermicro's network adapters are optimized for the most demanding multi-core computing systems.

### 100G Controllers



Model	AOC-S100G-b1C	AOC-SHFI-i1C	AOC-S100G-m2C
Type	Standard Low-profile	Standard Low Profile	Standard Low-Profile
Description	Single-port 100GbE	Single Port 100Gbps Intel® Omni Path Host Fabric Interface Adapter	Dual-port 100GbE
Interface	PCI-E 3.0 x16	PCI-E 3.0 x16	PCI-E 3.0 x16
Port	1 QSFP28	1 QSFP28	2 QSFP28
Speed	100Gb/port	100Gb/port	100Gb/port
Controller	Broadcom® BCM57454	Intel® OPA HFI ASIC	Mellanox® ConnectX-4 EN
Dimension (LxW) (without end brackets)	6.6" x 2.713" (16.76 x 6.89cm)	6.6" x 2.713" (16.76 x 6.89cm)	6.6" x 2.713" (16.76 x 6.89cm)
Compatible Motherboards	All MBs with a PCI-E x16 slot	All MBs with a PCI-E x16 slot	All MBs with a PCI-E x16 slot
Compatible Servers	All Servers with a PCI-E x16 slot	All Servers with a PCI-E x16 slot	All Servers with a PCI-E x16 slot

### 10GbE Controllers



Model	AOC-STG-b2T	AOC-CTGS-i2T	AOC-STG-b4S	AOC-CTG-i2T	AOC-CTG-i2S	AOC-CTG-i1S
Type	Standard Low-profile	MicroLP	Standard Low-profile	MicroLP	MicroLP	MicroLP
Description	Dual-port 10GbE	MicroLP Dual-port 10GbE	Standard Low-profile 10GbE	MicroLP Dual-port 10GbE	Dual-port 10GbE	Single-port 10GbE
Interface	PCI-E 3.0 x8	PCI-E 3.0 x4	PCI-E x8	PCI-E 2.0 x8	PCI-E 2.0 x8	PCI-E 2.0 x8
Port	2 RJ45	2 RJ45	4 SFP+	2 RJ45	2 SFP+ ports / 2 USB ports	1 SFP+ port / 2 USB ports
Ethernet Speed	10Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port
Controller	Broadcom® BCM57416	Intel® X550-AT2	Broadcom® BCM57840S	Intel® X540	Intel® 82599ES	Intel® 82599EN
Dimension (LxW) (without end brackets)	5.6" x 2.713" (14.224 x 6.89cm)	4.45" x 1.54" (11.3 x 3.9cm)	5.4" x 2.73" (13.7 x 6.9cm)	4.8" x 2.75" (12.32 x 7.0cm)	4.85" x 1.54" (12.3 x 3.9cm)	4.45" x 1.54" (11.3 x 3.9cm)
Compatible Motherboards	All MBs with a PCI-E x8 slot	X11SSE-F	All MBs with a PCI-E x8 slot	X9DRT-HF+, X9DRFR, X10DRFR, X10DRFR-N(T)	X9DRT-HF+, X9SRD-F, X9DRFR, X10DRFR, X10DRFR-N(T)	X9DRT-HF+, X9SRD-F, X9DRFR, X10DRFR, X10DRFR-N(T)
Compatible Servers	All servers with a PCI-E x8 slot	MicroCloud, 2U Twin <sup>2</sup> +, 2U Twin+ and FatTwin	All servers with a PCI-E x8 slot	2U Twin+, and FatTwin w/ 4-node only	MicroCloud, 2U Twin2+, 2U Twin+, and FatTwin	MicroCloud, 2U Twin2+, 2U Twin+, and FatTwin

### 25GbE

### 25GbE

### 25GbE

### GbE

### GbE

### GbE

### SFP+ Transceiver

### 25/1GbE Controllers & SFP+ Transceiver



Model	AOC-S25G-b2S	AOC-S25G-m2S	AOC-C25G-m1S	AOC-CG-i2	AOC-CPG-i2	AOC-PG-i2+*	AOC-E10GSFPSR
Type	Standard Low-profile	Standard Low-Profile	MicroLP	MicroLP	MicroLP	Proprietary	SFP+ Transceiver
Description	Dual-port 25GbE	Dual-port 25GbE	1U MicroLP Single-port 25GbE controller with 1x SFP28 port.	Dual-port GbE	Dual-port GbE	Low-profile Dual-port GbE	1000Base-SX / 10GbBase-SR plug-in module
Interface	PCI-E x8	PCI-E 3.0 x8	PCI-E 3.0 x8	PCI-E x4	PCI-E x4	PCI-E 2.0 x4	Cabling Type: MMF 62.5/50 µm
Port	2 SFP28	2 SFP28	1 SFP28 ports	2 RJ45 ports	2 RJ45 ports	2 RJ45 ports	
Speed	25Gb/port	25Gb/port	25Gb/port (Ethernet)	1 Gb/port	1Gb/port	1Gb/port	
Controller	Broadcom® BCM57414	Mellanox® ConnectX-4 LX	Mellanox® ConnectX-4 Lx EN	Intel® i2580	Intel® i350	Intel® 82576EB	Compatible Add-on Cards: AOC-STG-i4S, AOC-SIGN-i1S, AOC-STG-i2S, AOC-STG-b4S, AOC-CTG-i1S, AOC-CTG-i2S,
Dimension (LxW) (without end brackets)	5.6" x 2.713" (14.224 x 6.89cm)	5.6" x 2.713" (14.224 x 6.89cm)	4.45" x 1.54" (11.3 x 3.9cm)	4.45" x 1.32" (11.3 x 3.35cm)	4.45" x 1.54" (11.3 x 3.9cm)	3.78" x 2.44" (9.6 x 6.2cm)	
Compatible Motherboards	All MBs with a PCI-E x8 slot	All MBs with a PCI-E x8 slot	X10DRFR	X9SCD-F	X9DRT-HF+, X9SRD-F, X9DRFR	X8DTU-F (Require RSC-R1UU-E8PR)	
Compatible Servers	All servers with a PCI-E x8 slot	All servers with a PCI-E x8 slot	FatTwin MicroCloud	5037MC-H8TRF	MicroCloud, 2U Twin2+, 2U Twin+, and FatTwin	6016T-UF, 6016T-NTF, 6016T-NTRF, 1026T-URF, 1026T-UF, 6016T-URF (Require RSC-R1UU-E8PR)	AOC-PTG-i1S, AOC-MTG-i4S, AOC-MTG-i2S

\* Standard form factor is available as integrated solution with Supermicro server and motherboards.

## SIOM NETWORK ADAPTERS

SIOM Networking Adapters								
Model	AOC-MGP-i2	AOC-MGP-i4	AOC-MTGN-i2S	AOC-MTG-i4S	AOC-MTG-b2T	AOC-MTG-i2T	AOC-MTG-i4T	AOC-MH25G-m2S2T
Type	SIOM							
Description	Dual-port GbE	Quad-port GbE	Dual-port 10GbE	Quad-port 10GbE	Dual-port 10GbE	Dual-port 10GbE	Quad-port 10GbE	Dual-port 25GbE & Dual-port 10GbE
Port	2 RJ45 ports	4 RJ45 ports	2 SFP+ ports	4 SFP+ ports	2 RJ45 ports	2 RJ45 ports	4 RJ45 ports	2 SFP28 & 2 RJ45 ports
Speed	1Gb/port	1Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port	25Gb/port 10Gb/port
Controller	Intel® i350	Intel® i350	Intel® 82599ES	Intel® XL710	Broadcom® BCM57416	Intel® X550	Intel® X550	Mellanox® ConnectX-4 Lx EN Intel® X550
Dimension (LxW) (without end brackets)	3.622" x 3.428" (9.2 x 8.708cm)							
Compatible Motherboards	Supermicro® Motherboards with SIOM slot							
Compatible Servers	Supermicro® Servers with SIOM slot							

**NEW!****NEW!****NEW!****NEW!**

## SIOM Networking Adapters

Model	AOC-M25G-m4S	AOC-M25G-i2S	AOC-MH25G-b2S2G	AOC-MHIBF-m2Q2G	AOC-MHIBF-m1Q2G	AOC-MHFI-11C	AOC-MHIBE-m1CG
Type	SIOM	SIOM	SIOM	SIOM	SIOM	SIOM	SIOM
Description	Quad-port 25GbE	Dual-port 25GbE	Dual-port 25GbE	Dual-port IB FDR & Dual-port GbE	Single-port IB FDR & Dual-port GbE	Single-port Host Fabric Interface	Single-port InfiniBand EDR or 100GbE and Single-port GbE
Port	4 SFP28 ports	2 SFP28 ports	2 SFP28 ports 2 RJ45 ports	2 QSFP & 2 RJ45 ports	1 QSFP & 2 RJ45 ports	1 QSFP28 port	1 QSFP28 port 1 RJ45 port
Speed	25Gb/port	25Gb/port	25Gb/port or 1Gb/port	56Gb/port 1Gb/port	56Gb/port 1Gb/port	100Gb/port	100Gb/port or 1Gb/port
Controller	Mellanox® ConnectX-4 Lx EN Intel® XXV710	Broadcom® BCM57414 Intel® i350	Intel® i350	Mellanox® ConnectX-3 Pro Intel® i350	Mellanox® ConnectX-3 Pro Intel® i350	Intel® Omni Path HFI ASIC	Mellanox® ConnectX-4 VPI Intel® i210
Dimension (LxW) (without end brackets)	3.428" x 3.622" (8.71 x 9.2cm)	3.428" x 3.622" (8.71 x 9.2cm)	3.428" x 3.622" (8.71 x 9.2cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.428" x 3.622" (8.71 x 9.2cm)
Compatible Motherboards	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot
Compatible Servers	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot

## Storage Mezzanine Cards

**NEW!****NEW!****NEW!****NEW!****NEW!**

Model	AOM-S3008M-L8	AOM-S3108M-H8L	AOM-S3108-H8	AOM-B3108-H8	AOM-S3108M-H8	AOM-S3008-L8-SB
Compatible MBs	X10DSC+	X10DSC+	X9DRW-CF31 X9DRW-CTF31 X9DRW-CTF31	B10DRC	X10DRW-i X10DRW-IN X10DRW-IT X10DDW-i X10DDW-IN	X10DRS
Features	8 internal ports, 12Gb/s per port, 240 SATA/SAS drives, RAID 0,1,5,10,6,60 2 GB cache with protection BTR-CV3108-U1	8 internal ports, 12Gb/s per port, 240 SATA/SAS drives, RAID 0,1,5,10,6,60 2 GB cache with protection BTR-TFM8G-BroadcomCVM02	8 internal ports, 12Gb/s per port, 16 SATA/SAS drives, RAID 0,1,5,10,6,60 2 GB onboard cache with protection BTR-TFM8G-BroadcomCVM02	8 internal ports, 12Gb/s per port, 16 SATA/SAS drives, RAID 0,1,5,10,6,60 2 GB onboard cache with protection BTR-TFM8G-BroadcomCVM02	8 internal ports, 12Gb/s per port, 112 SATA/SAS drives, IR mode, RAID 0,1,1e,10	

## HBA AND SAS RAID CARDS

	<i>Coming Soon!</i>	<i>NVMe</i>	<i>NVMe</i>	<i>NVMe</i>	<i>NVMe</i>	<i>NVMe</i>	<i>NVMe</i>	<i>NVMe</i>	<i>NVMe</i>	<i>NVMe</i>
<b>Model name</b>	AOC-SLG2-2TM2	AOC-SLG2-2TM2-T	AOC-SLG3-4X4P	AOC-SHG3-4M2P	AOC-SLG3-2M2	AOC-SLG3-2E4T	AOC-SLG3-4E4T	AOC-SLG3-4E2P	AOC-SLG3-2E4	AOC-SLG3-2E4R
Compatible MBs	All*	All*	X11DDW-L X11DPT-B X11DPT-PS X11DPT-TF	All*	X10DRT-H, X10SRM-TF	All*	All*	All*	All	X10DRW-i, X10DRW-iT, X10DRH, X10DRL-CT
Features	PCI-E 2.0 x2 low-profile card, Adjustable stand-off supporting two SATA3 M.2 form factors: 2280, 2242, RAID1, BMC enabled management, User-visible LEDs for each SSD's Activity and Status monitoring	PCI-E 2.0 x2 low-profile card, 2x 7pin SATA connectors for two SATA3 drives, RAID1, Supports SGPIO for backplane monitoring, IPMI support for RAID monitoring	x8, quad M.2 SSD expansion switch sizes: 22x110mm; 22x80mm; 22x60mm; 22x42mm	x8, dual M.2 SSD expansion card, supports multiple M.2 sizes: 22x110mm; 22x80mm; 22x60mm	x8, dual OCuLink port, PLX PCI-E Switch, SW hot-swap*	x16, quad OCuLink port, Re-Timer, hot-swap*	x8, quad OCuLink port, PLX PCI-E Switch, SW hot-swap*	x8, dual port, PLX hot-swap* (SW)	x8, dual port, re-driver (T) hot-swap*	x16 quad port, re-driver (T) hot-swap* Requires backplane w/ U.2 connector

\* HW restrictions may apply

	<i>New!</i> <b>SAS3</b>	<i>New!</i> <b>SAS3</b>	<b>SAS3</b>	<b>SAS3</b>	<b>SAS3</b>	<b>SAS3</b>	<b>6Gbps</b>
<b>Model</b>	AOC-S316L-L16iT	AOC-S3216L-L16iT	AOC-S3108L-H8iR-16DD	AOC-S3108L-H8iR†	AOC-S3008L-L8e†	AOC-S3008L-L8i†	AOC-S2208L-H8i†
Type	Stanadrd	Stanadrd	Low profile PCI-E 3.0 x8	Standard	Standard	Standard	Standard
Controller/IOP	BroadcomSAS 3616	BroadcomSAS 3216	BroadcomSAS 3108	BroadcomSAS 3108	BroadcomSAS 3008	BroadcomSAS 3008	BroadcomSAS 2208
SAS Port	16 ports, 12Gbps per port, 16 Internal, Low Profile, 1024 SATA/SAS Drives	16 ports, 12Gbps per port, 16 Internal, Low Profile, 1024 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 16 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 122 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 63 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives,
RAID	IT/HBA	IT/HBA	RAID 0,1,5,6,10,50,60 2GB DDR3 on-card cache Optional SuperCap: BTR-TFM8G-BroadcomCVM02. Installation kit PN =MCP-240-00127-ON	RAID 0,1,5,6,10,50,60 2GB DDR3 on-card cache Optional SuperCap: BTR-TFM8G-BroadcomCVM02. Installation kit PN =MCP-240-00127-ON	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,6,10,50,60 1GB DDR3 on-card cache w/ Battery Back-up or SuperCap, Optional Battery Backup Unit: BTR-0022L-Broadcom00279 / MCP-450-00001-ON / Ambient Temp 45C; SuperCap option: BTR-0024LH-Broadcom00297. Installation kit PN =MCP-240-00127-ON
Onboard Cache	-	-	-	-	-	-	-

	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>
<b>Model</b>	AOC-S2308L-L8e†	AOC-S2308L-L8i†	AOC-SAS2LP-H8iR†	AOC-SAS2LP-H8iR-16DD†	AOC-USAS2LP-H8iR*	AOC-USAS2-L8iR	AOC-USAS2-L8i
Type	Standard	Standard	Standard	Standard	UIO	UIO	UIO
Controller/IOP	BroadcomSAS 2308	BroadcomSAS 2308	BroadcomSAS 2108	BroadcomSAS 2108	BroadcomSAS 2108	BroadcomSAS 2008	BroadcomSAS 2008
SAS Port	8 ports, 6Gbps per port, 8 Internal, Low Profile, 122 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 63 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 16 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile	8 ports, 6Gbps per port, 8 Internal	8 ports, 6Gbps per port, 8 Internal
RAID	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,6,10,50,60 512MB DDR2 on-card cache w/ Optional Battery Backup Unit: BTR-0023L-Broadcom00264	RAID 0,1,5,6,10,50,60 512MB DDR2 on-card cache w/ Optional Battery Backup Unit: BTR-0023L-Broadcom00264	RAID 0,1,5,6,10,50,60 512 MB DDR2 on-card cache w/ Optional Battery Backup Unit: BTR-0023L-Broadcom00264	RAID 0,1,5,10	RAID 0,1,10,1E
Onboard Cache	-	-	-	-	-	-	-

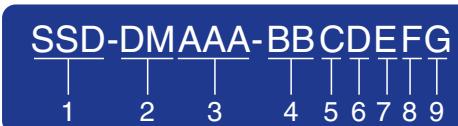
	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>	<b>6Gbps</b>
<b>Model</b>	AOC-USAS2-L8E	AOC-SAS2LP-H4iR†	AOC-SAS2LP-MV8	AOC-SAS2LP-MV8	AOC-USAS-L8i**	AOC-USASLP-L8i**	AOC-USAS-L4i**
Type	UIO	Standard	Standard	UIO	UIO	UIO	UIO
Controller/IOP	BroadcomSAS 2008	BroadcomSAS 2108	Marvel 9480 based	BroadcomSAS 1068E	BroadcomSAS 1068E	BroadcomSAS 1068E	BroadcomSAS 1068E
SAS Port	8 ports, 6Gbps per port, 8 Internal	8 ports, 6Gbps per port, 4 Internal, 4 external, Low Profile, 240 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile	8 ports, 3Gbps per port, 8 Internal	8 ports, 3Gbps per port, 8 Internal, Low Profile	8 ports, 3Gbps per port, 4 Internal, 4 External	8 ports, 3Gbps per port, 4 Internal, 4 External
RAID	IT mode / HBA	RAID 0,1,5,6,10,50,60 512MB DDR2 on-card cache w/ battery w/ Optional Battery Backup Unit: BTR-0023L-Broadcom00264	HBA	IT/HBA Mode	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,10
Onboard Cache	-	-	-	-	-	-	HBA only

# PRODUCT NAMING GUIDE



**Riser Card**

Character	Representation	Options	
<b>1st</b>	Part Number Prefix	RSC: Riser Cards (New Naming Convention) CSE: Riser Cards (Old Naming Convention)	
<b>2nd</b>	Product Category	S:Standard U:Ultra W:WIO G:GPU T:Twin	F:FATTWIN M:Micro Blade B:Super Blade C:Micro Cloud
<b>3rd</b>	Form Factor	1: 1U 2: 2U 3: 3U	4: 4U 5: 5U
<b>4th</b>	Location	R: Right hand side F:Front IO/Front of the MB N6 = 6 NVMe ports	B: Rear IO/Back of the MB M: Middle of the MB
<b>5th</b>	Output	U: UIO 4/8/6: PCI-E x4/x8/x16 X: PCI-X	A: Active Riser Card X33: PCI output
<b>6th</b>	MB Type/Spec:	PR: Proprietary +: Additional Features E: MB with Spec H: Support AMD MB Only	UP: Support UP MB X: Support X10 MB & above X1: Support X11 MB & above X2: Support X12 MB & above



**SATA DOM Module**

Character	Representation	Options			
<b>1st</b>	Storage Module Type	SSD = Solid State Disk			
<b>2nd</b>	Form Factor (DM)	SATA DOM			
<b>3rd</b>	Capacity (AAA)	016 = 16GB	032 = 32GB	064 = 64GB	128 = 128GB
<b>4th</b>	Controller (BB)	PHI = Vendor A SM = Vendor B			
<b>5th</b>	Temperature Rating (C)	C = Commercial Temperature	I = Industrial Temperature		
<b>6th</b>	Flash Type (D)	S = SLC M = MLC T = TLC			
<b>7th</b>	Profile (E)	V = Vertical	H = Horizontal		
<b>8th</b>	Configuration (F)	N = Normal	S = SED		
<b>9th</b>	Reserved (G)	1 = Initial Released Version			

# RISER CARDS

## 1U GPU/Coprocessor (Left Hand Side)

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
RSC-G-A66-X	1U GPU LHS	1U GPU Slot (GPU)	1 Universal Slot (GPU)	2 PCI-E x16	Active	No	X10DRG-H, X10DRG-HT	N/A	N/A	Yes	Yes	Yes	Yes
RSC-R1UG-E16B-X9	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF	118GQ		1027GR-TQF, 1027GR-TQF-FM409, 1027GR-TQF-FM475, 1027GR-TQFT, 1027GR-TRF, 1027GR-TRF-FM309, 1027GR-TRF-FM375, 1027GR-TRFT, 1027GR-TSF	Yes	Yes	Yes	Yes
RSC-R1UG-E16-UP	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9SRG-F	118GQ		1017GR-TF, 1017GR-TF-FM209, 1017GR-TF-FM275, 5017GR-TF, 5017GR-TF-FM209, 5017GR-TF-FM275	Yes	Yes	Yes	Yes
RSC-R1UG-E16-X9	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF+	118GQ		1027GR-TRF+	Yes	Yes	No	No
RSC-R1UG-A2E16-X9	1U GPU LHS	Universal Slot (GPU)	2 PCI-E x16	Active	Yes	X9DRG-H(T)F+, X10DRG-H	118GQ		1027GR-TRF+1027GR-TRFT+	Yes	Yes	Yes	No
RSC-R1UG-E16B+II	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9DRG-HF+II, X9DRG-HTF+II	118GH-R1K66B	1027GR		Yes	Yes	Yes	Yes
RSC-R1UG-E16A+II	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9DRG-HF+II, X9DRG-HTF+II	118GH-R1K66B	1027GR		Yes	Yes	Yes	Yes
RSC-R1UG-E16B	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	No	X8DTG-QF+	118GQ		1026GT-TRF, 1026GT-TRF-FM307, 1026GT-TRF-FM309, 1026GT-TRF-FM375, 1026GT-TSF	Yes	Yes	No	No
RSC-R1UG-E16	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	No	X8DTG-DF		818G-1400, 818G-1400B, 818G-1K43B, 818G-R1400, 118G-1400B, 118G-1800B, 118G-1K43B	1026GT-TF, 1026GT-TF-FM, 2071026GT-TF-FM, 2756016GT-TF, 2076016GT-TF-FM, 2096016GT-TF-FM275, 1026GT-TF-FM205, 1026GT-TF-FM209, 6016GT-TF-FM205	Yes	Yes	No	No
RSC-R1UG-E16S	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	No	H8DGG-QF		118G-1400B, 118G-1800B, 118G-1K43B	1022GG-TF, 1122GG-TF	Yes	Yes	No	No
RSC-R1UG-E16A-X9	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF	118GQ		1027GR-TQF, 1027GR-TQF-FM409, 1027GR-TQF-FM475, 1027GR-TQFT, 1027GR-TRF, 1027GR-TRF-FM309, 1027GR-TRF-FM375, 1027GR-TRFT, 1027GR-TSF	Yes	Yes	Yes	No
RSC-R1UG-2E8G	1U GPU LHS	Universal Slot (GPU)	2 PCI-E x8	Passive	No	X8DTG-DF		818G-1400, 818G-1400B, 818G-1K43B, 818G-R1400, 118G-1400B, 118G-1800B, 118G-1K43B	1026GT-TF-FM107, 1026GT-TF-FM109, 6016GT-TF-FM107, 6016GT-TF-FM109, 6016GT-TF-FM175, 1026GT-TF-FM105, 1026GT-TF-FM175	No	Yes	No	No
RSC-R1UG-E16A	1U GPU LHS	PCI-E x16	2 PCI-E x16	Passive	No	X8DTG-QF+	118GQ		1026GT-TRF, 1026GT-TRF-FM307, 1026GT-TRF-FM309, 1026GT-TRF-FM375, 1026GT-TSF	Yes	Yes	No	No
RSC-R1UG-2E8G-UP	1U GPU LHS	Universal Slot (GPU)	2 PCI-E x8	Passive	Yes	X9SRG-F	118GQ		1017GR-TF-FM109, 1017GR-TF-FM175, 5017GR-TF-FM109, 5017GR-TF-FM175	No	Yes	Yes	Yes

# RISER CARDS

## 1U GPU/Coprocessor (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection		
RSC-G-6	1U GPU LHS	1 PCI-E x16	1 PCI-E x16	Passive	Yes	X10DGQ	SC118GQE-R2K03P	1028GQ-TRT, 1028GQ-TR		Yes	Yes	Yes	Yes		
RSC-R1UG-E16B-X9	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF	118GQ		1027GR-TOF, 1027GR-TOF-FM409, 1027GR-TOF-FM475, 1027GR-TOFT, 1027GR-TRF, 1027GR-TRF-FM309, 1027GR-TRF-FM375, 1027GR-TRFT, 1027GR-TSF		Yes	Yes	Yes	Yes	
RSC-R1UG-E16-UP	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9SRG-F	118GQ		1017GR-TF, 1017GR-TF-FM209, 1017GR-TF-FM275, 5017GR-TF, 5017GR-TF-FM209, 5017GR-TF-FM275		Yes	Yes	Yes	Yes	
RSC-R1UG-E16-X9	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF+	118GQ		1027GR-TRF+		Yes	Yes	No	No	
RSC-R1UG-A2E16-X9	1U GPU LHS	Universal Slot (GPU)	2 PCI-E x16	Active	Yes	X9DRG-H(T)F+, X10DRG-H	118GQ		1027GR-TRF+1027GR-TRFT+		Yes	Yes	Yes	No	
RSC-R1UG-E16B+II	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9DRG-HF+II, X9DRG-HTF+II	118GH-R1K66B	1027GR			Yes	Yes	Yes	Yes	
RSC-R1UG-E16A+II	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9DRG-HF+II, X9DRG-HTF+II	118GH-R1K66B	1027GR			Yes	Yes	Yes	Yes	
RSC-R1UG-E16B	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	No	X8DTG-QF+	118GQ		1026GT-TRF, 1026GT-TRF-FM307, 1026GT-TRF-FM309, 1026GT-TRF-FM375, 1026GT-TSF		Yes	Yes	No	No	
RSC-R1UG-E16	1U GPU LHS	Universal Slot (GPU)	1 PCI-E x16	Passive	No	X8DTG-DF			1026GT-TF, 1026GT-TF-FM, 2071026GT-TF-FM, 2756016GT-TF, 2076016GT-TF-FM, 2096016GT-TF-FM275, 1026GT-TF-FM205, 1026GT-TF-FM209, 6016GT-TF-FM205		Yes	Yes	No	No	
RSC-R1UG-E16S	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	No	H8DGG-QF			118G-1400B, 118G-1800B, 118G-1K43B	1022GG-TF, 1122GG-TF		Yes	Yes	No	No
RSC-R1UG-E16A-X9	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF	118GQ		1027GR-TOF, 1027GR-TOF-FM409, 1027GR-TOF-FM475, 1027GR-TOFT, 1027GR-TRF, 1027GR-TRF-FM309, 1027GR-TRF-FM375, 1027GR-TRFT, 1027GR-TSF		Yes	Yes	Yes	No	
RSC-R1UG-2E8G	1U GPU LHS	Universal Slot (GPU)	2 PCI-E x8	Passive	No	X8DTG-DF			818G-1400, 818G-1400B, 818G-1K43B, 818G-R1400, 118G-1400B, 118G-1800B, 118G-1K43B	1026GT-TF-FM107, 1026GT-TF-FM109, 6016GT-TF-FM107, 6016GT-TF-FM175, 1026GT-TF-FM105, 1026GT-TF-FM175		No	Yes	No	No
RSC-R1UG-E16A	1U GPU LHS	PCI-E x16	2 PCI-E x16	Passive	No	X8DTG-QF+	118GQ		1026GT-TRF, 1026GT-TRF-FM307, 1026GT-TRF-FM309, 1026GT-TRF-FM375, 1026GT-TSF		Yes	Yes	No	No	
RSC-R1UG-2E8G-UP	1U GPU LHS	Universal Slot (GPU)	2 PCI-E x8	Passive	Yes	X9SRG-F	118GQ		1017GR-TF-FM109, 1017GR-TF-FM175, 5017GR-TF-FM109, 5017GR-TF-FM175		No	Yes	Yes	Yes	

## 1U GPU/Coprocessor (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection	
RSC-GR-A88	1U GPU RHS	SMC Proprietary	2 PCI-E x8	Active	No	X10DGQ	SC118GQE-R2K03P	1028GQ-TRT, 1028GQ-TR		No	Yes	Yes	Yes	
RSC-GR-6	1U GPU RHS	1 PCI-E x16	1 PCI-E x16	Passive	No	X10DGQ	SC118GQE-R2K03P	1028GQ-TRT, 1028GQ-TR		Yes	Yes	Yes	Yes	
RSC-R1UG-2E8AR+II	1U GPU RHS	1 PCI-E x16	2 PCI-E x8	Passive	Yes	N/A	N/A	N/A			Yes	Yes	Yes	Yes
RSC-R1UG-E16R-UP	1U GPU RHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9SRG-F	118G-1400B 118G-1800B 118G-1K43B		1017GR-TF, 1017GR-TF-FM109, 1017GR-TF-FM175, 1017GR-TF-FM209, 1017GR-TF-FM275, 5017GR-TF, 5017GR-TF-FM109, 5017GR-TF-FM209, 5017GR-TF-FM275		No	Yes	Yes	Yes
RSC-R1UG-E16R+II	1U GPU RHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9DRG-HF+II, X9DRG-HTF+II, X10DRG-H (T)	SC118GH	1027GR			Yes	Yes	Yes	Yes
RSC-R1UG-E16BR-X9	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF	118GQ		1027GR-TQF, 1027GR-TQF-FM409, 1027GR-TQF-FM475, 1027GR-TOFT, 1027GR-TRF, 1027GR-TRF-FM309, 1027GR-TRF-FM375, 1027GR-TRFT, 1027GR-TSF		Yes	Yes	Yes	No
RSC-R1UG-E16AR+II	1U GPU RHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9DRG-HF+II, X9DRG-HTF+II, X10DRG-H (T)	SC118GH		1027GR-TR2, 1027GR-TR2+		Yes	Yes	Yes	Yes
RSC-R1UG-E16AR-X9	1U GPU RHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF, X8DTG-QF+	118G-1400B, 118G-1800B, 118G-1K43B		1026GT-TRF, 1026GT-TRF-FM307, 1026GT-TRF-FM309, 1026GT-TRF-FM375, 1026GT-TRF, 1026GT-TRF-FM309, 1026GT-TRF-FM375, 1026GT-TRFT, 1026GT-TSF		Yes	Yes	Yes	No

# RISER CARDS

## **1U GPU/Coprocessor (Right Hand Side)**

	RSC-R1UG-E16R-X9	1U GPU RHS	Universal Slot (GPU)	1 PCI-E x16 Passive	Yes	X9DRG-HF, X8DTG-QF+	118G-1400B, 118G-1800B, 118G-1K43B	I026G1-TRF, I026G1-TRF- FM309, I026GT-TRF-FM309, I026GT-TRF-FM375, I027GR-TQF, I027GR-TQF-FM409, I027GR-TQF- FM475, I027GR-TQFT, I027GR-TRF, I027GR-TRF+, I027GR-TRF-FM309, I027GR-TRF-FM375, I027GR-TRFT, I027GR-TRFT+, I027GR-TSF, I026GT-TSF	Yes	Yes	Yes	No	
	RSC-MLP-E8R	1U MLP RHS	PCI-E x8	1 PCI-E x8	Passive	Yes	X9SCE, X9SCE-F	SC 939H-R1K63B	AOM-CGP-I2M, AOM-CIBF-M1M, AOM-CTG-I1SM	No	Yes	Yes	No

## **1U Standard (Left Hand Side)**

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother-boards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-R1U-33	1U Standard LHS	PCI-32 (33 MHz)	1 PCI	Passive	Yes	X9BAA-F, X9SBA	504-203B	5017A-EF	No	No	No	No
	RSC-R1U-UL	1U Standard LHS	PCI-E x8	1 UIO	Passive	No	X7SBL-LN1/2, PDSBM-LN1/2/+, PDSML-LN1/LN2/LN2+/+, X7SLA-H/L,X-8SIL/E-series, X8S16-F, X7SML-X, X8STL-E/3-series, X7SP-E-series***, X9SD-F, X9SCA(F), X9S16(F), X9S2(F), X9SRL(F), X9SRE-series, X9SRI-series, X9SRH-series, X9SC1-series, X8DTN+, X7DWV+, H8QG-series, N/A, X9SPV-M4	SC815, SC813, SC113	N/A	No	Yes, depending on slots	No	N/A

## **1U Standard (Left Hand Side)**

## **1U Standard (Left Hand Side)**

# RISER CARDS

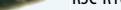
## **1U Ultra (Left Hand Side)**

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-UN4-88	1U Ultra LHS	1 WIO Slot	2 PCI-E x8	Passive	No	X10DRU-i+	119UAC10-R1K02P-N10	1028U-TN10RT+	No	Yes	Yes	Yes

## **1U Twin (Left Hand Side)**

## **1U Twin (Right Hand Side)**

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Sup- port	Gen3 Sup- port	Auto Detection
	RSC-R1U-E16R	1U Twin RHS	PCI-E x16	1 PCI-E x16	Passive	No	H8DGG-QF, H8DCT- IBQF, H8DCT-F, H8DCT-HLN4F, H8DGT-HLIBQF, H8DGT-HLF, H8DGT-HIBQF, H8DGT-HLIBQF, H8DGT-HF, X7SBT, X8SIT, X9SRG-F, X9DRT-series	SC818T	1022GG-TF, 1122GG-TF, 2022TC- HTRF4, 2022TG-H6B1QRF, 2022TG-H1BQRF, 2022TG-HIBQRF, 2022TG-HIBTR, 2122TG-H6RF4, 2122TG-H6BQRF, 2122TG-H6RF, 2122TG-HIBQRF, 2122TG-HIBTR, 2022TC-BIBQRF, 2022TC-BTRF, 1021TM-INF+B, 1021TM-T+B, 2021TM-BIBXRF, 2021TM-BTRF, 1017GR-TF, 1017GR-TF-FM109, 1017GR-TF-FM175, 1017GR-TF- FM209, 1017GR-TF-FM275, 1025TC- 10GA, 1025TC-3FB, 1025TC-TB, 1026GT-TF, 1026GT-TF-FM105, 1026GT-TF-FM107, 1026GT- TF-FM109, 1026GT-TF-FM175, 1026GT-TF-FM205, 1026GT- TF-FM207, 1026GT-TF-FM209, 1026GT-TF-FM275, 1026TTI-BQF, 1026TTI-BXF, 1026TTI-INF, 1026TTI- 1027TR-TF, 1027TR-TF, 1027TR-TOF, 2016TI-HTRF, 2026TTI-H6B1QRF, 2026TTI-H6BXRF, 2026TTI-H6RF, 2026TTI-HIBQRF, 2026TTI-HBXRF, 2026TTI-HTRF, 2027TR-H70RF, 2027TR-H70QRF, 2027TR-H70RF, 2027TR-H71FR, 2027TR-H71QRF, 2027TR-H72FR, 2027TR-H72QRF, 2027TR-H73FR, 2027TR-H73QRF, 2027TR-H74FR, 2027TR-H74QRF, 501STB-TB, 5016TI-TF, 5017GR-TF, 5017GR-TF-FM109, 5017GR-TF- FM175, 5017GR-TF-FM209, 5017GR- TF-FM275, 5026TI-BTRF, 5026TI-HTRF, 6015TC-1GB, 6015TC-LFTB, 6015TC-10GB, 6015TC-LFTB, 6015TC-10GB, 6015TI-INFV/B, 6015TI- TV/B, 6016GT-TF, 6016GT-TF-FM107, 6016GT-TF-FM109, 6016GT-TF- FM175, 6016GT-TF-FM205, 6016GT- TF-FM207, 6016GT-TF-FM209, 6016GT-TI-FM275, 6016TTI-BQF, 6016TTI-BXF, 6016TTI-INF, 6016TTI- TF, 6017TR-TF, 6017TR-TF, 6017TR- TOF, 6026TTI-BIBQF, 6026TTI-BIBQRF, 6026TTI-BIBX, 6026TTI-BIBXRF, 6026TTI-BINP, 6026TTI-BINPRF, 6026TTI-BTF, 6026TTI-BTRF, 6026TT- H6B1QRF, 6026TT-H6BXRF, 6026TT- H6RF, 6026TT-HIBQF, 6026TT-HIBQRF, 6026TT-HIBXF, 6026TT-HIBXRF, 6026TT-IHTF, 6026TT-IHTRF, 6026TT- IBQF, 6026TT-IIBXF, 6026TT- 6027TR-H70FRF, 6027TR-H70QRF, 6027TR-H70RF, 6027TR-H71FRF, 6027TR-H71QRF, 6027TR-H71RF, 6027TR-H7TRF, 6027TR-H7QRF, 6027TR-H7TRF, 1022TC-BQF, 1022TC-H	No	Yes, depend- ing on slots	No	N/A

	RSC-R1U-E8R	1U Twin RHS	PCI-E x8	1 PCI-E x8	Passive	No	X7DBT-series,X7DWT-series,X8DTT-series,X7SBT,X8SIT	SC808, SC809	6015T-TV/B, 6015T-INFV/B	No	Yes, depending on slots	No	N/A
	RSC-R1UFF-E8R	1U Twin RHS	PCI-E x8	1 PCI-E x8	Passive	Yes	X9SFCF-F, X9DRFR, X10DRFF-CG	F418BL-R1K62BP	F627R3-FT, F627R3-F73, F517H6-FT, F617H6-FT+, F617H6-FTL+, F617H6-FTP1+, F617H6-FTPL+, F617R2-FT+, F617R3-FT+, S017R-IHDP, F517H6-FT	No	Yes	Yes	Yes
	RSC-R1UF-E16R	1U Twin RHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRFF	F424AF-R1K28BP	F617R2-R72+, F617R2-RT+	Yes	Yes	Yes	Yes
	RSC-R1UFF-E16R	1U Twin RHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRFF	F418BL-R1K62BP	F627R3-FT, F627R3-F73	Yes	Yes	Yes	Yes

# RISER CARDS

## 1U UIO (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-R1UU-E16	1U UIO LHS	Universal SXB2 Slot (UIO)	1 PCI-E x16	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X8SIU-F, H8DMU+, H8SMU, H8DGU, H8DGU-F, H8DGU-LN4F+, X7DBU, X7DGL, X7DWU, X7DCU, X8DTU-6F, X8DTU-6T, X7SBU, PDSMU, X8SIU	563UB, 113TQ-560UB, 113TQ-P500UB, 113TQ-R650UB, 815TQ-560UB, 815TQ-600UB, 815TQ-710UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111LT-330UB, 111LT-360UB, 119TQ-700UB, 819TQ-280UB, SCS15-280UB	N/A	Yes	Yes, depending on MB	No	No
	RSC-R1UU-2E8	1U UIO LHS	Universal SXB2 Slot (UIO)	2 PCI-E x8	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X8SIU-F, H8DMU+, H8SMU, H8DGU, H8DGU-F, H8DGU-LN4F+, X7DBU, X7DGL, X7DWU, X7DCU, X8DTU-6F, X8DTU-6T, X7SBU, PDSMU, X8SIU	563UB, 113TQ-560UB, 113TQ-P500UB, 113TQ-R650UB, 815TQ-560UB, 815TQ-600UB, 815TQ-710UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111LT-330UB, 111LT-360UB, 119TQ-700UB, 819TQ-280UB, 515-280UB	1022G-NTF, 1026T-6RF+, 1026T-6RFT+, 6016T-6RFT+, 6016T-NTF, 6016T-NTRF, 6016T-NTRF+, 1011M-Ni(B), 1011M-URV/B, 5015B-NTB, 5015B-NTRV/B, 5015M-NTB, 5015M-NTRV/B, 5015M-NTRV/B, 5016I-NTF, 6015B-Ni(B), 6015B-NTRV/B, 6015C-Ni(B), 6015C-NTRV/B, 6015C-NTRV/B, 6015W-Ni(B), 015W-NTRV/B, 6015W-NTRV/B, 6016T-6RF+, 6016T-NT	No	Yes, depending on MB	No	No
	RSC-R1UU-2U	1U UIO LHS	Universal SXB2 Slot (UIO)	2 UIO	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X8SIU-F, H8DMU+, H8SMU, H8DGU, H8DGU-F, H8DGU-LN4F+, X7DBU, X7DGL, X7DWU, X7DCU, X8DTU-6F, X8DTU-6T, X7SBU, PDSMU, X8SIU	563UB, 113TQ-560UB, 113TQ-P500UB, 113TQ-R650UB, 815TQ-560UB, 815TQ-600UB, 815TQ-710UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111LT-330UB, 111LT-360UB, 119TQ-700UB, 819TQ-280UB	N/A	No	Yes, depending on MB	No	No
	RSC-R1UU-UE8	1U UIO LHS	Universal SXB2 Slot (UIO)	1 PCI-E x8; 1 UIO	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X8SIU-F, H8DMU+, H8SMU, H8DGU, H8DGU-F, H8DGU-LN4F+, X7DBU, X7DGL, X7DWU, X7DCU, X8DTU-6F, X8DTU-6T, X7SBU, PDSMU, X8SIU	563UB, 113TQ-560UB, 113TQ-P500UB, 113TQ-R650UB, 815TQ-560UB, 815TQ-600UB, 815TQ-710UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111LT-330UB, 111LT-360UB, 119TQ-700UB, 819TQ-280UB	1022G-NTF, 1026T-6RF+, 1026T-6RFT+, 6016T-6RFT+, 6016T-NTF, 6016T-NTRF, 6016T-NTRF+, 1011M-Ni(B), 1011M-URV/B, 5015B-NTB, 5015B-NTRV/B, 5015M-Ni(B), 6015B-NTRV/B, 6015B-NTRV/B, 6015B-Ni(B), 6015B-NTRV/B, 6015C-Ni(B), 6015C-NTRV/B, 6015C-NTRV/B, 6015W-Ni(B), 015W-NTRV/B, 6015W-NTRV/B, 6016T-6RF+, 6016T-NT	No	Yes, depending on MB	No	No
	RSC-R1UU-E8E16	1U UIO LHS	Universal SXB2 Slot (UIO)	1 PCI-E x8; 1 PCI-E x16	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X9SPU-F, X9DBU-If, X9DBU-3F, H8DGU, H8DGU-F, H8DGU-LN4F+, X8SIU-F, X8SIU	113TQ-560UB, 113TQ-563UB, 113TQ-P500UB, 113TQ-R650UB, 815TQ-560UB, 815TQ-600UB, 815TQ-710UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111LT-330UB, 111LT-360UB, 119TQ-700UB, 819TQ-280UB	6017B-NTF	Yes	Yes, depending on MB	Yes, depending on MB	Yes depending on MB
	RSC-R1UU-UE16	1U UIO LHS	Universal SXB2 Slot (UIO)	1 PCI-E x16; 1 UIO	Passive	Yes	X8DTU, X8DTU-F, X8DTU-LN4F+, X9SPU-F, X9DBU-If, X9DBU-3F, H8DGU, H8DGU-F, H8DGU-LN4F+,	113TQ-560UB, 113TQ-600UB, 113TQ-660UB, 113TQ-690UB, 113TQ-720UB, 815TQ-560UB, 815TQ-600UB, 815TQ-710UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111LT-330UB, 111LT-360UB, 119TQ-700UB, 819TQ-280U	1022G-URF, 1026T-URF, 1026T-URF+4+, 1026T-URF+4+, 1026T-URF+4+, 1026T-URF+4+, 1017C-URF, 6016T-U, 6016T-U, 6016T-U, 6017B-URF	Yes	Yes, depending on MB	Yes, depending on MB	Yes

## 1U UIO (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-R1UU-E8PR	1U UIO RHS	PCI-E x8	1 PCI-E x8	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X7DWU, X7DCU, X8DTU-6F, X8DTU-6T	113TQ-560UB, 113TQ-563UB, 113TQ-600UB, 113TQ-660UB, 113TQ-690UB, 113TQ-720UB, 815TQ-560UB, 815TQ-600UB, 815TQ-660UB, 815TQ-690UB, 815TQ-720UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111LT-330UB, 111LT-360UB, 119TQ-700UB, 819TQ-280UB	N/A	No	Yes, depending on slots	No	No
	RSC-R1UU-E8R+	1U UIO RHS	PCI-E x8	1 PCI-E x8	Passive	No	X8SIU-F, X9SPU-F, H8SMU, X8DTU-LN4F+, X8DTU-6F+, X8SIU-F	113TQ-560UB, 113TQ-563UB, 113TQ-600UB, 113TQ-660UB, 113TQ-690UB, 113TQ-720UB, 815TQ-560UB, 815TQ-600UB, 815TQ-660UB, 815TQ-690UB, 815TQ-720UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111LT-330UB, 111LT-360UB, 119TQ-700UB, 819TQ-280UB	N/A	No	No	No	No

## 1U WIO (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-W-68	1U WIO LHS	WIO Slot	1 PCI-E x8 1 PCI-E x16	Passive	Yes	X11SSW-F	WIO Chassis	5019S-WR	No	Yes	Yes	No
	RSC-W-88	1U WIO LHS	WIO Slot	2 PCI-E x8	Passive	No	X10DRW-i	WIO Chassis	6028R-WTR, 1028R-WTR, 1028R-WC1R	No	Yes	Yes	Yes

## RISER CARDS

### 1U WIO (Left Hand Side)

RSC-R1UW-2E16	1U WIO LHS	WIO Slot	2 PCI-E x16	Passive Yes	X9SRW-3F, X9SRW-F, X9DRW-1F, X9DRW-3F, X9DRW-3LN4F+, X9DRW-3TF+, X10DRW-series / X10DRW-T series / X10DRW-T series / X10DDW-i	WIO Chassis	1027R-728RFTP, 1027R-N3RF, 1027R-WRF, 1027R-WRF4+, 1027R-WRF+, 5017R-WRF, 6017R-728RFTP, 6017R-N3RF4+, 6017R-N3RF+, 6017R-NTT, 6017R-WRF	Yes	Yes	Yes	Yes
RSC-R1UW-U	1U WIO LHS	WIO Slot	1 UIO	Passive Yes	X9SRW-3F, X9SRW-F, X9DRW-1F, X9DRW-3F, X9DRW-3LN4F+, X9DRW-3TF+, X10DRW-series, X10SRW-F	WIO Chassis	N/A	No	Yes	Yes	No
RSC-R1UW-E16	1U WIO LHS	WIO Slot	1 UIO	Passive Yes	X9DRD-CNT+, X10DRW-series, X10SRW-F	1U WIO Chassis	N/A	Yes	Yes	Yes	Yes

### 1U WIO (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
RSC-R1UW-E8R	1U WIO RHS	WIO Slot	1 PCI-E x8	Passive Yes	X9SRW-3F, X9SRW-F, X9DRW-1F, X9DRW-3F, X9DRW-3LN4F+, X9DRW-7TF+, X10SRW-F, X10DDW-i	WIO Chassis	5017R-WRF, 1027R-728RFTP, 1027R-N3RF4+, 1027R-WRF+, 6017R-728RFT, 6017R-N3RF4+, 6017R-N3RF+	No	Yes	Yes	No		

### 2U GPU/Coprocessor (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
RSC-G2F-A66	2U GPU LHS	1 PCI-E x16	2 PCI-E x16	Active No	X10DRG-H, X10DRG-HT	SC218GH-R2K03B	2028GR-TR, 2028GR-TRH, 2028GR-TRHT, 2028GR-TRT	Yes	Yes	Yes	Yes	Yes	
RSC-R2UG-E8G-X9	2U GPU LHS	Universal Slot (GPU)	1 PCI-E x8	Passive Yes	X9DRG-HF, X9DRG-HTF	218G-R1800B	2027GR-TRF, 2027GR-TRF-FM409, 2027GR-TRF-FM475, 2027GR-TRF+, 2027GR-TSF	No	Yes	Yes	Yes	Yes	
RSC-R2UG-A2E16-A	2U GPU LHS	Universal Slot (GPU)	2 PCI-E x16	Active Yes	X9DRG-HF, X9DRG-HTF	218G-R1800B	2027GR-TRFH, 2027GR-TRFHT, 2027GR-TRFH-FM609, 2027GR-TRFH-FM675	Yes	Yes	Yes	Yes	Yes	
RSC-R2UG-A2E16-B	2U GPU LHS	Universal Slot (GPU)	2 PCI-E x16	Active Yes	X9DRG-HF, X9DRG-HTF	218G-R1800B	2027GR-TRFH, 2027GR-TRFHT, 2027GR-TRFH-FM609, 2027GR-TRFH-FM675	Yes	Yes	Yes	Yes	Yes	
RSC-R2UG-2E4E8	2U GPU LHS	PCI-E x16	1 PCI-E x8; 2 PCI-E x4	Passive Yes	X8DTG-QF+	218G-R1800B	2026GT-TF, 2026GT-TRF, 2026GT-TRF-FM407, 2026GT-TRF-FM409	N/A	Yes	No	Yes		
RSC-R2UG-2E16	2U GPU LHS	Universal Slot (GPU)	2 PCI-E x16	Passive No	X8DTG-QF+	218G-R1800B	2026GT-TF, 2026GT-TRF, 2026GT-TRF-FM407, 2026GT-TRF-FM409	Yes	Yes	No	Yes		
RSC-R2UG-2E16-X9	2U GPU LHS	Universal Slot (GPU)	2 PCI-E x16	Passive Yes	X9DRG-HF, X9DRG-HTF, X10DRG-H (T)	218G-R1800B	2027GR-TRF, 2027GR-TRF-FM409, 2027GR-TRF-FM475, 2027GR-TRF+, 2027GR-TSF	Yes	Yes	Yes	Yes	Yes	

### 2U GPU/Coprocessor (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection	
RSC-G2FR-A66	2U GPU RHS	1 PCI-E x16	2 PCI-E x16	Active Yes	X10DRG-H, X10DRG-HT	SC218GH-R2K03B	2028GR-TR, 2028GR-TRH, 2028GR-TRHT, 2028GR-TRT	Yes	Yes	Yes	Yes	Yes		
RSC-R2UG-UR-X9	2U GPU RHS	PCI-E x8	1 UIO	Passive Yes	X8DTG-QF+, X9DRG-QF+	218G-R1800B	N/A	N/A	Yes	Yes	Yes	N/A		
RSC-R2UG-E16R-X9	2U GPU RHS	PCI-E x16	1 PCI-E x16	Passive Yes	X8DTG-QF+	218G-R1800B	2026GT-TF, 2026GT-TRF, 2026GT-TRF-FM407, 2026GT-TRF-FM409, 2026GT-TRF-FM475, 2027GR-TRFHT, 2027GR-TSF	Yes	Yes	Yes	Yes	N/A		
RSC-R2UG-2E16R-X9	2U GPU RHS	Universal Slot (GPU)	2 PCI-E x16	Passive Yes	X8DTG-QF+X9DRG-HF X9DRG-HF+	218G-R1800B	2027GR-TRF, 2027GR-TRF-FM409, 2027GR-TRF-FM475, 2027GR-TRF+, 2027GR-TRFH, 2027GR-TSF	Yes	Yes	Yes	Yes	Yes		

### 2U Standard (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
RSC-S2-88	2U Standard LHS	1 PCI-E x8	2 PCI-E x8	Passive No	X10QRH+	CSE-218U-R1K02P	2048U-RTR4	No	Yes	Yes	Yes	Yes	
RSC-R2U-E8	2U Standard LHS	PCI-E x8	1 PCI-E x8	Passive Yes	H8SCM-F, H8SCM, X8SIE, X8SIE-F, X8SIE-LN4, X8SIE-LN4F, X8DTD3, X8DT3-F, X8DT3-LN4F, X8DTI, X8DTI-F, X8DTI-LN4F, X8DTN, X8DTN-F, X8STI, X8STI-F, X8STI-LN4, X8SIE, X8SIE-F, X8SIE-LN4, X8SIE-LN4F, X8SIE-LN4L, X8SIE-LN4L-F, X8SIE-LN4L-LN4, X8SIE-LN4L-F, X95CL-LN4, X95CL-LN4F, X95CA, X95CA-F	N/A	825MTQ-R700LPB, 825TO-600LPB, 825TO-R720LPB, 826RA-R1200LPB, 826BA-R1K28LPB, 826BA-R920LPB, 826BE16-R1K28LPB, 826BE16-R920LPB, 216A-R900LPB, 216E16-R1200LPB	No	No	No	No	No	

# RISER CARDS

## **2U Standard (Left Hand Side)**

	RSC-R2U-E8E+	2U	Standard LHS	PCI-E x16 Slot with SEPC	2 PCI-E x8	3 PCI-E x8	Passive	No	X8SIE, X8SIE-F, X8SIE-LN4F, X8DTL-1, X8DTL-1F, X8DTL-2, X8DTL-3, X8DTL-3F, X8DTL-6, X8DTL-6F, X8DTL-6L, X8DTL-L,	N/A	No	No	No	No
	RSC-R2U-A3E8+	2U	Standard LHS	PCI-E x8	Slot with SEPC	3 PCI-E x8	Active	No	X8DTN+, X8DTN+F, X8DTN+-F, X8DTI-N+, X8DTI-N-, X8DTI-F, X8DTI-LN4F, X8DT3+, X8DT3-F, X8DT3-F, X8DT3-F, X7DWN	N/A	No	Yes	Yes	Yes

## **2U Ultra (Left Hand Side)**

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-U2N4-6	2U Ultra LHS	1 WIO Slot	2 PCI-E x8	Passive	No	X10DRU-i+	CSE-219UAC-R1K02	2028U-TN24RT+	Yes	Yes	Yes	Yes

### **2U Twin (Left Hand Side)**

## **2U Twin (Right Hand Side)**

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection	
A green printed circuit board with three PCI-E x8 slots.	RSC-R2UT-3E8R	2U Twin RHS	PCI-E x8	PCI-E x16	3 PCI-E x8	Passive	Yes	X9DRT-X, X9DRT-HF, X9DRT+HIBPF, X9DRT-HIBQF, X9DRT-IBPF, X9DRT-IBQF	SC827T-R1400B, SC827T-R1200	2027TR-D70RF, 2027TR-D70QRF, 2027TR-D70RF, 6027TR-D70QRF, 6027TR-D70RF, 6027TR-D71RF, 6027TR-D71QRF, 6027TR-D71RF, 6027TR-DTQRF, 6027TR-DTRF	No	Yes	Yes	Yes
A green printed circuit board with one PCI-E x16 slot.	RSC-R2UF-E16R	2U Twin RHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRFR-F	SCF424AS-R1K28BP	N/A		Yes	Yes	Yes	
A green printed circuit board with one PCI-E x8 slot and one PCI-E x16 slot.	RSC-R2UT-E8E16R	2U Twin RHS	PCI-E x8PCI-E x16	1 PCI-E x8; 1 PCI-E x16	Passive	Yes	X9DRT-X, X9DRT-HF, X9DRT-HIBPF, X9DRT-HIBQF, X9DRT-IBPF, X9DRT-IBQF	SC827T-R1400B, SC827T-R1200	6027TR-GTRF		Yes	Yes	Yes	
A green printed circuit board with two PCI-E x8 slots.	RSC-R2UT-2E8R	2U Twin RHS	PCI-E x16	2 PCI-E x8	Passive	No	X8DTT, X8DTT-F, X8DTT+BX, X8DTT-IBXF, X8DTT+BQ, X8DTT-IBQF, X8DTT+H, X8DTT+HF, X8DTT+H+, X8DTT+HF+, X8DTT+HIBXF, X8DTT+HIBQF, X8DTT+HIBQF+, X8DTT+HLN4F	827H-R1400B, 827T-R1200	2026TT-DLIBQRF, 2026TT-DLIBXRF, 2026TT-DLIBQRF, 6026TT-DGIBORF, 6026TT-DGIBXF, 026TT-HDIBORF, 6026TT-HDIBXF, 6026TT-HDTRF, 2122TC-DLRF4	No	Yes	No	Yes	
A green printed circuit board with one PCI-E x16 slot.	RSC-R2UF-2E8GR	2U Twin RHS	PCI-E x16	2 PCI-E x8	Passive	Yes	X9DRFR-F	SC-F424AS-R1K28BP	N/A		No	Yes	Yes	

	RSC-R2UT-E16R	2U Twin RHS	PCI-E x16	1 PCI-E x16 Passive	No	X8DTT-X8DTT-F, X8DTT-BX, X8DTT-IBXF, X8DTT-BQ, X8DTT-IBQF, X8DTT-H, X8DTT-HF, X8DTT-H+, X8DTT-THF+, X8DTT-HB, X8DTT-HIBF, X8DTT-HIB, X8DTT-HIBF, H8DTG-HF, H8DTG-HBF, H8DTG-HIB, H8DTG-HIBF, X7DWT-X7DWT-INF, X7DWT-INF+, X8DTT-INF, X8DTT-INF-, X8DTT-HIBX, X8DTT-HIB+	827H-R1400B, 827T-R1200	6026TT-GIBQRF, 6026TT-GIBX-RF, 6026TT-GTRF	Yes	Yes	No	No	
	RSC-R2UT-2E4E8R-SS026	2U Twin RHS	PCI-E x16	2 PCI-Ex4; 1 PCI-E x8	Passive	No	X8DTS-F	SC937ETS	2026T-DE2R24L, 6036ST-6HR, 6036ST-6LR	No	Yes	No	Yes

### **2U UJO (Left Hand Side)**

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
A green printed circuit board with two M.2 slots and a PCIe x8 port.	RSC-R2UU-E8E16	2U UIO LHS	Universal SXB2 Slot (UIO)	1 PCI-E x8; 1 PCI-E x16	Passive	Yes	X8DTUX8DTU-F, X8DTULN4F+, H8DGU-F, H8DGLN4F+, X9DBU-F, X9DBU-IF	UIO Chassis	N/A	No	Yes	Yes	Yes
A green printed circuit board with two M.2 slots and a PCIe x8 port.	RSC-R2UU-U2E4E8G	2U UIO LHS	Universal SXB2 Slot (UIO)	1 PCI-E x8; 2 PCI-E x4; 1 UIO	Passive	Yes	X8DTU, X8DTU-F, X8DTULN4F+, X9DBU-3F, X9DBU-F, X9SPU-F	UIO Chassis	2026T-URF4+, 6026T-URF4+, 6027B-URF	No	Yes	Yes	Yes
A green printed circuit board with two M.2 slots and a PCIe x8 port.	RSC-R2UU-A4E8+	2U UIO LHS	SXB-E Universal Slot (UIO)	4 PCI-E x8	Active	No	X8DTU, X8DTU-F, X8DTULN4F+, H8DGU, H8DGU-F, H8DGU-LN4F+	UIO Chassis	N/A	No	Yes	No	No
A green printed circuit board with two M.2 slots and a PCIe x8 port.	RSC-R2UU-2U	2U UIO LHS	SXB-E Universal Slot (UIO)	2 UIO	Passive	No	H8DMU+, H8SMU, H8DGU, H8DGU-F, H8DGU-LN4F+, X8DTU, X8DTU-F, X8SBU-F, X7DCU, X7DBU, X7DWU, X7DGU, X8DTU-6F, X8DTU-6T, X8SBU, X7SBU, PDSMU	UIO Chassis	N/A	No	Yes, depending on slots	No	No

## RISER CARDS

### 2U UIO (Left Hand Side)

	RSC-R2UU-UA3E8+	2U UIO LHS	SX8-E Universal Slot (UIO)	3 PCI-E x8; 1 UIO	Active	No	X8DTU, X8DTU-F, X8DTU-LN4F+, H8DGU, H8DGU-F, H8DGU-LN4F+	UIO Chassis	2022G-URF, 2022G-URF4+, 6026T-UR, 6026T-URF	No	Yes	No	No
	RSC-R2UU-3E8G	2U UIO LHS	UIO (PCI-E x8)	3 PCI-E x8	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, H8DGU, H8DGU-F, H8DGU-LN4F+, X9DBU-3F, X9DBU-F	UIO Chassis	N/A	No	Yes	Yes	Yes
	RSC-R2UU-UE8	2U UIO LHS	Universal SXB2 Slot (UIO)	1 UIO 11 PCI-E x8	Passive	No	H8DMU+, H8SMU, X75BU, X7DCU, X7DBU, X7DWU, X7DGU, X8DTU-6F, X8DTU-6TF	UIO Chassis	N/A	No	Yes, depending on MB	No	No
	RSC-R2UU-2E8	2U UIO LHS	Universal SXB2 Slot (UIO)	2 PCI-E x8	Passive	No	H8DMU+, H8SMU, X75BU, X7DCU, X7DBU, X7DWU, X7DGU, X8DTU-6F, X8DTU-6TF	UIO Chassis	N/A	No	Yes, depending on MB	No	No

### 2U UIO (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-R2UU-2E8R	2U UIO RHS	PCI-E x16	2 PCI-E x8	Passive	No	H8DMU+, X7DWU	UIO Chassis	2021M-UR+V, 2021M-UR+B, 6025W-URV, 6025W-URB	No	Yes, depending on slots	No	No
	RSC-R2UU-2E4E8R	2U UIO RHS	PCI-E x16	2 PCI-E x4; 1 PCI-E x8	Passive	No	X8DTU-LN4F+	UIO Chassis	2026T-URF4+, 6026T-URF4+	No	Yes	No	No
	RSC-R2UU-2E4R	2U UIO RHS	PCI-E x8	2 PCI-E x4	Passive	No	X8DTU, X8DTU-F, X8DTU-6F, X8DTU-6TF+, X9DBU-3F, X9DBU-3F-X9SIU-F, X9SPU-F, X75BU, X7DWU, X8DTU-LN4F, X8SIU	UIO Chassis	N/A	No	Yes	Yes	Yes
	RSC-R2UU-2E2E4R	2U UIO RHS	PCI-E x8	2 PCI-E x2; 1 PCI-E x4	Passive	No	H8DGU-LN4F+	UIO Chassis	N/A	No	Yes	No	No

### 2U WIO (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-R2UW-2E8E16+	2U WIO LHS	WIO Slot	2 PCI-E x16; 1 PCI-E x8	Passive	Yes	X9DRW-If, X9DRW-3F, X9DRD-It+, X10DRW-series and X10QRU-series	WIO CHASSIS	N/A	Yes	Yes	Yes	Yes
	RSC-R2UW-2E8E16	2U WIO LHS	WIO Slot	2 PCI-E x8; 1 PCI-E x16	Passive	Yes	X9SRW-F, X9SRW-3F, X9DRW-If, X9DRW-3F, X9DRW-3TF+, X9DRW-3LN4F+	WIO CHASSIS	6027R-72RFTP+, 2027R-72RFTP+	Yes	Yes	Yes	Yes
	RSC-R2UW-U2E8	2U WIO LHS	WIO Slot	2 PCI-E x8; 1 UIO	Passive	Yes	X9SRW-F, X9SRW-3F, X9DRW-If, X9DRW-3F, X9DRW-3TF+, X9DRW-3LN4F+, X10DRW-series	WIO CHASSIS	N/A	No	Yes	Yes	Yes
	RSC-R2UW-2E16-2E8	2U WIO LHS	WIO Slot	2 PCI-E x16; 2 PCI-E x8	Passive	Yes	X9DRW-3LN4F+, X9DRW-3TF+, X9DRW-7TF+	WIO CHASSIS	N/A	Yes	Yes	Yes	Yes
	RSC-R2UW-4E8	2U WIO LHS	WIO Slot	4 PCI-E x8	Passive	Yes	X9SRW-F, X9SRW-3F, X9DRW-If, X9DRW-3F, X9DRW-3TF+, X9DRW-3LN4F+, X10DRW-series	WIO CHASSIS	5027R-WRF, 2027R-N3RF4+, 2027R-N3RFT+, 6027R-N3RF4+, 6027R-N3RFT+	No	Yes	Yes	Yes

### 2U WIO (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-R2UW-2E4R	2U WIO RHS	1 PCI-E x16	2 PCI-E x4	Passive	Yes	X9SRW-F, X9SRW-3F, X9DRW-If-SS022, X10SRW-F	2U WIO chassis	N/A	No	Yes	Yes	Yes
	RSC-R2UW-E8R-UP	2U WIO RHS	WIO Slot	1 PCI-E x8	Passive	Yes	X9SRW-3F, X9SRW-F, X10DDW-I and X10SRW-F	WIO Chassis	5027R-WRF	No	Yes	Yes	Yes
	RSC-R2UW-2E8R	2U WIO RHS	WIO Slot	2 PCI-E x8	Passive	Yes	X9DRW-IFX9DRW-3FX-9DRW-3TF+X-9DRW-3LN4F+	WIO Chassis	2027R-72RFTP+, No 6027R-72RFTP+	Yes	Yes	Yes	Yes

# TRUSTED PLATFORM MODULE (TPM)

## Provisioned TPM

TPM	Types	Differentiators	FormFactors	Pictures	Model Numbers
Provisioned TPM+ TXT	Server (S)	96-Byte index Memory Support: Intel® Xeon® Processor E5, Intel® Xeon® Processor E7	Vertical (V)		AOM-TPM-9655V-S AOM-TPM-9665V-S
			Horizontal (H)		AOM-TPM-9655H-S AOM-TPM-9665H-S
Provisioned TPM+ TXT	Client (C)	48-Byte index Memory Support: Intel® Xeon® Processor E3 Intel® Core™ i7 Processor, Intel® Core™ i5 Processor	Vertical (V)		AOM-TPM-9655V-C AOM-TPM-9665V-C
			Horizontal (H)		AOM-TPM-9655H-C AOM-TPM-9665H-C

## TPM Products

TCG	Model #	Form Factor	TXT*	MB Platform	Supported CPUs
TPM 1.2	AOM-TPM-9655V	Vertical	N/A	Intel® & AMD	Any MB's Supported CPU
	AOM-TPM-9655V-S	Vertical	Server	Intel®	Intel® Xeon® Processor E5, Intel® Xeon® Processor E7
	AOM-TPM-9655V-C	Vertical	Client	Intel®	Intel® Core™ i5 Intel® Core™ i7 Processor, Intel® Core™ i5 Processor & Intel® Xeon® Processor E3
	AOM-TPM-9655H	Horizontal	N/A	Intel® & AMD	Any MB's Supported CPU
	AOM-TPM-9655H-S	Horizontal	Server	Intel®	Intel® Xeon® Processor E5, Intel® Xeon® Processor E7
	AOM-TPM-9655H-C	Horizontal	Client	Intel®	Intel® Core™ i5 Processor Intel® Core™ i7 Processor, Intel® Xeon® Processor E3
TPM 2.0	AOM-TPM-9665V	Vertical	N/A	Intel	Any MB's Supported CPU
	AOM-TPM-9665V-S	Vertical	Server	Intel®	Intel® Xeon® Processor E5, Intel® Xeon® Processor E7
	AOM-TPM-9665V-C	Vertical	Client	Intel®	Intel® Core™ i3 Processor, Intel® Core™ i5 Processor, Intel® Core™ i7 Processor, Intel® Xeon® Processor E3
	AOM-TPM-9665H	Horizontal	N/A	Intel	Any MB's Supported CPU
	AOM-TPM-9665H-S	Horizontal	Server	Intel®	Intel® Core™ i5 Processor, Intel® Core™ i7 Processor
	AOM-TPM-9665H-C	Horizontal	Client	Intel®	Intel® Core™ i5 Processor, Intel® Core™ i7 Processor, Intel® Xeon® Processor E3

\* TPM Provisioning is required for TXT function, selecting server or client provisioning depends on the CPU and MB that is going to be used

## MOBILE RACKS & DRIVE KITS

**High Performance,  
Scalability & Flexibility for  
Next Generation Enterprise  
Server/Storage Solutions**



**New! SAS 3.0 (12Gbps)**

**New! SAS 3.0 (12Gbps)**



**SAS 3.0/SATA 3.0**

**SAS 3.0/SATA 3.0**

**SAS 2.0/SATA 3.0**

Model Part#	CSE-M14TQC	CSE-M28SACB / CSE-M28SACB-OEM	CSE-M28SAB / CSE-M28SAB-OEM
<b>Occupancy</b>	1 x 5.25" drive bays	2x 5.25" drive bays	2x 5.25" drive bays
<b>Capacity</b>	4 x 2.5" hot-swap SAS 3.0/SATA 3.0 hard drives	8x 2.5" hot-swap SAS 3.0/SATA 3.0 hard drives	8x 2.5" hot-swap SAS2.0/SATA 3.0 hard drives
<b>Expander Card</b>	N/A	N/A	N/A
<b>Cooling Subsystem</b>	40mm exhaust fan <ul style="list-style-type: none"> <li>• Overheat LED &amp; alarm</li> <li>• Drive activity LED</li> <li>• Fan failure LED</li> <li>• 4x 7-pin SATA connectors (support 12Gbps)</li> </ul>	40mm exhaust fan (CSE-M28SACB only) <ul style="list-style-type: none"> <li>• Overheat LED &amp; alarm</li> <li>• Drive activity LED &amp; failure LED</li> <li>• Fan failure LED &amp; Alarm (CSE-M28SACB only)</li> <li>• 2x MiniSAS HD connectors</li> </ul>	40mm exhaust fan (CSE-M28SAB only) <ul style="list-style-type: none"> <li>• Fan fail detection LED &amp; alarm (CSE-M28SAB only)</li> <li>• Overheat LED indication alarm</li> <li>• Drive activity/failure LED</li> <li>• 2x iPAS connectors</li> </ul>
<b>System Monitoring</b>			
<b>Dimensions</b>	5.8" W x 1.6" H x 7.9" D (147mm x 40mm x 200mm)	CSE-M28SACB: 5.8" W x 3.4" H x 7.4" D (146 x 85 x 187mm) CSE-M28SACB-OEM: 5.8" W x 3.4" H x 6.2" D (146 x 85 x 157mm)	CSE-M28SAB: 5.8" W x 3.4" H x 7.4" D (146 x 85 x 187mm) CSE-M28SAB-OEM: 5.8" W x 3.4" H x 6.2" D (146 x 85 x 157mm)
<b>Gross Weight</b>	4 lbs	5 lbs	5 lbs



**New! SAS 3.0 (12Gbps)**



**New! SAS 3.0 (12Gbps)**



**SAS/SATA**

**SAS 3.0/SATA 3.0**

**SAS 3.0/SATA 3.0**

Model Part#	CSE-M35T-1/M35TQ	MCP-220-82616-0N MCP-220-83608-0N MCP-220-84610-0N	MCP-220-81506-0N MCP-220-81504-0N
<b>Occupancy</b>	3x 5.25" drive bays	1x rear drive bay	1x slim DVD or slim floppy size drive bay
<b>Capacity</b>	5x 3.5" hot-swap SAS/SATA hard drives	2x 2.5" hot-swap SAS3/SATA3 hard drives	1x 2.5" hot-swap SAS3/SATA3 hard drive
<b>Expander Card</b>	N/A	N/A	N/A
<b>Cooling Subsystem</b>	90mm exhaust fan <ul style="list-style-type: none"> <li>• Fan fail detection LED &amp; alarm</li> <li>• Overheat LED indication</li> <li>• Drive activity LED</li> <li>• SCM35TQ has "Drive Failure LED"</li> </ul>	N/A	N/A
<b>System Monitoring</b>		<ul style="list-style-type: none"> <li>• Monitoring drive activity, rebuild or failure</li> <li>• Jumper settings for various configurations</li> <li>• 12G support with optional CBL-SAST-0699</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring drive activity, rebuild or failure</li> <li>• Support SGPIO if connected to logical port #0</li> <li>• 12G support with optional CBL-SAST-0699</li> <li>• Slim drive tray (up to 9.5mm)</li> </ul>
<b>Dimensions</b>	5.8" W x 5" H x 9.7" D (146 x 129 x 245mm)	82616: 3.26" x 1.36" x 6.26" (83x35x159mm) 83608: 3.2" x 1.6" x 6.1" (81x41x155mm) 84610: 6.0" x 0.76" x 6.7" (152x20x170mm)	Slim DVD size: 5.05" W x 0.5" H x 6.3" D (128x13x160mm) Slim floppy size: 3.8" W x 0.5" H x 6.3" D (97x13x160mm)
<b>Gross Weight</b>	7.5 lbs	1.5 lbs	1 lbs

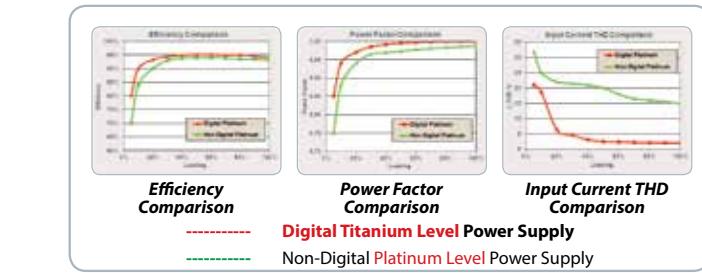
# POWER SUPPLIES

## Digital Switching Power Supplies

### 96% Titanium Level Power Efficiency!

- New generation Digital Switching Power Supplies
- Improved power efficiency (5~10%) in light loading
- Improved power factory correction (5~10%) in light loading
- Reduce current THD (15%) power transmission loss
- Real-time monitoring & enhanced system reliability

New!



Digital Titanium Level Power Supply

Non-Digital Platinum Level Power Supply



Model	PWS-2K60A-1R	PWS-1K02A-1R	PWS-1K03A-1R	PWS-1K04A-1R	PWS-1K62A-1R	PWS-1K22A-1R
Total Output Power	2600W	800W / 1000W	800W / 1000W	800W/1000W	1000W / 1600W	800W / 1200W
Input	208-240Vac 220-240Vac (for QC only)	100-127Vac/200-240Vac/ 50-60Hz	100-127Vac/ 200-240Vac/ 50-60Hz	100-127Vac / 200-240Vac / 50-60Hz	100-127Vac/200-240Vac/ 50-60Hz	100-127Vac / 200-240Vac/ 50-60Hz
Form Factor	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	48x 4.5 x 4	20.3 x 7.35 x 4	33.6 x 7.6 x 4	18.5 x 7.35 x 4	20.3 x 7.35 x 4	20.3 x 7.35 x 4
Output Type*	Backplanes (connector)	25Pair Gold Finger	Backplanes Available	BackPlanes (gold finger)	25Pair Gold Finger	25Pair Gold Finger
Redundant	Yes	Yes	Yes	Yes	Yes	Yes
I'C Remote Monitoring	FRU Data	FRU Data and PMbus	FRU Data and PMbus	FRU data and PMbus	FRU Data and PMbus	FRU Data and PMbus
+5V	-	-	-	-	-	-
+12V	216.6A	66.7A (100Vac-127Vac), 83A (200Vac-240Vac)	66.7A (100Vac-127Vac)	66.7A (100-127Vac) / 83A (200-240Vac)	83.3A (100Vac-127Vac), 133A (200Vac-240Vac)	66.7A (100Vac-127Vac) / 100A (200Vac-240Vac)
+3.3V	-	-	-	-	-	-
5VSB	-	12Vsb 2.1A	4A	-	12Vsb 2.1A	12Vsb 2.1A
-12V	4.5A	-	-	12Vsb 2.1A	-	-
Efficiency						



Model	PWS-2K05A-1R	PWS-2K04A-1R PWS-2K04F-1R	PWS-2K20A-1R	PWS-1K68A-1R	PWS-1K23A-1R
Total Output Power	1000W/1800/1980/2000	1000W / 1800W / 1980W / 2000W	1200W/1800W/1980W/ 2090W/2200W	800W / 1600W	1000W / 1200W
Input	100-120/200-220/220-230/ 230-240Vac/ 50-60Hz	100-127/200-220Vac/ 220-230/230-240Vac/ 50-60Hz	100-127Vac / 200-220Vac / 220-230Vac / 230-240Vac / 220-240Vac (UL, cUL only)/ 50-60Hz	100-140Vac / 180-240Vac / 50-60Hz	100-127Vac / 200-240Vac / 50-60Hz
Form Factor	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	26.5 x 7.35 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4
Output Type*	Backplanes Available	Backplanes Available	BackPlanes (gold finger)	Backplanes available	Backplanes Available
Redundant	Yes	Yes	Yes	Yes	Yes
I'C Remote Monitoring	FRU Data and PMbus	FRU Data and PMbus	FRU data and PMbus	FRU Data and PMbus	FRU Data and PMbus
+5V	-	-	-	-	-
+12V	83.3A (100-120Vac), 150A (200-220Vac), 165A (220-230Vac), 166.7A (230-240Vac); UL/CUL use: 166.7A (200-240Vac)	83.3A (100-127Vac) 150A (200-220Vac) 165A (220-230Vac) 166.7A (230-240Vac) UL/CUL: 166.7A (200-240Vac)	100A (100-127Vac) / 150A (200-220Vac)/ 165A (220-230Vac) / 174.17A (230-240Vac)/ 183.3A (220-240Vac, UL/cUL only)	66.6A (100Vac-140Vac) 133A (180Vac-240Vac)	83A (100Vac-127Vac), 100A (200Vac-240Vac)
+3.3V	-	-	-	-	-
5VSB	12Vsb 2.1A	1A	1A	1A	4A
-12V	-	-	-	-	-
Efficiency			 New!		



Model	PWS-2K01A-BR	PWS-2K21A-2R	PWS-802A-1R	PWS-1K05A-1R	PWS-2K22A-1R	PWS-2K21A-BR
Total Output Power	1000W / 1800W / 1980W / 2000W	1200W/1800W/1980W/ 2090W/2200W	800W	800W / 1000W	1200W / 1800W / 1980W / 2090W/2200W	1200W/1800W/1980W/ 2090W/2200W
Input	100-127Vac / 200-240Vac / 50-60Hz	100-127Vac / 200-220Vac / 220-230Vac / 230-240Vac (UL, cUL only)/ 180-220Vac (UL, CUL only)/ 230-240Vac (CCC only)/ 50-60Hz	100-240Vac / 200-240Vdc / 50-60Hz	100-127Vac / 200-240Vac / 50-60Hz	100-127 / 200-220 / 220- 230 / 230-240 / 220-240 Vac / 50-60Hz / 230-240Vdc	100-127Vac / 200-220Vac / 220-230Vac / 230-240Vac / 240Vdc (CCC only) / 50-60Hz
Form Factor	Micro-Blade	2U	1U	1U	1U	Microblade/ superblade
Dimension (LxWxH) cm	28.33 x 10.65 x 8.4	10.65 x 20.35 x 8.24	33.6 x 7.6 x 4	36 x 3.8 x 4	48 x 4.5 x 4	24.53 x 10.65 x 8.4
Output Type*	Micro-Blade Midplane	BackPlanes (gold finger)	BackPlanes (gold finger)	Backplanes Available	Backplanes Available	BackPlanes (gold finger)
Redundant	Yes	Yes	Yes	Yes	Yes	Yes
I'C Remote Monitoring	FRU Data and PMbus	FRU data and PMbus	FRU data and PMbus	FRU Data and PMbus	FRU Data and PMbus	FRU data and PMbus
+5V	-	-	-	-	-	-
+12V	83.3A (100-127Vac), 150A (200- 220Vac), 165A (220-230Vac), 166.7A (230-240Vac), UL/CUL: 166.7A (200-240Vac)	100A (100-127Vac) / 150A (200-220Vac)/ 165A (220-230Vac) / 174.17A (230-240Vac)/ 183.3A (220-240Vac, UL, CUL only) / 174.17A (180-220Vac, UL, CUL only) / 174.17A (230- 240Vdc, CCC only)	66.7A (100Vac-127Vac), 83A (200Vac-240Vac)	100A (100-127Vac) / 150A (200-220Vac)/ 165A (220-230Vac) / 174.17A (230-240Vac)/ 183.3A (220-240Vac, UL, CUL) / 174.17A (230- 240Vdc, CCC only)	100A (100-127Vac) / 150A (200-220Vac)/ 165A (220-230Vac) / 174.17A (230-240Vac)/ 183.3A (220-240Vac, UL, CUL only) / 174.17A (230- 240Vdc, CCC only)	100A (100-127Vac) / 150A (200-220Vac)/ 165A (220-230Vac) / 174.17A (230-240Vac)/ 183.3A (220-240Vac, UL, CUL only) / 174.17A (230- 240Vdc, CCC only)
+3.3V	-	-	-	-	-	-
5VSB	12Vsb 4.2A	12Vsb: 2A	4A	4A	12Vsb 2.1A	12Vsb 2.1A
-12V	-	-	-	-	-	-
Efficiency						

# POWER SUPPLIES



Model	PWS-2K02P-1R PWS-2K02F-1R	PWS-1K41P-1R	PWS-1K28P-SQ	PWS-1K21P-1R	PWS-920P-SQ	PWS-741P-1R	PWS-721P-1R
<b>Total Output Power</b>	1100W / 1400W / 1800W / 1980W / 2000W	1100W / 1400W	1000W / 1280W	1000W / 1200W	920W	740W	720W
<b>Input</b>	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-140Vac / 180-240Vac / 50-60Hz	100-140Vac / 180-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz
<b>Form Factor</b>	1U	1U	1U	1U	1U	1U	1U
<b>Dimension (LxWxH) cm</b>	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4
<b>Output Type*</b>	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available
<b>Redundant</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>I'C Remote Monitoring</b>	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMBus	PMBus
<b>+5V</b>	-	-	-	-	-	-	-
<b>+12V</b>	91.7A (100-120Vac) 116.7A (120-140Vac) 150A (200-220Vac) 165A (220-230Vac) 166.7A (230-240Vac) UL/CUL: 166.7A (200-240Vac)	92A (100-140Vac) 116A (180-240Vac)	83A (100-140Vac) 106.7A (180-240Vac)	83A(100-140Vac) 100A(180-240Vac)	75A	61.7A	59A
<b>+3.3V</b>	-	-	-	-	-	-	-
<b>5VSB</b>	4A	4A	4A	4A	4A	4A	3A
<b>-12V</b>	-	-	-	-	-	-	-
<b>Efficiency</b>							

New!



Model	PWS-501P-1R	PWS-2K03P-1R	PWS-1K66P-1R	PWS-1K64P-1R	PWS-751P-1R	PWS-606P-1R	PWS-608P-1R	
<b>Total Output Power</b>	500W	1000/1800/1980/2000W	1000W / 1600W	1500W / 1600W	750W	600W	600W	
<b>Input</b>	100-240Vac / 50-60Hz	100-120/200-220/220-230/230-240Vac / 50-60Hz	100-127Vac, 200-240Vac / 50-60Hz	120-127, 200-240Vac / 50-60Hz	100-127, 200-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	
<b>Form Factor</b>	1U	1U	1U	1U	1U	1U	1U	
<b>Dimension (LxWxH) cm</b>	33.6 x 7.6 x 4	26.5 x 7.35 x 4	26.5 x 7.35 x 4	26.5 x 7.35 x 4	20.3 x 7.35 x 4	22 x 5.45 x 4	22 x 5.45 x 4.025	
<b>Output Type*</b>	Backplanes Available	Backplanes available	Backplanes Available	Backplanes Available	25Pair Gold Finger	Backplanes Available	BackPlanes (gold finger)	
<b>Redundant</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>I'C Remote Monitoring</b>	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMBus	PMbus	
<b>+5V</b>	-	-	-	-	-	-	-	
<b>+12V</b>	41.7A	83.3A (100-120Vac), 150A (200-220Vac), 165A (220-230Vac), 166.7A (230-240Vac); UL/CUL use: 166.7A (200-240Vac)	82A (100-127Vac) 132A (200-240Vac)	125(120-127Vac) / 133 (200-240Vac)	62.5A	50A	50A	
<b>+3.3V</b>	-	-	-	-	-	-	-	
<b>5VSB</b>	4A	12Vsb 3.5A	12Vsb 2A	12Vsb 2.1A	12Vsb 2.1A	3A	3A	
<b>-12V</b>	-	-	-	-	-	-	-	
<b>Efficiency</b>								



Model	PWS-407P-1R	PWS-982P-1R	PWS-706P-1R	PWS-707P-1R	PWS-704P-1R	PWS-703P-1R	PWS-504P-1R
<b>Total Output Power</b>	400W	850W / 980W	700W / 750W	700W / 750W	700W / 750W	700W / 750W	500W
<b>Input</b>	100-240Vac / 200-240Vdc / 50-60Hz	100-240Vac / 50-60Hz	200-240Vdc/100-140Vac / 200-240Vac/50-60Hz	200-240Vac/100-140Vac / 200-240Vac/50-60Hz	100-140Vac / 180-240Vac/50-60Hz	100-140Vac / 180-240Vac/50-60Hz	100-240Vac / 50-60Hz
<b>Form Factor</b>	1U	1U	1U	1U	1U	1U	1U
<b>Dimension (LxWxH) cm</b>	22 x 5.45 x 4	32 x 5.45 x 4	32 x 5.45 x 4.025	32 x 5 x 4.025	32 x 5.45 x 4.025	32 x 5 x 4.025	32 x 5.45 x 4.025
<b>Output Type*</b>	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available
<b>Redundant</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>I'C Remote Monitoring</b>	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMBus	FRU Data and PMBus
<b>+5V</b>	-	-	-	-	-	-	-
<b>+12V</b>	33A	70A (100-140Vac) 81A (180-240Vac)	58A (100-140Vac) 62A (200-240Vac) 62A (200-240Vdc)	58A (100-140Vac) 62A (200-240Vac) 62A (200-240Vdc)	58A (100-140Vac) 62A (180-240Vac)	58A (100-140Vac) 62A (180-240Vac)	42A
<b>+3.3V</b>	-	-	-	-	-	-	-
<b>5VSB</b>	3A	4A	3A	4A	3A	3A	4A
<b>-12V</b>	-	-	-	-	-	-	-
<b>Efficiency</b>							

# POWER SUPPLIES



Model	PWS-503P-1R	PWS-1K43F-1R	PWS-1K41F-1R	PWS-1K81P-1R	PWS-1K67P-1R	PWS-656P-1H PWS-656S-1H
<b>Total Output Power</b>	500W	1200W / 1400W	1200W / 1400W	1000/1200/ 1800W	1200W / 1400W / 1600W	600W / 650W
<b>Input</b>	100-240Vac/ 50-60Hz	100-140Vac / 180-240Vac / 50-60Hz	100-140Vac / 180-240Vac / 50-60Hz	100-240Vac/ 50-60Hz	100-120/ 120-140/ 200-240Vac/ 50-60Hz	100 - 127Vac/ 200 - 240Vac/ 50-60Hz
<b>Form Factor</b>	1U	1U	1U	1U	Micro-Blade	1U
<b>Dimension (LxWxH) cm</b>	32 x 5 x 4.025	28.8 x 10.45 x 4.04	28.8 x 10.45 x 4.04	30.5 x 9.1 x 4	24.13 x 10.65 x 8.4	28 x 7.6 x 4
<b>Output Type*</b>	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Micro-Blade Midplane	24pin ATX Cable
<b>Redundant</b>	Yes	Yes	Yes	Yes	Yes	N/A
<b>I²C Remote Monitoring</b>	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMBus
<b>+5V</b>	-	-	-	-	-	18A
<b>+12V</b>	42A	100A (100-140Vac) 117A (180-240Vac)	100A (100-140Vac) 116A (180-240Vac)	84A (100-120Vac) 100A (120-140Vac) 150A (200-240Vac)	100A (100-120Vac) / 116.7 (120-140Vac) / 133A (200-240Vac)	49A (100Vac-127Vac) 54A (200Vac-240Vac)
<b>+3.3V</b>	-	-	-	-	-	15A
<b>5VSB</b>	4A	6A	6A	4A	12Vsb 2A	3A
<b>-12V</b>	-	-	-	-	-	.5A
<b>Efficiency</b>						



Model	PWS-605P-1H	PWS-341P-1H	PWS-203-1H	PWS-601-1H	PWS-505P-1H	PWS-441P-1H
<b>Total Output Power</b>	600W	340W	200W	600W/680W	500W	440W/480W
<b>Input</b>	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz
<b>Form Factor</b>	1U	1U	1U	1U	1U	1U
<b>Dimension (LxWxH) cm</b>	28 x 7.6 x 4	28 x 7.6 x 4	19.3 x 7.6 x 4	22 x 10 x 4	18 x 10 x 4	22 x 10 x 4
<b>Output Type*</b>	24pin ATX Cable	24pin ATX Cable	20pin ATX Cable	24pin ATX Cable	24pin ATX Cable	24pin ATX Cable
<b>Redundant</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>I²C Remote Monitoring</b>	FRU Data and PMBus	FRU Data and PMBus	N/A	N/A	FRU Data and PMbus	FRU Data and PMbus
<b>+5V</b>	18A	16A	8A	20A	15A	18A
<b>+12V</b>	49A	28A	16A	49A (100-140Vac) 56A (180-240Vac)	41A	35.8A (100-140Vac) 39.1A (180-240Vac)
<b>+3.3V</b>	15A	15A	8A	16A	12A	15A
<b>5VSB</b>	3A	3A	2A	3A	3A	3A
<b>-12V</b>	.5A	.5A	.5A	.5A	.2A	.5A
<b>Efficiency</b>						

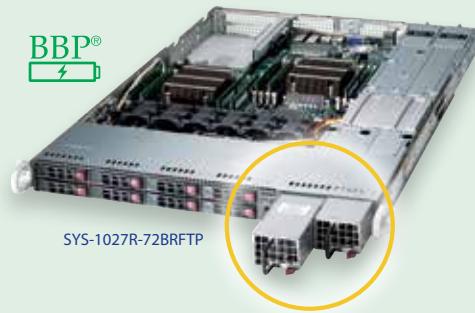


Model	PWS-350P-1H	PWS-351-1H	PWS-1K25P-PQ	PWS-903-PQ	PWS-668-PQ	PWS-502-PQ	PWS-653-2H
<b>Total Output Power</b>	350W	350W	1000/1200W	900W	668W	500W	600W/650W
<b>Input</b>	100-240Vac / 50-60Hz	100-240vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-140Vac / 180- 240Vac / 50-60Hz
<b>Form Factor</b>	1U	1U	Tower	Mid-Tower	Mid-Tower	Mid-Tower	2U
<b>Dimension (LxWxH) cm</b>	18 x 10 x 4	22 x 10 x 4	18.5 x 15 x 8.6	19 x 15 x 8.6	18.5 x 15 x 8.6	14 x 15 x 8.6	30 x 10.6 x 8.4
<b>Output Type*</b>	24pin ATX Cable	24pin ATX Cable	24pin ATX Cable	24 pin ATX Cable	24 pin ATX Cable	24pin ATX Cable	24pin ATX Cable
<b>Redundant</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>I²C Remote Monitoring</b>	FRU Data and PMBus	N/A	FRU Data and PMBus	N/A	N/A	N/A	N/A
<b>+5V</b>	15A	18A	20A	25A	11.8A	20A	30A
<b>+12V</b>	29A	29A	83A (100-114Vac) 99A (115-240Vac)	12V1 25A; 12V2 25A; 12V3 25A; 12V4 25A	54A	12V1 16A; 12V2 18A; 12V3 18A; 12V4 18A	49A (100-140Vac) 54A (180-240Vac)
<b>+3.3V</b>	12A	15A	20A	25A	12A	15A	25A
<b>5VSB</b>	3A	3A	3A	4A	2A	3A	3A
<b>-12V</b>	.2A	.5A	.3A	.5A	.1A	.5A	.5A
<b>Efficiency</b>	80 Plus Platinum (Certification Pending)						

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### Evolutionary Design to Replace UPS!

- Increases overall data center power efficiency
- Hot-swappable and easy deployed
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BBP2 + Power Supply  
All In One



Model	PWS-206B-1R	PWS-1K01B-1R	PWS-1K20B-BR
Total Output Power	200W / 5 minutes	Battery: Single module 500W 1.5mins Redundant w/ two modules 1000W 1.5mins; Output: 800/1000W, 100-240Vac	1200W / 35 seconds
Input	Work w/ PWS-406P-1R/ 407P-1R/606P-1R	100-127Vac: 800W 200-240Vac: 1000W	works with PWS-2K01A-BR/ PWS-2K21A-1BR/PWS- 1K6P-1R
Form Factor	1U	1U	microblade/superblade
Dimension (LxWxH) cm	22 x 5.45 x 4	33.6 x 7.6 x 4	10.65 x 24.5 x 8.4
Output Type*	Backplanes available	Backplanes available	Backplanes available
Redundant	Yes	Yes	Yes
I²C Remote Monitoring	FRU/Smart battery I²C	FRU Data and PMBus	FRU/Smart battery I²C
+5V	-	-	-
+12V	16.7A	From AC Input: 66.7A(100-127V), 83A (200-240V) Battery Output: 41.66A	100A (11.2-12.9Vdc)
5VSB	2A	4A	-
-12V	-	-	12Vsb 2.5A
Efficiency	Online mode power consumption <1W		Online mode battery power consumption less than 5W

## DC Power Solutions



Model	PWS-661P-1R	PWS-654-1R	PWS-601D-1R	PWS-1K11P-1R	PWS-711-1R	PWS-1K300-1R	PWS-1K60D-1R
Total Output Power	660W	650W	600W	850W / 1010W	710W	1300W	1600W
Input	-42Vdc to -72Vdc DC 48V Input	-44Vdc to -72Vdc	-44Vdc to -65Vdc	-36Vdc to -76Vdc	-36Vdc to -76Vdc	-48Vdc to -65Vdc	-48Vdc to -60Vdc
Form Factor	1U	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	32.2 x 5 x 4	32.2 x 5.45 x 4	22 x 5.45 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	20.3 x 7.35 x 4	26.5 x 7.35 x 4
Output Type*	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	25pairs Gold Finger Connector	25pairs Gold Finger Connector
Redundant	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I²C Remote Monitoring	FRU Data and PMbus	FRU Data	FRU Data	FRU Data and PMBus	FRU Data and PMBus	FRU Data	FRU Data and PMBus
+5V	-	-	-	-	-	-	-
+12V	55A	53.28A	50A	70A (-36 to -42Vdc) 83A (-43 to -76Vdc)	59A	108.3A	133A
+3.3V	-	-	-	-	-	-	-
5VSB	4A	3A	3A	4A	4A	12Vsb 2.1A	12Vsb 3.5A
-12V	-	-	-	-	-	-	-
Efficiency	Typical 90%+	Typical 90%+	Typical 90%+	Typical 90%+	Typical 88%+	-	Typical 92%+

New!



Model	PWS-0061	PWS-2K03D-1R	PWS-2K04A-240	PWS-1K28D-240	PWS-706P-1R	PWS-707P-1R	PWS-503D-240	PWS-407P-1R
Total Output Power	410W	1600W / 2000W	2000W / 1980W / 1800W	1280W	700W/750W	700W/750W	500W	400W
Input	-36Vdc to -72Vdc	-36Vdc to -44Vdc -45Vdc to -66Vdc	230-240Vdc/200-220/220-230/230-240Vac/50-60Hz	200-240Vdc/200-240Vac/50-60Hz	100-140Vac/200-240Vac/200-240Vdc/50-60Hz	100-140Vac/200-240Vac/200-240Vdc/50-60Hz	200-240Vdc/100-240Vac/50-60Hz	100-240Vac/200-240Vdc/50-60Hz
Form Factor	1U	1U	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	24 x 10 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	32 x 5.45 x 4.025	32 x 5 x 4.025	32 x 5 x 4.025	22 x 5.45 x 4
Output Type*	24pin ATX Cable Output	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available
Redundant	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I²C Remote Monitoring	N/A	PMBus 1.2	FRU Data and PMbus	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMbus	FRU Data and PMBus	FRU Data and PMbus
+5V	35A	-	-	-	-	-	-	-
+12V	32A	133.3A (-36Vdc to -44Vdc) 166.7A (-45Vdc to -66Vdc)	150A (200-220Vac), 165A (220-230Vac), 166.7A (230-240Vac), 166.7A (230-240Vdc)	106.7A	58A (100-140Vac) / 62A (200-240Vac) / 62A (200-240Vdc)	58A (100-140Vac) / 62A (200-240Vac) / 62A (200-240Vdc)	42A	33A
+3.3V	20A	-	-	-	-	-	-	-
5VSB	3A	6A	1A	4A	3A	3A	3A	3A
-12V	-12V: 0.5A	-	-	-	-	-	-	-
Efficiency	Typical 77%+	Typical 90%	Typical 96%	Typical 95%+		Typical 94%	Typical 94%+	

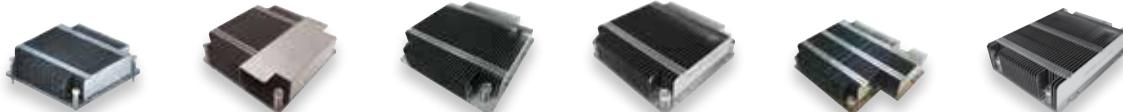
# HEATSINKS (X11/X10/X9)

## X11 Heatsinks 1U/2U/4U Passive/Active CPU Heatsinks for UP, DP, and MP Systems



Part Number	SNK-P0067PS	SNK-P0067PSM	SNK-P0067PSMB	SNK-P0068PS	SNK-P0068PSC	SNK-P0068APS4	SNK-P0070APS4
<b>Form Factor</b>	1U Passive Narrow Retention Mechanism UP/DP	1U Passive Proprietary (Middle Air Channel) Narrow Retention Mechanism DP	1U Passive Proprietary (Middle Air Channel) Narrow Retention Mechanism DP	2U Passive Narrow Retention Mechanism UP/DP	2U Passive Proprietary (Side Air Channel) Narrow Retention Mechanism DP	2U Active Narrow Retention Mechanism UP/DP	4U Active Narrow Retention Mechanism UP/DP
<b>CPU Type</b>	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors
<b>Socket Type</b>	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0
<b>Major Integrated Part</b>	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Aluminium Fins Copper + Aluminium Base Heat Pipes Cooling Fan (Front Side)	Aluminium Fins Copper + Aluminium Base Heat Pipes Cooling Fan (Front Side)
<b>Dimension (mm)</b>	108L x 78W x 25.5H	108L x 78W x 25.5H	108L x 78W x 25.5H	108L x 78W x 64H	108L x 78W x 64H	108L x 78W x 64H	108L x 92.5W x 126H
<b>Mounting Method</b>	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws

## X11/X10, 1U Passive CPU Heatsinks for UP, DP, and MP Systems



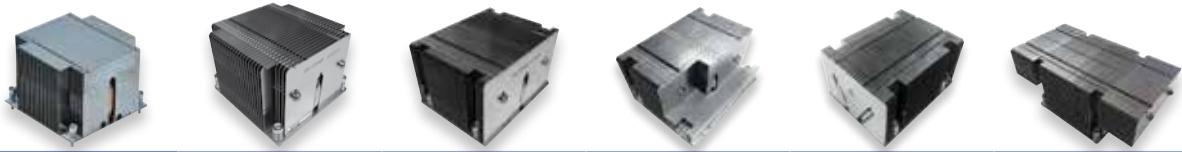
Part Number	SNK-P0037P	SNK-P0041	SNK-P0046P	SNK-P0047P	SNK-P0047PD	SNK-P0047PS
Form Factor	1U Passive, DP	Proprietary 1U Passive, DP (X9DBL Front CPU)	1U Passive, UP (X11/X10/X9)	1U Passive, UP, DP	1U Passive, Proprietary, DP	1U Passive, UP, DP, MP
CPU Type	Intel® Xeon® Processor E5-2400 & Intel® Xeon Processor E5-2400 v2 product families	Intel® Xeon® Processor E5-2400 & Intel® Xeon Processor E5-2400 v2 product families	Intel® Xeon® Processor E3-1200 product family; Intel® Core™ i3 Processor; Intel® Pentium® Processor & Intel® Celeron® Processor	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2, and Intel® Xeon® Processor E5-4600 product families
Socket Type	LGA 1356	LGA 1356	LGA 1155/1151/1150	LGA 2011(Square ILM)	LGA 2011 (Square ILM)	LGA 2011 (Narrow ILM)
Major Integrated Part	Copper + Aluminum Base Aluminum Fins Heat Pipes	Copper Base Aluminum Fins Heat Pipes	Copper + Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes
Dimension (mm)	90L x 90W x 27H mm	90L x 90W x 27H mm	95L x 95W x 27H mm	90L x 90W x 26H mm	90L x 110W x 27H mm	104L x 80W x 26H mm
Mounting Method	Screws + Springs	Screws + Springs	Screws + Springs Mounting Bracket (BKT-0028L Included)	Screws + Springs	Screws + Springs	Screws + Springs



Part Number	SNK-P0047PSC	SNK-P0047PSM	SNK-P0047PSR	SNK-P0047PS+	SNK-P0047PW	SNK-P0057P	SNK-P0057PS
Form Factor	Proprietary 1U Passive, DP (1U 3/4 GPUs/ Coprocessor Front CPU)	Proprietary 1U Passive, DP (2U Twin2+ Front CPU), Twin Pro <sup>2</sup>	Low Profile Passive, Proprietary, UP (X10/ X9), 12-node MicroCloud Servers	Proprietary 1U Passive, UP (X10/X9) (Micro Cloud Server)	Proprietary 1U Passive, DP (2U Twin2 Rear CPU)	1U Passive, UP, DP	1U Passive, UP, DP, MP
CPU Type	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E3-1200 v4/v3/v2 product families; Intel® Core™ i3 Processor; Intel® Pentium® Processor & Intel® Celeron® Processor	Intel® Xeon® Processor E3-1200 v4/v3/v2 product families; Intel® Core™ i3 Processor; Intel® Pentium® Processor & Intel® Celeron® Processor	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2, and Intel® Xeon® Processor E5-4600 product families
Socket Type	LGA 2011 (Narrow ILM)	LGA 2011 (Narrow ILM)	LGA 1150 & LGA 1155	LGA 1155 & LGA1150, LGA2011 (Narrow ILM).	LGA 2011 (Square ILM)	LGA 2011 (Square ILM)	LGA 2011 (Narrow ILM)
Major Integrated Part	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Copper + Aluminium Base Copper Fins Heat Pipes	Copper + Aluminium Base Aluminum Fins Heat Pipes	Aluminum Base Copper + Aluminium Fins Heat Pipes	Copper + Aluminium Base Copper Fins Heat Pipes	Copper + Aluminium Base Copper Fins Heat Pipes
Dimension	104L x 80W x 26H mm	104L x 80W x 26H mm	104L x 80W x 15H mm	104L x 80W x 30H mm	90L x 116W x 26H mm	90L x 90W x 26H mm	104L x 80W x 26H mm
Mounting Method	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs

# HEATSINKS (X11/X10/X9)

## X10 and X9 2U Passive CPU Heatsinks for UP, DP, and MP Systems



Part Number	SNK-P0038P	SNK-P0048P	SNK-P0048PS	SNK-P0048PSC	SNK-P0048PW	SNK-P2048P
Form Factor	2U(+) Passive, DP	2U(+) Passive, UP, DP	2U(+) Passive, UP, DP, MP	Proprietary 2U Passive, DP (2U WIO+ Server)	Proprietary 2U Passive, DP (2U Twin Rear CPU)	Proprietary 2U Passive, DP (HFT Series Servers)
CPU Type	Intel® Xeon® Processor E5-2400 product family & E5-2400 v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 product family and Intel® Xeon® Processor E5-4600 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families
Socket Type	LGA 1356	LGA2011 (Square ILM)	LGA2011 (Narrow ILM)	LGA2011 (Narrow ILM)	LGA 2011 (Square ILM)	LGA2011 (Square ILM)
Major Integrated Part	Copper + Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Copper + Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes
Dimension	90L x 90W x 64H mm	90L x 90W x 64H mm	104L x 80W x 64H mm	104L x 80W x 64H mm	90L x 116W x 64H mm	90L x 170W x 64H mm
Mounting Method	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs

## X11/X10/X9 Active CPU Heatsinks for UP and DP Systems



Part Number	SNK-P0035AP4	SNK-P0040AP4	SNK-P0046A4	SNK-P0048AP4	SNK-P0050AP4	SNK-P2050AP4	SNK-P0051AP4
Form Factor	4U Active, DP	4U Active, DP	2U(+) Active, UP (X11/X10/X9)	2U(+) Active, UP, DP	4U Active, UP, DP	Proprietary 4U Active, DP (HFT Series Servers)	4U Active, UP (X11/X10/X9)
CPU Type	Intel® Xeon® Processor E5-2400 & Intel® Xeon® Processor E5-2400 v2 product families	Intel® Xeon® Processor E5-2400 & Intel® Xeon® Processor E5-2400 v2 product families	Intel® Xeon® Processor E3-1200 v6/v5/v4/v3/v2 product families; Intel® Core™ i3 Processor; Intel® Pentium® Processor & Intel® Celeron® Processor	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E3-1200 v6/v5/v4/v3/v2 product families; Intel® Core™ Processors; Intel® Pentium® Processor & Intel® Celeron® Processor
Socket Type	LGA 1356	LGA 1356	LGA1155/1151/ 1150	LGA 2011 (Square and Narrow ILMs)	LGA 2011 (Square and Narrow ILMs)	LGA 2011 (Square ILM)	LGA1155/1151/ 1150
Material	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Rear Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Top)	Aluminum Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Middle Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)
Dimension	105L x 100W x 126H mm	105L x 100W x 126H mm	90D x 65H mm	85L x 80W x 65L mm	105L x 93W x 126H mm	96L x 130W x 125H mm	105L x 93W x 128H mm
Mounting Method	Screws + Springs Mounting Bracket (BKT-0023L Included)	Screws + Springs	Push-in Pins	Screws + Springs; Mounting Brackets (BKT-0048L-RS and BKT-0048L-RN Included)	Screws + Springs; Mounting Brackets (for Square and Narrow ILMs Included)	Screws + Springs	Back Plate + Springs + Screws BKT-0028L Included

# IPMI (SERVER REMOTE MANAGEMENT)

## Onboard IPMI 2.0 for (-F) Motherboards/Servers

Onboard IPMI 2.0 for (-F) Motherboards/Servers  
 Many Supermicro (-F) motherboards now offer IPMI 2.0 capabilities onboard through a dedicated LAN port to support remote management. This convenient remote management capability is provided through an onboard BMC (Baseboard Management Controller) that improves reliability and maintainability while reducing costs. X10 DP motherboards support IPMI 2.0 as a standard feature.

### Monitoring Features:

- Monitor CPU and system temperature
- Monitor on-board voltage (12V, 5V, 5Vst\_by, Vbat, Vcore, memory voltage)
- Monitor and control fan speed
- Chassis intrusion
- Power status (including PMbus support)
- Memory errors
- CPU errors

### Management Features:

- Remote system power control (including ACPI power off)
- Virtual Media and Java based KVM HTML5 (included with price of motherboard)
- SOL (included with price of motherboard)
- E-mail alerts and SNMP traps
- Support for Node Manager
- Mount ISO images

### Security Features:

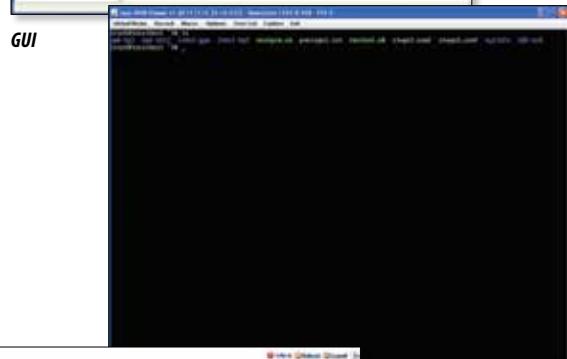
- Firmware firewall
- Restricted access using pre-defined IP address
- Added security with SSL
- Protection from shell injection
- Select/Deselect Services

### Easy Maintenance:

- Configuration utility for DOS, Windows, Linux
- Firmware flash utilities for DOS, Windows, Linux (easy to script)
- Firmware flash using web-browser
- Fail-over access to IPMI over network
- CLI, WEBUI, API and GUI tools to maintain large deployments
- Support OOB BIOS management (for selected HW)

### Added-value Features:

- SMASH
- DCMI
- Active directory and LDAP
- RADIUS



Sensor Readings

## SuperDoctor® Server Management

Health Info



System Info



Configuration - Alerts



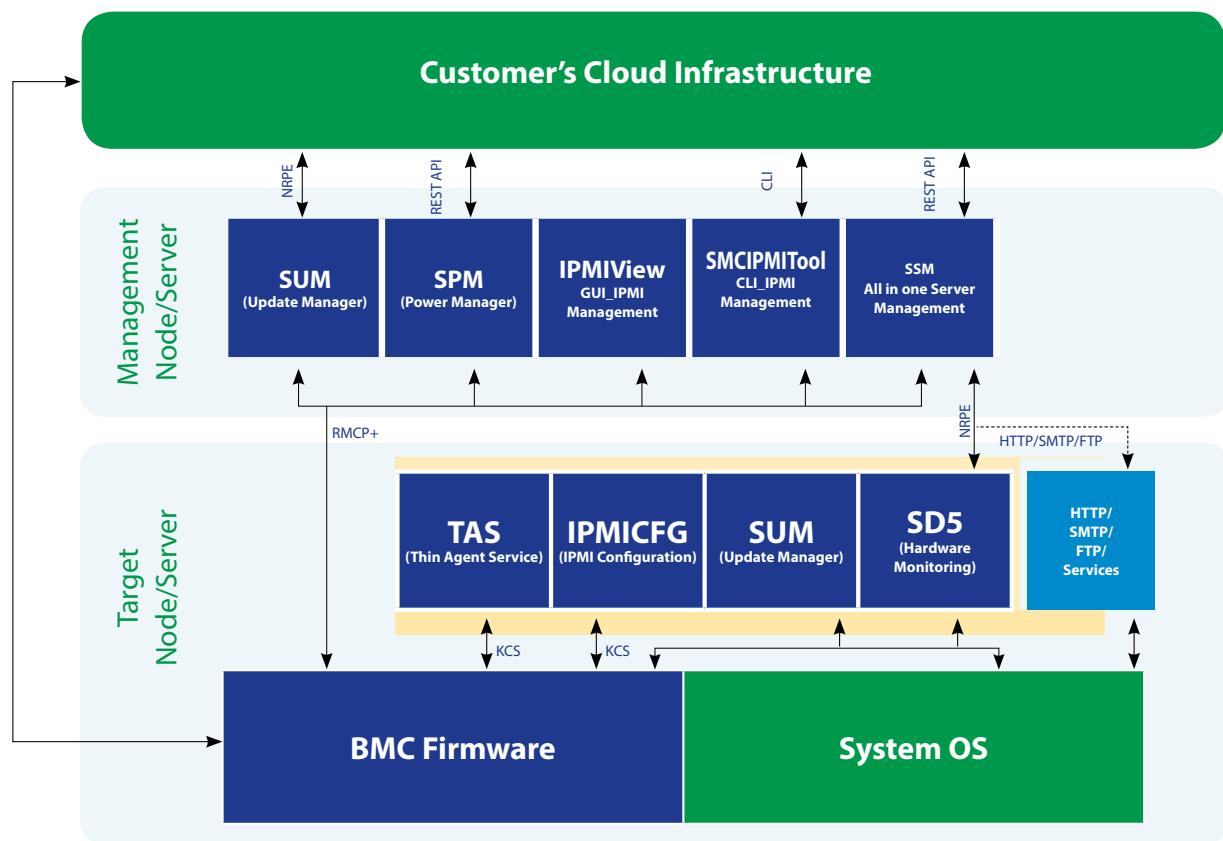
Configuration - Monitor Items



Configuration - Flash BIOS



# SUPERMICRO SERVER MANAGEMENT UTILITIES



## Supermicro Server Management Utilities

Server management utilities assist data center system administrators to manage hardware issues such as server availability and firmware upgrades to reduce server downtime. Supermicro has developed a multifunction suite of tools that can perform health monitoring, power management and firmware maintenance to help deploy and maintain servers in data centers. Our solutions are designed for easy automation with existing management infrastructure using CLI and REST APIs. In data centers, Supermicro Server Management Utilities provides you all the necessary functions like:

### Remotely managing the health of hardware and operating system services:

Helps IT operators to monitor the health of system components through Agent and Agent-less based solutions

### Managing power consumption of nodes in cluster:

Optimize the power consumption of your server rack. Monitor and apply policies to maximize compute density per rack and avoid unexpected server shutdowns.

### Managing BIOS provisioning through BMC/IPMI:

Allows you to manage system BIOS upgrades and configurations uniformly across multi-environment deployments through baseboard management controller.

### Execute commands on multiple target systems in parallel:

Perform parallel firmware upgrades, system memory and power commands, and many more through SSL and RMCP+.

### Execute commands on multiple target systems through Redfish API:

Perform API execution for server health, system inventory, power info, event notification and many more through secure socket layer (SSL).

### Software SKUs:

<b>SFT-DCMS-Single:</b>	Per node license for System Management Suite (all packages)
<b>SFT-OOB-LIC:</b>	Per node license for OOB firmware maintenance mechanisms
<b>SFT-SPM-LIC:</b>	Per node license for Power Management Utility

\* AMD platform not supported.

# FRONT BEZELS/LCD

## 1U Rackmount Chassis

New!

OLCD Kit & Accessories Standard 3.5" drive with 0.95 OLED, fit 1x 2.5" HDD, digital color	MCP-220-00119-0B	
LCD Kit & Accessories 5.25" USB LCD Kit	MCP-220-00095-0B	
SC813, SC813M, SC815, SC819 (Redundant Power) series Please contact tech support for LCD programming instruction package	MCP-210-00007-01 (Black)	
SC813, SC813M, SC815, SC818, SC819(U)* (Redundant Power) series Does not support SC818G series	CSE-PTFB-813LB (Black) CSE-PTFB-813L (Beige)	
SC113, SC113M, SC116, SC119(U)*, SC514 series No front LED indicator support	MCP-210-11601-0B (Black)	
SC813, SC813M, SC815, SC818, SC819(U)* (Redundant Power) series Does not support SC818G series	CSE-PTFB-813-02B (Black) CSE-PTFB-813-02 (Beige)	
SC812 series Does not support SC812L series	CSE-PTFB-812 (Beige) CSE-PTFB-812B (Black)	
SC512, SC512L, SC512F-260 series Does not support SC512F-280/350/441/520/600 series	MCP-210-00028-01 (Black) MCP-210-00028-02 (Beige)	
SC512, SC512L, SC512F-260 series Does not support SC512F-280/350/441/520/600 series	MCP-210-00005-01 (Black) MCP-210-00005-02 (Beige)	
SC512, SC512L, SC512F-260 series Does not support SC512F-280/350/441/520/600 series Please contact tech support for LCD programming instruction package	MCP-210-00033-01(OEM) (Black)	

## 2U Rackmount Chassis

SC822, SC823 series	CSE-PTFB-820B (Black) CSE-PTFB-820 (Beige)	
SC825, SC828 series	MCP-210-82503-0B (Black)	
SC825M series	MCP-210-82502-0B (Black)	
SC213, SC216, SC217, SC219(U)*, SC226S, SC227(S), SC826(S) SC827, SC829(U)* series	MCP-210-82601-0B (Black)	

## 3U Rackmount Chassis

SC835 series	MCP-210-83501-0B (Black)	
SC836, SC837 series	MCP-210-83601-0B (Black)	

## 4U Rackmount Chassis

SC842 series	MCP-210-84201-0B (Black)	
SC846, SC847, SC848, SC417, SC418 series	MCP-210-84601-0B (Black)	

\*Exception: Do not support auto-latch design handles

## SUPERRACK® TOTAL SOLUTIONS



**S**upermicro's SuperRack® systems were designed for ease of integration, implementation, and deployment. Their easy rear access and modularized Building Block design makes them ideal for hot-swap-capable servers, such as Supermicro's Twin and Double-Sided Storage® families. For a rack system that is convenient, reliable, and customizable, the Supermicro SuperRack® is the ideal choice.

### Key Features:

**Per-U Design** - Ground-breaking Per-U design concept simplifies cable management and minimizes integration time

**Accessible** - Versatile Front and Rear access hot-plug optimizations provide an improved service experience

**Optimized Air Flow** - Reduced cabling optimizes air flow and improves cooling

**Building Block Design** - Building-block design and intuitive installation process reduce overall deployment schedules

**Expandable** - With unique add-on expansion units the SuperRack® easily accommodates many different server configurations

**Customizable** - Fully customizable options offer a well-rounded total Rack solution and service

**SuperRack® Total Solution** - Supermicro provides rack configuration, integration, testing, burn-in, and shipping services delivering an integrated rack system to the end-user. Please contact your Supermicro sales representative for details.



- Versatile Front and Rear access hot-plug optimizations

- Per-U Design simplifies cable management and minimizes integration time



### SuperRack® Solutions: Pre-Configured, Fully Tested and Application Optimized

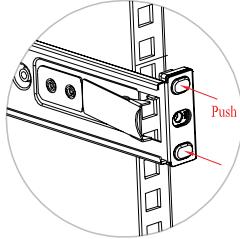
- Hadoop Clusters for Big Data Analytics
- Rack Solutions for Virtualization and Cloud Computing
- Rack Solutions for Search Engine, Web 2.0
- HPC Clusters with GPU/Coprocessor Accelerator
- Scale-Out Storage with Extreme Drive Density
- Rack Integration Service from Design to Delivery

For detailed information, please contact your Supermicro sales representative; visit: <http://www.supermicro.com/products/rack>

# QUICK-RELEASE SLIDE RAILS

## The Supermicro Tool-less, Quick-release Slide Rails

Designed for quick and easy installation and access to Supermicro's server equipment. Several different sizes are provided to accommodate a variety of Supermicro server systems.



Model Part#	MCP-290-00054-ON	MCP-290-00062-ON
<b>Product</b>	Optional rail set	Optional rail set
<b>Content</b>	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail
<b>Chassis Type</b>	1U, 17.2" width	1U, 17.2" width
<b>Mechanism</b>	Linear	Linear
<b>Outer Rail Extendable Length</b>	25.6"~33.05"	25.6"~33.05"
<b>Compatible Chassis</b>	Optional for SC813, 815	Optional for SC118, 119, 808, 809, 816, 818, 819

### For Short-depth Chassis Rack



Model Part#	MCP-290-00052-ON-BULK	MCP-290-00056-ON
<b>Product</b>	Optional outer rail bulk pack	Optional short-depth outer rail
<b>Content</b>	Quick-release outer rail (10 set/pack)	Short quick-release outer rail
<b>Chassis Type</b>	1U, 17.2" width	1U, 17.2" width in short-depth rack
<b>Mechanism</b>	Linear	Linear
<b>Outer Rail Extendable Length</b>	25.6"~33.05"	19"~26.4"
<b>Compatible Chassis</b>	Optional for SC113, 113M, 118, 119, 512F-280/350/410/441/520/600, 515, 514, 808, 809, 813, 813M, 815, 816, 818, 819	Optional for SC113, 113M, 118, 119, 512F-280/350/410/441/520/600, 514, 515, 808, 809, 813, 813M, 815, 816, 818, 819

### For Short-depth Chassis Rack



Model Part#	MCP-290-00053-ON	MCP-290-00057-ON	MCP-290-00058-ON
<b>Product</b>	Default rail set	Default rail set	Optional short-depth rail set
<b>Content</b>	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail
<b>Chassis Type</b>	2~3U, 17.2" width	4U, 17.2" width	2~4U, 17.2" width in short-depth rack
<b>Mechanism</b>	Ball-bearing, support round hole racks with adapter MCP-290-00060-ON	Ball-bearing, support round hole racks with adapter MCP-290-00060-ON	Ball-bearing, support round hole racks with adapter MCP-290-00060-ON
<b>Outer Rail Extendable Length</b>	26.5"~36.4"	26.5"~36.4"	19"~26.6"
<b>Compatible Chassis</b>	Default for SC213, 216, 217, 218, 219, 823M, 825, 825M, 826, 827, 828, 829, 835, 836, 837, 936, 937, 938, 939	Default for SC417, 418, 758, 846, 847, 848, optional for SC842	Optional for SC213, 216, 217, 218, 219, 417, 418, 747, 748, 758, 823M, 825, 825M, 826, 827, 828, 835, 836, 837, 842, 846, 847, 848, 936, 937, 938, 939

# CABLES

## External Copper 25 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0944-SS28C10M	ETHERNET, SFP28, 28GbE, PASSIVE, 30 AWG, 1M	1				
CBL-NTWK-0944-SS28C20M	ETHERNET, SFP28, 28GbE, PASSIVE, 30 AWG, 2M	2				
CBL-NTWK-0944-SS28C30M	ETHERNET, SFP28, 28GbE, PASSIVE, 30 AWG, 3M	3			Copper	25 Gb/s
CBL-NTWK-0944-SS28C50M	ETHERNET, SFP28, 28GbE, PASSIVE, 26 AWG, 5M	5				

## External Copper 100 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0943-SQ28C10M	ETHERNET, QSFP28, 100GbE, PASSIVE, 32 AWG, 1M	1				
CBL-NTWK-0943-SQ28C50M	ETHERNET, QSFP28, 100GbE, PASSIVE, 26 AWG, 5M	5			Copper	100 Gb/s
CBL-NTWK-0942-MQ28C10M	ETHERNET, QSFP28, 100GbE, PASSIVE, 1m, Mellanox	1				
CBL-NTWK-0942-MQ28C20M	ETHERNET, QSFP28, 100GbE, PASSIVE, 2m, Mellanox	2				
CBL-NTWK-0942-MQ28C30M	ETHERNET, QSFP28, 100GbE, PASSIVE, LSZH, 3m, Mellanox	3				
CBL-NTWK-0942-MQ28E10M	InfiniBand, EDR, QSFP28, 100GbE, PASSIVE, LSZH, 1m, Mellanox	1	QSFP28	Passive	Copper	100 Gb/s
CBL-NTWK-0942-MQ28E20M	InfiniBand, EDR, QSFP28, 100GbE, PASSIVE, LSZH, 2m, Mellanox	2				
CBL-NTWK-0942-MQ28E30M	InfiniBand, EDR, QSFP28, 100GbE, PASSIVE, LSZH, 3m, Mellanox	3				

## External Copper 10 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0347	ETHERNET, SFP+, 10GbE, PASSIVE, PUSH, 1M, 30AWG	1				
CBL-NTWK-0456	ETHERNET, SFP+, 10GbE, PASSIVE, PUSH, 2M, 30AWG	2				
CBL-NTWK-0912	ETHERNET, SFP+, 10GbE, PASSIVE, PUSH, 3M, 30AWG	3				
CBL-NTWK-1009	ETHERNET, SFP+, 10GbE, PASSIVE, PUSH, 5M, 24AWG	5	SFP+	Passive	Copper	10 Gb/s
CBL-NTWK-0592	ETHERNET, SFP+, 10GbE, PASSIVE, PULL, 1M, 30AWG	1				
CBL-NTWK-0525	ETHERNET, SFP+, 10GbE, PASSIVE, PULL, 3M, 30AWG	3				
CBL-NTWK-0552	ETHERNET, SFP+, 10GbE, PASSIVE, PULL, 5M, 30AWG	5				

## External Fiber 10 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-SFP+AOC-1M-1	ETHERNET, SFP+, 10GbE, FIBER, ACTIVE, PULL, 1M	1				
CBL-SFP+AOC-3M-1-ORG	ETHERNET, SFP+, 10GbE, FIBER, ACTIVE, PULL, 3M, Orange	3				
CBL-SFP+AOC-5M-1-ORG	ETHERNET, SFP+, 10GbE, FIBER, ACTIVE, PULL, 5M, Orange	5	SFP+	Active	Fiber	10 Gb/s
CBL-SFP+AOC-10M	ETHERNET, SFP+, 10GbE, FIBER, ACTIVE, PULL, 10M	10				

## External Copper 40 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0417-01	ETHERNET, QSFP, 40GbE, PASSIVE, 1M, 30AWG	1				
CBL-NTWK-0325-02	ETHERNET, QSFP, 40GbE, PASSIVE, 2M, 26AWG	2				
CBL-NTWK-0446-01	ETHERNET, QSFP, 40GbE, PASSIVE, 3M, 28AWG	3	QSFP+	Passive	Copper	40 Gb/s
CBL-NTWK-0422-01	ETHERNET, QSFP, 40GbE, PASSIVE, 5M, 26AWG	5				

# CABLES

External Copper 40 Gb/s to 4x 10 Gb/s						
SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0719	ETHERNET, 40GbE/QSFP+ to 4x 10GbE/SFP+, PASSIVE, 1M, 30AWG, Mellanox	1				
CBL-NTWK-0720	ETHERNET, 40GbE/QSFP+ to 4x 10GbE/SFP+, PASSIVE, 3M, 30AWG, Mellanox	3	QSFP+ to 4X SFP+	Passive	Copper	40G to 4x 10G
CBL-NTWK-0721	ETHERNET, 40GbE/QSFP+ to 4x 10GbE/SFP+, PASSIVE, 5M, 25AWG, Mellanox	5				
External Fiber 40 Gb/s						
SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-QSFP+AOC-1M	IB/ETHERNET, QSFP, QDR, 40GbE, FIBER, ACTIVE, PULL, 1M	1				
CBL-QSFP+AOC-5M-1	ETHERNET, QSFP, QDR, 40GbE, FIBER, ACTIVE, PULL, 5M	5	QSFP+	Active	Fiber	40 Gb/s
CBL-QSFP+AOC-10M-1	ETHERNET, QSFP, QDR, 40GbE, FIBER, ACTIVE, PULL, 10M	10				
External Copper 12 Gb/s						
SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-SAST-0573	MINI SAS HD, 12G, EXT, 1M, 28AWG	1				
CBL-SAST-0690-1	MINI SAS HD, 12G, EXT, 2M, 30AWG	2	miniSAS HD x4	Passive	Copper	12 Gb/s
CBL-SAST-0677	MINI SAS HD, 12G, EXT, 3M, 28AWG	3				
CBL-SAST-1035-1	MINI SAS HD, x8, 12G, EXT, PASSIVE, PULL, 1M, 30AWG	1				
CBL-SAST-1036-1	MINI SAS HD, x8, 12G, EXT, PASSIVE, PULL, 2M, 30AWG	2	miniSAS HD x8	Passive	Copper	12 Gb/s
CBL-SAST-1037-1	MINI SAS HD, x8, 12G, EXT, PASSIVE, PULL, 3M, 28AWG	3				
Internal Copper 12 Gb/s – Oculink 1.0						
SMCI P/N	Descriptions	Length (cm)	Connector	Cable type	Media	Date Rate
CBL-SAST-0929	OcuLink v 1.0 source to MiniSAS HD, INT, PCI-E, 57CM,34AWG	57				
CBL-SAST-0972	OcuLink v 1.0 source to MiniSAS HD, INT, PCI-E, 70CM,34AWG	70				
CBL-SAST-0847	OcuLink v 1.0, INT, PCI-E NVMe SSD, 76CM,34AWG	76				
CBL-SAST-0818	OcuLink v 1.0, INT, PCI-E NVMe SSD, 55CM,34AWG	55	Oculink 1.0	Passive	Copper	
CBL-SAST-0819	OcuLink v 1.0, INT, PCI-E NVMe SSD, 65CM,34AWG	65				
CBL-SAST-0974-1	OcuLink v 1.0, INT, PCI-E NVMe SSD, 37CM,34AWG	37				
CBL-SAST-0973-1	OcuLink v 1.0, INT, PCI-E NVMe SSD, 25CM,34AWG	25				
Internal Copper 6 Gb/s						
SMCI P/N	Descriptions	Length (cm)	Connector	Cable type	Media	Date Rate
CBL-0473L	SATA, INT, ROUND, ST-ST, 21CM, 30AWG	21				
CBL-0483L	SATA, INT, ROUND, ST-ST, 29CM, 30AWG	29	7-Pin SATA	Passive	Copper	6 Gb/s
CBL-0484L	SATA, INT, ROUND, ST-ST, 55CM, 30AWG	55				
CBL-0481L	SATA, INT, ROUND, ST-ST, 81CM, 30AWG	81				
CBL-0109L-02	MINI SAS, INT, 22CM, 26AWG	22				
CBL-0421L	MINI SAS, INT, 55CM, 26AWG	55	miniSAS	Passive	Copper	6 Gb/s
CBL-0281L-01	MINI SAS, INT, 75CM, 30AWG	75				
Internal Copper 12 Gb/s						
SMCI P/N	Descriptions	Length (cm)	Connector	Cable type	Media	Date Rate
CBL-SAST-0550	MINI SAS HD, INT, 25CM, 30AWG	25				
CBL-SAST-0532	MINI SAS HD, NT, 50CM, 30AWG	50	miniSAS HD	Passive	Copper	12 Gb/s
CBL-SAST-0531	MINI SAS HD, INT, 80CM, 30AWG	80				
CBL-SAST-0623	MINI SAS HD, INT, 45CM, 85 OHM, 30AWG	45	miniSAS HD	Passive	Copper	12 Gb/s
CBL-SAST-0590	MINI SAS HD, INT, 70CM, 30, 85 OHM, AWG	70				
CBL-SAST-0957	Mini SAS HD to PCI-E SFF-8639 w/ Power, 55CM, 45CM 34 AWG	55	miniSAS HD to SFF-8639	Passive	Copper	12 Gb/s
CBL-SAST-0956	Oculink v1.0 to PCI-E SFF-8639 w/ Power, 55CM, 34 AWG	55	Oculink to SFF-8639	Passive	Copper	12 Gb/s
CBL-SAST-1011	Oculink v1.0 to PCI-E SFF-8639 w/ Power, 75CM, 34 AWG	75				

# INTEL® OMNI PATH ARCHITECTURE SWITCH

## 100G 48-port Intel® Omni Path Top-of-Rack Switch SSH-C48Q

High Performance, High Density, Low latency, 100-Gigabit Intel® Omni Path Architecture, Meets the Most Demanding Applications for HPC.

### Supermicro SuperSwitch Solution Benefit Highlights

- 1U TOR 100 Gb/s 48-Port
- 9.6 Tb/s Switching Capacity
- Optimized for High Message Rates and Low End-to-End Latency
- Out-of-Band Fabric Management Card (Optional)
  - Ethernet (10/100/1000 Base-T) and USB Serial Console
- Redundant Hot-Pluggable 750W **Platinum Level** Power Supplies
- Redundant Cooling



**SSH-C48Q**



*Rear View*

The Supermicro SSH-C48Q 1U 48-port top-of-rack network SuperSwitch supports the 100Gbps Intel® Omni Path Architecture (OPA) providing a unique HPC cluster solution offering excellent bandwidth, latency and message rates that is highly scalable and easily serviceable.

The SSH-C48Q leverages the Intel® Scalable System Framework (SSF) to address evolving demands across high performance data analytics, machine learning, visualization, traditional modeling and simulation workloads. Designed specifically for HPC, the 48-port SSH-C48Q offers 9.6 Tb/s total fabric bandwidth and high scalability with the capability of 27,648 nodes in a 2-tier configuration. The Supermicro SSH-C48Q is designed to overcome the scaling challenges of large-sized clusters.

### High Message Rate Throughput

The SSH-C48Q is designed to support high message rate traffic from each node through the fabric. That means the fabric can support the high bandwidth as well as high message rate throughput associated with the ever-increasing processing power and core counts of Intel® Xeon® Processor and Coprocessors.

### 48-port Switch ASIC

With a 48-port design the SSH-C48Q provides improved fabric scalability, reduced latency, increased density, reduced cost, and lower power demand. It is the basis of the SSH-C48Q capacity of 9.6 Tb/s fabric bandwidth and high scalability to 27,648 nodes in 2-tier configurations.

### Deterministic Latency

Features in the Intel® OPA optimize the performance impacts of large Maximum Transmission Units (MTUs) on small messages. They help maintain consistent latency for inter-process communication (IPC) messages, such as Message Passing Interface (MPI) messages, when large messages—typically storage—are being simultaneously transmitted in the fabric. Intel® OPA can bypass lower priority large packets, giving higher priority to small packets, creating a lower and more predictable latency through the fabric.

### Enhanced End-to-End Reliability

The Supermicro SSH-C48Q also delivers its own unique error detection and correction which is more efficient than the forward error correction (FEC) defined in the InfiniBand standard. Enhancements include zero load for detection - if a correction is required, packets only need to be retransmitted from the last link—not all the way from the sending node. This gives near-zero additional latency.

Ports	<ul style="list-style-type: none"> <li>• 48 x 100 Gb/s ports – QSFP28</li> <li>• RJ45 1G optional management port</li> <li>• USB serial console port</li> </ul>	
Switching	<ul style="list-style-type: none"> <li>• Switching capacity 9.6 Tb/s total fabric bandwidth</li> <li>• Optimized high message rate</li> <li>• Optimized error detection/correction and low latency</li> <li>• Capability of 27,648 nodes in 2-tier configuration</li> <li>• Virtual lanes: Configurable from one to eight VLs plus one management VL</li> </ul>	<ul style="list-style-type: none"> <li>• Configurable MTU size of 2KB, 4KB, 8KB, or 10KB</li> <li>• Maximum multicast table size: 8192 entries</li> <li>• Maximum unicast table size: 49151 entries</li> <li>• Passive copper or active fiber cables</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Out-of-band management card (optional)</li> <li>• Enables Command Line Interface and Chassis Management GUI through 10/100/1000 Base-T Ethernet</li> </ul>	<ul style="list-style-type: none"> <li>• Enables Serial Console through USB Serial Port</li> <li>• Fabric Management GUI</li> </ul>
Physical/Environmental	<ul style="list-style-type: none"> <li>• Dimensions 17.2" W x 16.6" D x 1.72" H</li> <li>• Weight 16 lbs / 7.26 kg</li> </ul>	<ul style="list-style-type: none"> <li>• Operating Temperature: 0°C to 40°C (32°F to 104°F)</li> <li>• Forward Direction Air Flow</li> </ul>
Power	<ul style="list-style-type: none"> <li>• Redundant Hot-Pluggable 750W <b>Platinum Level</b> Power Supplies</li> <li>• AC Input: 100-127V/200-240 V, 50-60 Hz</li> </ul>	<ul style="list-style-type: none"> <li>• Power consumption:           <ul style="list-style-type: none"> <li>- 210 W (Copper)</li> <li>- 380 W (All max 3W Optical)</li> </ul> </li> </ul>

## LAYER 2 ETHERNET SWITCHES

Cost-effective 1-Gigabit Ethernet networking including a Power-over-Ethernet model and featuring Energy Efficient Ethernet – **We Keep IT Green®**

Rear View



Model	SSE-G2252P (52 ports; 48 with Power-over-Ethernet)	SSE-G2252 (52 ports)		
<b>General Specifications:</b>	<ul style="list-style-type: none"> <li>48 RJ45 10/100/1000 Mbps Ports</li> <li>4 SFP 1-G Ports</li> <li>Non-Blocking</li> <li>Standard L2 Features</li> <li>IPv4 and IPv6</li> <li>RJ45 Console Port: Web Management, CLI</li> <li>Power-over-Ethernet (IEEE802.3at) <ul style="list-style-type: none"> <li>- Up to 30W per port</li> <li>- Up to 400W total PoE budget</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>48 RJ45 10/100/1000 Mbps Ports</li> <li>4 SFP 1-G Ports</li> <li>Non-Blocking</li> <li>Standard L2 Features</li> <li>IPv4 and IPv6</li> <li>RJ45 Console Port: Web Management GUI, CLI</li> </ul>		
<b>Switching Capacity</b>	• 104 Gbps	• 104 Gbps		
<b>Energy Efficient Ethernet</b>	• 802.3az	• 802.3az		
<b>Power Supply</b>	• 500W	• 65W		
<b>Weight</b>	• 11.7 lbs / 5.3kg	• 6.8 lbs / 3.1kg		
<b>Dimensions (WxDxH)</b>	• 440 x 379 x 43mm (17.3" x 14.9" x 1.7")	• 440 x 279 x 43mm (17.3" x 11" x 1.7")		
<b>Switching Features</b>	<ul style="list-style-type: none"> <li>16K MAC address entries</li> <li>Link Aggregation <ul style="list-style-type: none"> <li>- 802.3ad with LACP</li> <li>- Up to 12 aggregation groups up to 8 ports per group</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Double tagging: <ul style="list-style-type: none"> <li>- 802.1 Q-in-Q</li> <li>- 802.1ad provider bridge</li> <li>- Unqualified learning and forwarding</li> </ul> </li> <li>Storm protection <ul style="list-style-type: none"> <li>- Broadcast</li> <li>- Multicast</li> </ul> </li> <li>IGMP: <ul style="list-style-type: none"> <li>- IGMP snooping v1/v2/v3</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Spanning tree <ul style="list-style-type: none"> <li>- 802.1D spanning tree</li> <li>- 802.1s multiple</li> </ul> </li> <li>Jumbo frames up to 9KB</li> </ul>	
<b>VLAN</b>	<ul style="list-style-type: none"> <li>802.1Q tagging, port and protocol based</li> <li>Dynamic VLAN Support (GVRP)</li> </ul>	<ul style="list-style-type: none"> <li>4K VLANs; 256 active</li> <li>Voice VLAN support</li> </ul>		
<b>Quality of Service (QoS)</b>	<ul style="list-style-type: none"> <li>L2/L3/L4 Traffic Classification/ Priority Management</li> <li>Deficit WRR and Strict Priority Scheduling</li> </ul>	<ul style="list-style-type: none"> <li>Traffic shaping <ul style="list-style-type: none"> <li>- IP based (all ports)</li> <li>- Port based (all ports)</li> <li>- Port based shaping QoS aware</li> </ul> </li> <li>4 priority queues per port</li> <li>IPv4/v6 DiffServ</li> </ul>	<ul style="list-style-type: none"> <li>Per port bandwidth management <ul style="list-style-type: none"> <li>- Resolution 64KB</li> </ul> </li> <li>Packet prioritization based on ingress/egress ports using pre-defined value</li> </ul>	<ul style="list-style-type: none"> <li>Ingress/Egress metering at 64KB increments <ul style="list-style-type: none"> <li>- Ingress/egress policer</li> <li>- Ingress and egress co-work</li> </ul> </li> </ul>
<b>Security Features</b>	<ul style="list-style-type: none"> <li>802.3x Port-Based Authentication</li> <li>Switch access password protection</li> </ul>	<ul style="list-style-type: none"> <li>Layer 2, 3, 4 Access Control List (512 rules)</li> </ul>	<ul style="list-style-type: none"> <li>RADIUS and TACACS+ Authentication</li> </ul>	<ul style="list-style-type: none"> <li>SSH/SSL Encryption</li> </ul>
<b>Management Features</b>	<ul style="list-style-type: none"> <li>Web-based management interface – HTTP/HTTPS</li> <li>- Telnet (4 sessions)</li> <li>- SNMP</li> </ul>	<ul style="list-style-type: none"> <li>Industry standard CLI with telnet, SSH, or local management port</li> <li>- Scripting capability</li> <li>- Command completion</li> <li>- Context-sensitive "Help"</li> </ul>	<ul style="list-style-type: none"> <li>Software upgrade/download</li> <li>Multiple configuration file upload/download by TFTP and HTTP</li> </ul>	<ul style="list-style-type: none"> <li>Auto upgrade</li> <li>DHCP functions</li> <li>Telnet-Server</li> <li>SNMP v1/v2c/v3</li> <li>RMON</li> </ul>
<b>PoE Features</b>	<ul style="list-style-type: none"> <li>Compliant with IEEE 802.3af-2003 &amp; IEEE 802.3at-2009</li> <li>PoE on 10/100/1000Base-T ports only (ports 1~48)</li> <li>Power start/stop (remote sense)</li> <li>Power feeding over 1/2 and 3/6 data twisted pair of Cat. 5 UTP/STP cable</li> <li>Independent overload and short-circuit protection for each port</li> <li>LED indicators for power status per port</li> <li>Per port configuration</li> <li>Port priority configuration</li> <li>IEEE 802.3af/IEEE 802.3at MIB for Power over Ethernet function</li> </ul>			
<b>Operating Temperature</b>	• 0 ~ 50°C			

## LAYER 2/3 ETHERNET SWITCHES

Enterprise-class performance with advanced switching capabilities in a 1U form factor.

Highly cost-effective 1/10-Gigabit Ethernet Networking – Standalone or Top-of-Rack.



Rear View



Model	SSE-G24-TG4	SSE-X3348S/SR	SSE-X3348T/TR
<b>Port Attributes</b>	<ul style="list-style-type: none"> <li>24 One Gigabit Ethernet ports</li> <li>- 24 RJ45 Copper ports</li> <li>- Four fiber SFP combo ports</li> <li>• Out-of-band RS-232 Management port</li> <li>• Up to four 10-Gigabit Ethernet uplinks</li> <li>• Up to two stacking ports</li> </ul>	<ul style="list-style-type: none"> <li>48 Ten-Gigabit Ethernet ports</li> <li>- SFP+ Connectors</li> <li>• 4 Forty-Gigabit Ethernet ports</li> <li>- QSFP Connectors</li> <li>• 2 One-Gigabit Ethernet ports</li> <li>- RJ45 Connectors</li> <li>• Out-of-band RS-232 Management port</li> </ul>	<ul style="list-style-type: none"> <li>• 48 Ten-Gigabit Ethernet ports</li> <li>- 10GbE-T RJ45 connectors</li> <li>• 4 Forty-Gigabit Ethernet ports</li> <li>- QSFP Connectors</li> <li>• 2 One-Gigabit Ethernet ports</li> <li>- RJ45 Connectors</li> <li>• Out-of-band RS-232 Management port</li> <li>• Energy Efficient Ethernet- IEEE 802.3az</li> </ul>
<b>Switching Capacity</b>	• 136Gbps	• 1284 Gbps	• 1284 Gbps
<b>Stacking Performance</b>	• Up to 48 Gbps	•	•
<b>Power Consumption</b>	• 105W	<ul style="list-style-type: none"> <li>• 326W (Redundant Power Supplies)</li> <li>• Reverse airflow model available</li> </ul>	<ul style="list-style-type: none"> <li>• 357W (Redundant Power Supplies)</li> <li>• Reverse airflow model available</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>• 12.6 lbs / 5.70 kg (w/ modules)</li> <li>12.2 lbs / 5.54 kg (w/o modules)</li> </ul>	• 18.1 lbs / 8.2 kg	• 20.3 lbs / 9.22 kg
<b>Dimensions (WxDxH)</b>		<ul style="list-style-type: none"> <li>• 438 x 473 x 43mm (17.3" x 18.6" x 1.7")</li> </ul>	<ul style="list-style-type: none"> <li>• 438 x 473 x 43mm (17.3" x 18.6" x 1.7")</li> </ul>
<b>Availability</b>	<ul style="list-style-type: none"> <li>• Multiple Spanning Trees (802.1s)</li> <li>• Virtual Redundant Routing Protocol (VRRP)</li> </ul>	<ul style="list-style-type: none"> <li>• Spanning Tree (802.1D)</li> <li>• Rapid Spanning Tree (802.1w)</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple Spanning Trees (802.1s)</li> <li>• Virtual Redundant Routing Protocol (VRRP)</li> </ul>
<b>VLAN</b>	• 1K Static VLANs	<ul style="list-style-type: none"> <li>• 802.1Q tagging, port and protocol based</li> <li>• Dynamic VLAN Support (GVRP)</li> <li>• 4K Static VLANs</li> </ul>	
<b>Quality of Service and DiffServ</b>	<ul style="list-style-type: none"> <li>• Marking</li> <li>• Metering / Rate limiting</li> </ul>	<ul style="list-style-type: none"> <li>• 8 priority queues per port</li> <li>• Adjusted WRR and Strict Priority Scheduling</li> <li>• Layer 2, 3, 4 Prioritization</li> </ul>	<ul style="list-style-type: none"> <li>• Marking</li> <li>• Metering / Rate limiting</li> </ul>
<b>Switching Features</b>	<ul style="list-style-type: none"> <li>• Jumbo Frames up to 9KB</li> <li>• Port Mirroring – N to 1. Tx &amp; Rx Configurable</li> </ul>	<ul style="list-style-type: none"> <li>• Link Aggregation - 24 groups with 8 members per group</li> <li>• MLAG support</li> <li>• LACP Support</li> </ul>	<ul style="list-style-type: none"> <li>• Link Layer Discovery Protocol (802.1AB)</li> <li>• Jumbo Frames up to 9KB</li> <li>• Port Mirroring – N to 1. Tx &amp; Rx Configurable</li> </ul>
<b>Routing Features</b>	<ul style="list-style-type: none"> <li>• VRRP (Virtual Router Redundancy Protocol)</li> <li>• DVMRP (Distance Vector Multicast Routing Protocol)</li> </ul>	<ul style="list-style-type: none"> <li>• Static Routing, RIP v1/v2, RIPvng, OSPF v1/v2/v3 and BGP</li> <li>• IPv4 and IPv6 Routing</li> </ul>	<ul style="list-style-type: none"> <li>• VRRP (Virtual Router Redundancy Protocol)</li> <li>• DVMRP (Distance Vector Multicast Routing Protocol)</li> </ul>
<b>Multicast</b>	<ul style="list-style-type: none"> <li>• PIM SM, PIM DM</li> <li>• PIM SMv6</li> </ul>	<ul style="list-style-type: none"> <li>• IGMP Snooping v1, v2, v3</li> <li>• IGMP v1, v2, v3</li> </ul>	<ul style="list-style-type: none"> <li>• PIM SM, PIM DM</li> <li>• PIM SMv6</li> </ul>
<b>Security Features</b>	<ul style="list-style-type: none"> <li>• RADIUS and TACACS+ Authentication</li> <li>• SSH, SSL Encryption</li> </ul>	<ul style="list-style-type: none"> <li>• 802.3x Port Based Authentication</li> <li>• Switch access password protection</li> <li>• Layer 2, 3, 4 Access Control Lists (256 rules)</li> </ul>	<ul style="list-style-type: none"> <li>• RADIUS and TACACS+ Authentication</li> <li>• SSH, SSL Encryption</li> </ul>
<b>Management Features</b>	<ul style="list-style-type: none"> <li>• Multiple levels of user privilege (CLI and Web UI)</li> <li>• SNMP v1, v2, v3</li> <li>• Four RMON Groups - (1, 2, 3 and 9)</li> <li>• Logging – syslog</li> <li>• Dual firmware images</li> <li>• Configuration file - upload / download</li> </ul>	<ul style="list-style-type: none"> <li>• Web-based management interface – HTTP/HTTPS</li> <li>- Telnet</li> <li>- SNMP</li> <li>• Industry standard CLI with telnet, SSH, or local management port</li> <li>- Scripting capability</li> <li>- Command completion</li> <li>- Context-sensitive "Help"</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple levels of user privilege (CLI and Web UI)</li> <li>• SNMP v1, v2, v3</li> <li>• Four RMON Groups - (1, 2, 3 and 9)</li> <li>• Logging – syslog</li> <li>• Dual firmware images</li> <li>• Configuration file - upload / download</li> </ul>
<b>Operating Temperature</b>		<ul style="list-style-type: none"> <li>• 0 ~ 40°C</li> </ul>	<ul style="list-style-type: none"> <li>• 0 ~ 40°C</li> </ul>

### Options (order at least one, maximum two with each SSE-G24-TG4 or SSE-G48-TG4)

AOM-SSE-X2S



Two-port SFP+ connector module  
for copper or fiber connections and for stacking

## LAYER 2/3 ETHERNET SWITCHES

Convenient, Cost-effective way to ease the transition from 10G to 25G Ethernet

 <b>New!</b> <b>Non-blocking connectivity</b> <b>1U form factor for flexible installation</b>		 <b>New!</b> <b>Non-blocking connectivity</b> <b>1U form factor for flexible installation</b>
Model	SSE-F3548SR (54 Ports)	SSE-F3548S (54 Ports)
Port Attributes	<ul style="list-style-type: none"> <li>• 48 Twenty-Five Gigabit Ethernet Ports - SFP28 Connectors</li> <li>• 6 100G Ethernet Ports - QSFP28 Connectors</li> <li>• 1 One-Gigabit Ethernet ports - RJ45 Connector</li> <li>• 1 RJ45 Console port</li> <li>• 1 USB port</li> <li>• Reverse Airflow</li> </ul>	<ul style="list-style-type: none"> <li>• 48 Twenty-Five Gigabit Ethernet Ports - SFP28 Connectors</li> <li>• 6 100G Ethernet Ports - QSFP28 Connectors</li> <li>• 1 One-Gigabit Ethernet ports - RJ45 Connector</li> <li>• 1 RJ45 Console port</li> <li>• 1 USB port</li> </ul>
Switching Capacity	<ul style="list-style-type: none"> <li>• 3.6Tb</li> </ul>	
Power Consumption	<ul style="list-style-type: none"> <li>• &lt;400W (Redundant Power Supplies)</li> </ul>	
Weight	<ul style="list-style-type: none"> <li>• 18.1 lbs / 8.2 kg</li> </ul>	
Dimensions (WxDxH)	<ul style="list-style-type: none"> <li>• 445 x 515 x 43.5mm (17.5" x 20.2" x 1.7")</li> </ul>	
Availability	<ul style="list-style-type: none"> <li>• Multiple Spanning Tree (802.1D)</li> </ul>	
VLAN	<ul style="list-style-type: none"> <li>• 4K Static VLANs</li> <li>• 802.1Q tagging, port and protocol based</li> </ul>	
Quality of Service and DiffServ	<ul style="list-style-type: none"> <li>• 8 priority queues per port</li> <li>• Metering / Rate limiting</li> <li>• CoS</li> <li>• QoS (with DiffServ)</li> <li>• Storm Control</li> <li>• Flow Control</li> <li>• Marking</li> </ul>	
Switching Features	<ul style="list-style-type: none"> <li>• 64K MAC address entries</li> <li>• Jumbo frames up to 9KB</li> <li>• Spanning tree</li> <li>• Link Aggregation</li> <li>• LACP Support</li> </ul>	<ul style="list-style-type: none"> <li>• MLAG</li> <li>• Storm protection</li> <li>• Loop Protection</li> <li>• Port Mirroring - N to 1. Tx &amp; RX</li> </ul>
Routing Features	<ul style="list-style-type: none"> <li>• Future Release</li> </ul>	
Multicast	<ul style="list-style-type: none"> <li>• IGMP Snooping v1, v2, v3</li> </ul>	
Security Features	<ul style="list-style-type: none"> <li>• RADIUS and TACACS+ Authentication</li> <li>• SSH/SSL Encryption</li> <li>• Switch access password protection</li> <li>• ACL</li> </ul>	
Management Features	<ul style="list-style-type: none"> <li>• Multiple levels of user privilege (CLI and Web UI)</li> <li>• DHCP Client</li> <li>• Logging - syslog</li> <li>• Configuration file - upload / download</li> <li>• Multiple configuration file upload/download by TFTP and HTTP</li> <li>• NTP</li> </ul>	<ul style="list-style-type: none"> <li>• Software upgrade/download</li> <li>• SNMP v1, v2, v3</li> <li>• Uplink Failure Detection</li> <li>• Web-based management interface HTTP/HTTPS</li> <li>• OpenConf</li> <li>• RESTCONF</li> </ul>
Operating Temperature	<ul style="list-style-type: none"> <li>• 0°C ~ 45°C (32°F - 113°F)</li> </ul>	

## OPEN NETWORKING ETHERNET SWITCHES

The SSE-G3648B/SSE-G3648BR, SSE-X3648S/SSE-X3648SR, and SSE-C3632S/SSE-C3632SR switches are ideal for deployment in Data Center, Cloud and Enterprise environments with the capability of handling access for the most demanding applications. All are available as a reverse-airflow model for use in large data centers with alternating hot and cold equipment aisles. And all are equipped with a second, redundant power supply (optional on SSE-G3648B/SSE-G3648BR). Pre-loaded with the Open Network Install Environment (ONIE), all three are ready for your networking operating system of choice. Supermicro recommends the use of Cumulus Linux – these switches are all listed on the Hardware Compatibility List (HCL) of Cumulus Networks. Cumulus Linux is an OS for open networking incorporating a true Linux distribution with extensive networking features plus hardware acceleration of routing and switching functions. By using many of the same tools employed for servers, Cumulus Linux enables affordable scalability with clear CapEx savings and even greater OpEx savings; it unleashes rapid innovation via custom, open source or commercial Linux tools and applications. The embedded X86 Linux-based controller is particularly well suited for running the provisioning tools which are typically used for servers. Contact Cumulus Networks ([www.cumulusnetworks.com](http://www.cumulusnetworks.com)) for more details and ordering information.

With these bare metal switches Supermicro customers have the opportunity to choose the hardware/software combination that best suits their own individual networking environment. And with Supermicro product reliability and support, customers can rest assured that their investment is truly protected.

**New! Layer 2/3**



Rear View



**New! Layer 2/3**



**New! Layer 2/3**



Model	SSE-G3648B/BR	SSE-X3648S/SR	SSE-C3632S/SR
<b>Port Specifications</b>	<ul style="list-style-type: none"> <li>• 48 x 1Gbps Ethernet RJ45 ports</li> <li>• 4 x 10Gbps Ethernet SFP+ ports</li> <li>• RJ-45 Ethernet management port</li> <li>• RJ45 (for console cable)</li> </ul>	<ul style="list-style-type: none"> <li>• 48x Ten-Gigabit Ethernet ports – SFP+</li> <li>• 6x Forty-Gigabit Ethernet ports – QSFP+</li> <li>• RJ-45 (for console cable)</li> <li>• RJ-45 1G Ethernet Management Port</li> <li>• USB</li> </ul>	<ul style="list-style-type: none"> <li>• 32 x 40Gbps Ethernet QSFP28 ports</li> <li>• 32 x 100Gbps Ethernet QSFP28 ports</li> <li>• 1 x 10Gbps Ethernet SFP+ ports</li> <li>• RJ-45 Gigabit Ethernet management port</li> <li>• RJ-45 serial console</li> <li>• Type A USB 2.0 port</li> </ul>
<b>Data Forwarding</b>	<ul style="list-style-type: none"> <li>• Switching Capacity – 176 Gbps</li> <li>• Broadcom® Helix4 Switch Chip</li> <li>• Wire-speed Layer 3 Routing</li> <li>• 1:1 Non-blocking connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Switching Capacity - 1440 Gbps</li> <li>• Broadcom® Trident II Switch Chip</li> <li>• Wire-speed Layer 3 Routing</li> <li>• 1:1 Non-blocking connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Switching Capacity - 6.4Tbps</li> <li>• Broadcom® Tomahawk Switch Chip</li> <li>• Wire-speed Layer 3 Routing</li> <li>• 1:1 Non-blocking connectivity</li> </ul>
<b>Control Plane</b>	<ul style="list-style-type: none"> <li>• Intel® CPU</li> <li>• 2GB DRAM</li> <li>• 8GB SSD</li> <li>• ONIE</li> <li>• Cumulus Linux Ready</li> </ul>	<ul style="list-style-type: none"> <li>• Intel® CPU</li> <li>• 4GB DRAM</li> <li>• 16GB SSD</li> <li>• ONIE</li> <li>• Cumulus Linux Ready</li> </ul>	<ul style="list-style-type: none"> <li>• Intel® CPU</li> <li>• 4GB DRAM</li> <li>• 16GB SSD</li> <li>• ONIE</li> <li>• Cumulus Linux Ready</li> </ul>
<b>Power</b>	<ul style="list-style-type: none"> <li>• Hot-pluggable 200W power supply</li> <li>• Optional second redundant power supply</li> <li>• AC Input: 100-127/200-240 V, 50/60 Hz</li> <li>• Power Consumption: &lt; 85.2 Watts</li> </ul>	<ul style="list-style-type: none"> <li>• Redundant, hot-pluggable, 460W power supplies</li> <li>• AC Input: 100-127/200-240 V, 50/60 Hz</li> <li>• Power Consumption: 305 Watts</li> </ul>	<ul style="list-style-type: none"> <li>• Redundant, hot-pluggable, 800W power supplies</li> <li>• AC Input: 100-127/200-240 V, 50/60 Hz</li> <li>• Power Consumption: 650 Watts</li> </ul>
<b>Physical/Environmental</b>	<ul style="list-style-type: none"> <li>• Weight: Net weight: 8.18kg (with 2 PSUs)</li> <li>• Regular and Reverse Airflow Models</li> <li>• Size (W x D x H): 434 x 320 x 44 mm (17.1 x 11.2 x 1.73 in.)</li> <li>• Temperature: Operating 0°C to 45 °C (32°F to 113°F)</li> <li>• Humidity -Operating: 5% to 95% (non-condensing)</li> </ul>	<ul style="list-style-type: none"> <li>• Weight: Net weight: 10.13kg (22.29 lb with 2 PSUs)</li> <li>• Regular and Reverse Airflow Models</li> <li>• Size (W x D x H): 434 x 550 x 44 mm (17.1 x 21.6 x 1.73 inches)</li> <li>• Temperature: Operating 0°C to 40 °C (32°F to 104°F)</li> <li>• Humidity - Operating: 5% to 95% (non-condensing)</li> </ul>	<ul style="list-style-type: none"> <li>• Weight: Net weight: 10.18kg (22.29 lb with 2 PSUs)</li> <li>• Regular and Reverse Airflow Models</li> <li>• Size (W x D x H): 434x 520 x 44 mm (17.1 x 20.47 x 1.73 inches)</li> <li>• Temperature: Operating 0°C to 40 °C (32°F to 104°F)</li> <li>• Humidity - Operating: 5% to 95% (non-condensing)</li> </ul>
<b>General</b>	<ul style="list-style-type: none"> <li>• Bare metal - ONIE Installed</li> <li>• 1U form factor for flexible installation</li> <li>• Mounting Flanges (included)</li> </ul>	<ul style="list-style-type: none"> <li>• Bare metal - ONIE Installed</li> <li>• 1U form factor for flexible installation</li> <li>• Mounting Rails (included)</li> </ul>	<ul style="list-style-type: none"> <li>• Bare metal - ONIE Installed</li> <li>• 1U form factor for flexible installation</li> <li>• Mounting Rails (included)</li> </ul>
<b>Optional Power Supply</b>	<ul style="list-style-type: none"> <li>• PWS-FRU-G3648-1F Second (for redundancy) power supply for SSE-G3648B Ethernet Switch. Forward Airflow</li> <li>• PWS-FRU-G3648-1R Second (for redundancy) power supply for SSE-G3648BR Ethernet Switch. Reverse Airflow</li> </ul>		

# Resource-Saving Technologies



Comprehensive Server, Storage and Networking Product Lines Optimized for IT, Datacenter, Embedded, HPC and Cloud Computing



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