ASUS
IN SEARCH OF INCREDIBLE

SERVER PRODUCT PORTFOLIO

ABOUT ASUS

Our Milestones

1995
Tier 1 OEM/ODM

2000
Datacenter OEM/ODM

2005
ASUS white-label solution

2008
First delivery of server products to leading cloud-service provider

2010
Joined Open Compute Project 1.0 development

2011
- Launched BMC solution – ASMB6-iKVM
- Joined VMware technology partnership

2012
- Released supercomputing, big data and storage server solutions
- Launched BMC solution – ASMB7-iKVM

2014
- Achieved Green500 Top 1 with ESC4000-G2S
- Launched ASUS System Web-based Management (ASWM)
- Launched BMC solution – ASMB8-iKVM

2016
Released GPU servers for deep learning, AI and VDI

2017
- Won 2017 Taiwan Excellence Award for server products
- Launched datacenter-level management utility – ASUS Control Center
- Performance tuning and No. 1 performance record in 2P solution
- Launched BMC solution – ASMB9-iKVM
- Joined Microsoft technology partnership

2018
- First delivery of server products to medical provider
- Ranked Top 20 in Taiwania 2 and ranked Top 10 in Green500
- Joined RedHat technology partnership

2019
Joined Open Compute Project

2020
Joined Ubuntu technology partnership

2021
- Launched BMC solution – ASMB10-iKVM
- First deliver to EEMEA cloud-service provider
- Jointly developed 5G edge server with 5G provider
- Joined MLCommons membership

2022
World records on MLPerf training and inference

BUILT WITH THE ENVIRONMENT IN MIND

RE100 | CLIMATE GROUP | CDP

ASUS is one of the member in RE100, a global renewable energy initiative, to achieve 100% renewable energy.

ASUS has set to achieve:

100% renewable energy usage in Taiwan-based operations centers by **2030,** and in global operations centers by **2035**

50% carbon emissions reduction from global operations centers by **2030**

30% above Energy Star standard efficiency from key products

30% reduction in carbon intensity rates from key suppliers

PRODUCING

Since 2013, ASUS introduced postconsumer recycled plastic as mechanical housing.

PACKAGING

ASUS continuously designs exclusive technologies that raise energy efficiency on hardware and software.

USING

Since 2012, packaging design department improved the folding structure of the packaging materials, this method received relevant patents.

RETIRING

Galvanized support for recycling programs and ensures that charitable organizations benefit from these initiatives.

Meet the industry's highest environmental certifications

In 2020 alone, ASUS earned 69,965 green certification from some of the most prestigious international organizations around the world.

69,965

Green Certifications

Green ASUS

Keeping Environment

We at ASUS are fully committed to creating a sustainable future. We believe in adopting an eco-friendly approach towards every aspect of our business. This is where the Green ASUS philosophy comes in - from our internal practices to our production processes - we remain focused on safeguarding our planet. ASUS is focused on safeguarding our planet with responsible products, and ASUS products succeed in combining a lower total cost of ownership (TCO) with the highest environmental standards.

Green Design

Good design extends beyond mere aesthetics, products should use modular components for simple repairs and prolonged life spans, and be easily recyclable at the end of their life cycle.

Green Manufacturing

Good product cant't be made without greener manufacturing processes, that's why ASUS adheres to strict guidelines to ensure that hazardous substances like lead and halogens are eliminated during production.

Green Procurement

ASUS is not only committed to reducing its own environmental impact. By ensuring a greener supply chain, it is helping to packaging follow greener principles too.

Servers Care

ASUS guarantees quality, service and reliability. That's why we offer an exclusive one-day advanced replacement and return merchandise authorization service – known as 1-Day ARS. In addition to rapid replacement, all ASUS barebone servers, server motherboards carry a 3-year limited warranty in most territories – with satisfaction guaranteed.

1-Day ARS

ASUS 1-Day ARS allows for convenient return and replacement of defective products (barebone servers, server motherboards) via system integrators (SI) and value-added resellers (VAR) throughout the United States, Canada within one day.

3-Year Warranty

The ASUS 3-year limited warranty protects all ASUS server products that means barebone servers, server motherboards are all covered. During the 3-year warranty period ASUS will repair or replace defective components, allowing your business or organization to continue with minimal disruption.

Global Presence

ASUS has a very strong global presence. Our products are recognized throughout the world and are sold in 113 countries through more than 70 branch offices worldwide. ASUS also has more than 1,400 support center across the globe that are ready to assist our customers anytime, anywhere.

113 Countries

70 Branches Offices

1,400 Support Centers

AMD EPYC™ 9004 Solutions

Empowering Data Center Sustainability

No.1 Benchmark World Records

Taking advantage of the AMD EPYC™ 9004 processors' compute leadership performance, ASUS servers powered by EPYC™ 9004 achieved the No.1 result for performance – securing a top ranking across SPEC CPU2017 benchmarks on SPEC org. The results demonstrate that ASUS leadership with the new AMD EPYC™ processors, delivering outstanding performance for the server industry.

* ASUS RS700A-E12 & RS520A-E12 servers are tested the highest scores on SPEC CPU2017 multiple benchmarks. All results can be verified on 10, November, 2022 at SPEC.org.

Custom-focused ASUS **Design**

ASUS servers are designed with our customers in mind, offering flexibility to enable easy scale-up of configurations to meet increasing data-center workloads.

CPU-balanced Architecture

- Offers reliable, optimal CPU performance efficiency between CPUs
- Extends I/O availability for more computing capability

Scalable Storage Solutions

- Unlock SSD RAID performance with SupremeRAID™ Technology, deliver up to 24 NVMe
- More scalable options in middle and rear bays

Comprehensive Cooling Solutions

- New HDD tray and independent airflow tunnel design deliver energy-efficient performance
- Immersion and direct-to-chip liquid cooling solutions for improved PUE and reduced operational costs

Multiple GPU and FPGA Support

- Flexible design to configure PCIe5 x16 slots for specific workloads
- GPU servers designed with space optimization for liquid cooling solutions
- Stand-out AI training and inference performance proved by MLPerf benchmarks

Form Factor **2U**

CPU Number **2**(Per Node)

PCIe Gen5 Slots **2**(Per Node)

Memory Number **24**(Per Node)

NVMe **8**

RS720QA-E12-RS8U

Multi-node server with high core counts and memory bandwidth for compute-intensive workloads

CPU	AMD EPYC™ 9004 Series Processor
Chipset	SoC
Memory Type	24x DIMM slots (Per Node), DDR5 up to 4800 RDIMM/RDIMM 3DS, Max 6TB
Drive bays	8
Additional OS Drive	2
Networking	2 x 10GbE LAN, 1 x Management port

Form Factor **4U**

CPU Number **2**

PCIe Gen5 Slots **13**

Memory Number **24**

NVMe **2**

Graphic Card **8** Dual-Slot

ESC8000A-E12P

High-density GPU server with additional expansion for AI/HPC workloads

CPU	AMD EPYC™ 9004 Series Processor
Chipset	SoC
Memory Type	24 x DIMM slots (Per CPU), DDR5 up to 4800 RDIMM/RDIMM 3DS, Max 6TB
Drive bays	8
Additional OS Drive	1
Networking	2 x 1 GbE LAN or 2 x 10 GbE LAN, 1 x Management port

HPC Data Center Solutions with

4th Gen Intel® Xeon® Scalable Processors

HPC Data Center Solutions powered by **4th Gen** Intel® Xeon® Scalable Processors

ASUS servers powered by 4th Gen Intel® Xeon® Scalable or high-bandwidth memory (HBM) processors are optimized to deliver supreme computing performance and energy efficiency for HPC, AI, data analytics and virtualization. Our enhanced thermal design and innovative liquid-cooling solutions improve data-center power-usage effectiveness, enabling scale up and scale out to accelerate and optimize complex workloads.

Superior Performance

- Support the highest performance CPUs and GPUs and the latest PCIe 5.0, DDR5 CXL 1.1 technologies
- Extends I/O availability and high bandwidth memory for more computing capability

Scalable Storage Solutions

- Unlock SSD RAID performance with SupremeRAID™ Technology, deliver up to 24 NVMe
- More scalable options in middle and rear bays

Comprehensive Cooling Solutions

- New HDD tray and independent airflow tunnel design deliver energy-efficient performance
- Immersion and direct-to-chip liquid cooling solutions for improved PUE and reduced operational costs

Multiple GPU and FPGA Support

- Flexible design to configure PCIe5 x16 slots for specific workloads
- GPU servers designed with space optimization for liquid cooling solutions
- Stand-out AI training and inference performance proved by MLPerf benchmarks

Liquid Cooling Solutions

Over **92%** Lower fan power

Over **29.6%** Lower noise level

Air Cooling Solutions

8 x **350** W CPUs with Enhanced Volume Air cooling (EVAC)

Independent Airflow Tunnel Design

2 350W CPUs

8 350W GPUs

ESC8000-E11P

High-density GPU server with additional expansion for AI/HPC workloads

CPU	4th Gen Intel Xeon Scalable Processors
Memory Type	32 x DIMM slots (16 DIMM Per CPU)DDR5 up to 4800Mhz
Drive bays	8
Additional OS Drive	1
Networking	2 x 1 GbE LAN or 2 x 10 GbE LAN, 1 x Management port

Form Factor **4U**

CPU Number **2**

PCIe Gen5 Slots **13**

Memory Number **32**

NVMe **2**

Graphic Card **8** Dual-Slot

RS700-E11-RS4

Great balance on performance, efficiency, and manageability for multi-workload

CPU	4th Gen Intel Xeon Scalable Processors
Memory Type	32 x DIMM slots (16 DIMM Per CPU)DDR5 up to 4800Mhz
Drive bays	4
Additional OS Drive	2
Networking	4 x 1Gbe LAN or 2 x 10Gbe LAN,1 x Management port

Form Factor **1U**

CPU Number **2**

PCIe Gen5 Slots **3**

Memory Number **32**

NVMe **4**

Graphic Card **1** Dual-Slot

NO.1 BENCHMARK

SPEC.CPU

ASUS holds the most amount of records on the SPEC CPU® 2017 benchmark in single-socket (1P) and dual-socket (2P). These world records are set by servers running across Intel and AMD platforms and workloads ranging from general business infrastructure, software-defined deployment, data analytics, AI, and HPC (High Performance Computing).

1183+
Benchmark World Records

* SPEC is a corporation formed to establish and endorse standardized benchmarks and tools to evaluate performance and energy efficiency of computer systems.

Performance Boost Technology

ASUS servers feature exclusive Performance Boost technology to achieve the best server performance and agility by tuning servers to match the requirements of workloads, letting you gain greater control of your server environment. This technology improves workload throughput by maximizing processor frequency and boost power, ideal for time-sensitive applications such as financial services or data center operations. In the BIOS you can choose from pre-configured server profiles optimized for specific workloads, maximizing overall performance and reducing server-configuration time.

Core Optimizer

Maximizes the processor frequency in multi-core operations, avoiding frequency shifting for reduced latency.

Engine Boost

Automatic power acceleration with an innovative voltage design to increase server overall performance.

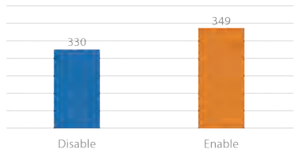
Workload Presets

Preconfigured BIOS server profiles based on workloads and benchmarks for improved performance and efficiency.

Performance Enhancement with Workload Presets

Peak Frequency Optimized

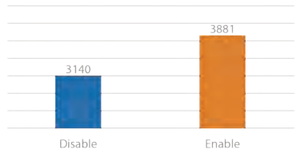
5.8%
performance improvement



CPU: Intel Xeon Platinum 8280L processor
Benchmark: SPECrate2017_int base

HPC

25%
performance improvement



CPU: Intel Xeon Platinum 8280L processor
Benchmark: HPL

TOP RECORDS

MLPerf

ASUS is focused on creating complete, optimized solutions and strives to cultivate strong industry partnerships to enhance AI developments in diverse fields to push technology to its limits. As an integrated-solutions partner, we deliver leading hardware for the fields of supercomputing and data centers, supported by an extensive AI portal and AI software stack.

66+
MLPerf Training & Inference

* MLCommons® is an open engineering consortium, built on a philosophy of open collaboration and accelerate machine learning innovation.

Top records on MLPerf training and inference

ESC8000A-E11

Its streamlined thermal design, with independent CPU and GPU airflow tunnels, brings high-efficiency cooling solution to air-cooled data centers

8 PCIe GPU Server
NVIDIA A100 x8
29

ESC4000-E10S

Offers a wide array of graphics accelerators, plus support for the NVIDIA NVLink high-speed GPU interconnect, to unleash maximum AI performance

4 PCIe GPU Server
NVIDIA A30 x4
16

ESC4000A-E11

Offers a wide array of graphics accelerators, plus support for the NVIDIA NVLink high-speed GPU interconnect, to unleash maximum AI performance

4 PCIe GPU Server
NVIDIA A30 x4
14

ESC N4A-E11

HGX 4-GPU server featuring single-CPU architecture for Simulation and Data Analytics

4 PCIe GPU Server
NVIDIA A100 x4
7

ASUS INNOVATIONS ON **SERVER SOFTWARE**

ASUS Control Center

ASUS Control Center (ACC) for Enterprise is an excellent centralized management tool for servers and client devices. It is tailored for efficient IT management, including both hardware- and software-inventory management, and the remote dispatch of both software and firmware updates. It also allows for simple remote device configurations and health checks, plus rapid deployment of latest security policies and patches. In short, ACC Enterprise is a one-stop portal for IT management, and has been embraced by industries and businesses globally to minimize administration and maximize uptime.

Design for Enterprise

BIOS Flash Update | Software Inventory | Hardware Inventory | Real-time System Monitor | Software Dispatch Task | Power and Security Control

Medical

Enterprise

Manufacturing

Education

- BMC IPMI/Redfish Integration
- Hardware Utilization Record

- Integrated Hotfix Report
- NVIDIA Graphic Cards Monitoring

Modern

Graphical dashboard based on responsive HTML5, enabling fast, simple and intuitive navigation from almost any modern device.

Remote

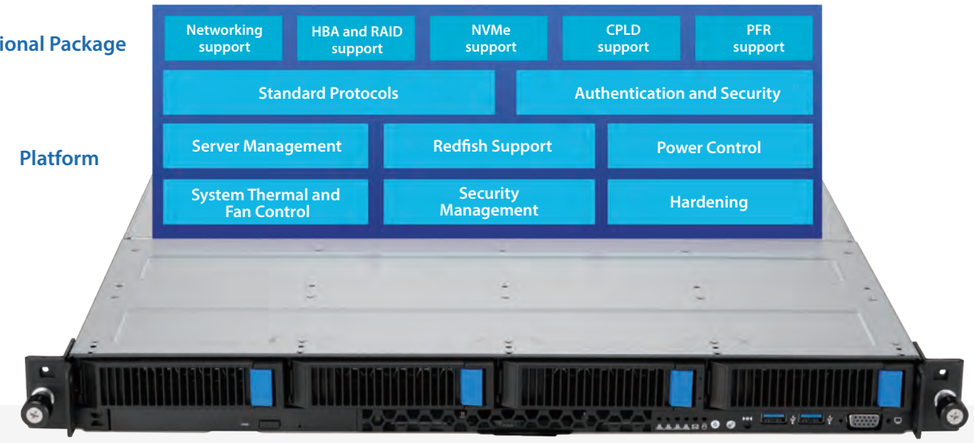
Remote-management capabilities enhance work flexibility, reducing resources for minimized total cost of ownership (TCO).

Centralization

Single console-style interfaces allows IT managers to manage and configure devices collectively, from a central location.

ASUS ASMB11-iKVM

Friendly User Interface | Redfish API | Exclusive Auxiliary Tool



What ASMB11-iKVM offers?

ASMB11-iKVM is optimized firmware management tool for server and data-center operations equipped with IPMI and Redfish Protocols to access and monitor all hardware status, sensor, and update. Out-band management significantly reduces redundant IT operations and deployments remotely. ASMB11-iKVM connects BIOS, BMC, server information and key-parts collectively and offers multiple routes to maintain up to customer's preference. ASUS keeps it simple and easy to easy to speed up IT operation efficiency.

ASPEED AST2600

The latest ASUS server management solution – ASMB11-iKVM is built upon the ASPEED 2600 chipset running on the latest AMI MegaRAC SP-X. The module provides various interfaces to enable out-of-band server management through WebGUI, Intelligent Platform Management Interface (IPMI) and Redfish® API.

American Megatrends

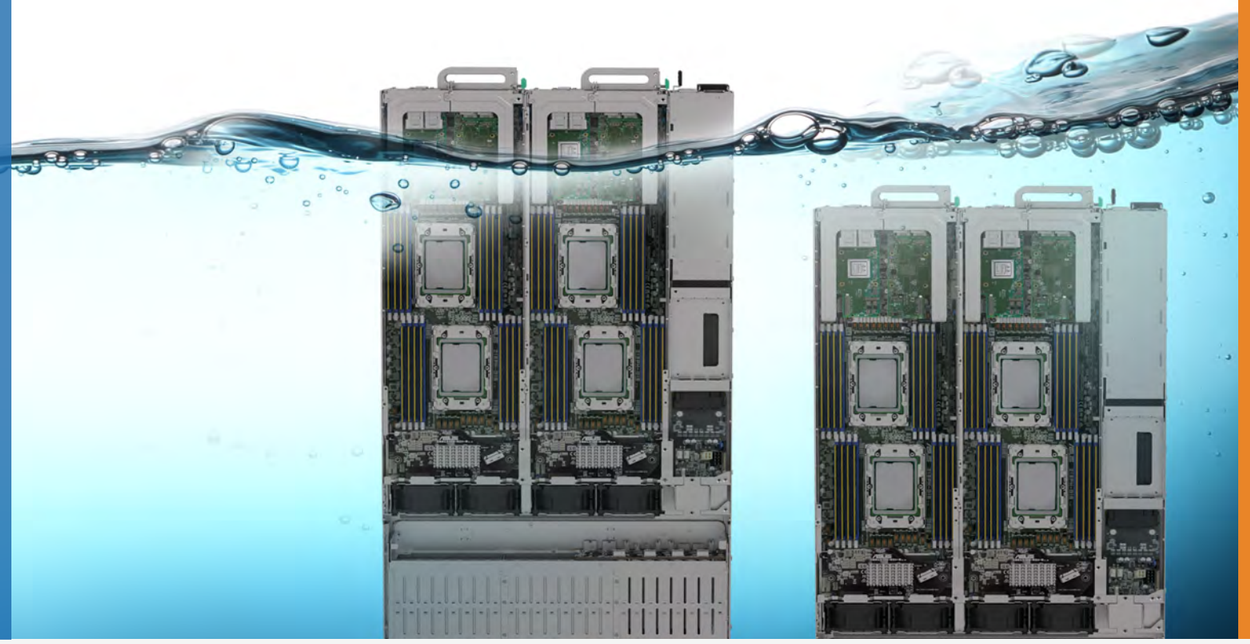
ASUS ASMB11-iKVM is an Intelligent Platform Management Interface (IPMI) 2.0-compliant module that allows you to monitor, control and manage a remote server from a local or central server attached to your network. ASMB11-iKVM also supports Redfish protocol for fast, efficient device management.

LATTICE SEMICONDUCTOR

ASUS servers integrate PFR FPGA as the platform Root-of-Trust solution for firmware resiliency to prevent hackers from gaining access to infrastructure. ASUS PFR solution provides authentication check in firmware to ensure firmware free of malicious attack and offer recovery, protection to systems with ease of mind.

LIQUID COOLING SOLUTIONS

Unparalleled cooling performance for the modern data center



A comprehensive liquid cooling solution

Optimized for intensive workloads, the solution requires a high TDP CPU and GPU server within an energy efficient present challenges for building data center, liquid cooling deliver more optimized space design, lower PUE and Operating Expenditures to balance power consumption and green energy awareness. By working with our partners, we're able to deliver a total solution — from servers to liquid-cooling modules, and even data-center floor plans and suggested infrastructure.

The top four reasons to choose liquid cooling

Denser Computational Power

While a server rack with conventional air cooling can manage up to 30 kW of heat dissipation, direct liquid cooling can scale much more. This increase in thermal capacity allows more computational density for servers, upgrading the scale of a data center to accelerate and optimize complex workloads.

Much improved PUE

The thermal efficiency of liquid cooling dramatically improves the PUE of a data center by reducing the demand for CRAC and cooling fans, and liquid coolant is a more efficient medium of heat exchange than air.

Save on OpEX in long term

A data center with liquid cooling is customarily designed for heat recirculation. The hot coolant exiting a server is directed though a heat exchanger system that recycles heat into more energy, further reducing OpEx for utilities. Thanks to this system, the initial cost of most direct liquid cooling servers can be recovered within the first 12 months of operation, providing potentially significant savings over time.

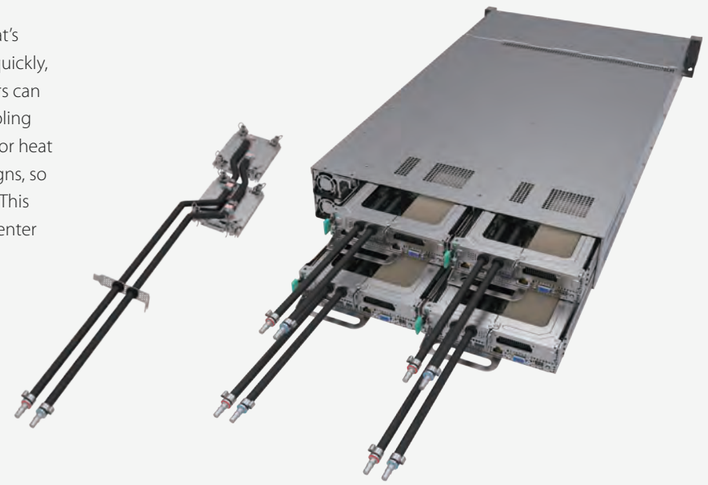
A much quieter environment

In addition to saving energy through the reduction of CRAC systems and fans, liquid cooling can also reduce fan noise, leading to a healthier work environment for data center personnel. The average acoustic impact of air-cooling is between 75 dBA and 95 dBA, whereas liquid cooling averages below 75 dBA. Enterprise, office and military data centers can particularly benefit.

Direct-to-chip cooling solution

ASUS direct-to-chip cooling is a quick, simple option that's based on existing infrastructure. D2C can be deployed quickly, and lower PUE (power-usage effectiveness). ASUS servers can support manifolds and cool plates to enable diverse cooling solutions. Moreover, ASUS servers can support a rear-door heat exchanger that complies with standard rack-server designs, so there's no need to replace all racks — just the rear door. This lowers the total cost of ownership, and increases data-center utilization ratio.

DELTA MGC



Immersive cooling solution

ASUS Immersion cooling is another highly-effective solution from ASUS. This technique offers more advantages on PUE and encompasses higher-density servers. However, it also demands more space, and may require retooling of the data-center infrastructure. But immersion cooling can control temperatures more rapidly, efficiently and cost-effectively than traditional methods. For users of supercomputers in particular, immersion cooling is the preferred option.

submer KAORI

Rack Servers

RS720QA-E12-RS8U

Motherboard	K14PH-D24
Processor	Per node: 2 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 240W)
Chipset	System on Chip (SoC)
Memory	Per node: 24 x DIMM slots DDR5 up to 4800 RDIMM/RDIMM 3DS Maximum 6144GB
VGA	Aspeed AST2600 64MB
Graphic	N/A
Expansion Slots	Per node: up to 2 slots 1 x PCIe Gen5 x16 (HHHL) 1 x PCIe Gen5 x16 (LP)
Storage Controller	Per node: Support RAID 0, 1 Optional Broadcom SAS3008 12G Controller
Storage Bays	8 x 2.5" Hot-Swap drive bays (NVMe/SATA/SAS*) *SATA/SAS support from optional CB board
Networking	2 x 10GbE LAN port 1 x Management port
Optical Drive	N/A
Front I/O Ports	N/A
Rear I/O Ports	Per node: 2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Mini-DP port 2 x 10GbE ports 1 x Management port
Security Solution	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	847mm x 444mm x 87.3mm (2U) 33.35" x 17.48" x 3.44"
Net Weight kg (CPU, DRAM & HDD not included)	TBD
Gross Weight kg (CPU, DRAM & HDD not included, Packing included)	TBD
Power Supply (Following different configuration by region)	1+1 Redundant 2600W 80 PLUS Titanium Power Supply 1+1 Redundant 3200W 80 PLUS Platinum Power Supply

RS720A-E12-RS24U

Motherboard	K14PP-D24
Processor	2 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)
Chipset	System on Chip (SoC)
Memory	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB
VGA	Aspeed AST2600 64MB
Graphic	Up to 6 single-slot or 3 double-slot GPU cards
Expansion Slots	Up to 9 PCIe Gen5 slots 6 x PCIe Gen5 x8 or 3 x PCIe Gen5 x16 (FHFL) 2 x PCIe Gen5 x8 or 1 x PCIe Gen5 x16 or 1 x OCP3.0 (FHFL) 1 x PCIe Gen5 x16 (LPHL)
Storage Controller	Optional kits: Broadcom HBA CARD 9500-16i Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i
Storage Bays	Front Bays: 24 x 2.5" Hot-Swap drive bays Support up to 16 x NVMe + 8 x NVMe/SATA/SAS* *RAID card is required to support SAS hard drives
Networking	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port
Optical Drive	1 x External ODD (optional)
Front I/O Ports	2 x USB 3.2 Gen1 ports 1 x Power Botton
Rear I/O Ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 4 x 1GbE or 2 x 10GbE LAN port
Security Solution	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	840mm x 449mm x 88.1mm (2U) 33.07" x 17.68" x 3.47"
Net Weight kg (CPU, DRAM & HDD not included)	20.3 kg
Gross Weight kg (CPU, DRAM & HDD not included, Packing included)	26.77 kg
Power Supply (Following different configuration by region)	1+1 Redundant 2600W/1600W 80 PLUS Titanium Power Supply 1+1 Redundant 2000W/1600W 80 PLUS Platinum Power Supply

RS720A-E12-RS24

Motherboard	K14PP-D24
Processor	2 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)
Chipset	System on Chip (SoC)
Memory	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB
VGA	Aspeed AST2600 64MB
Graphic	Up to 8 single-slot or 4 double-slot GPU cards
Expansion Slots	Up to 9 PCIe Gen5 slots 6 x PCIe Gen5 x8 or 3 x PCIe Gen5 x16 (FHFL) 2 x PCIe Gen5 x8 or 1 x PCIe Gen5 x16 or 1 x OCP3.0 (FHFL) 1 x PCIe Gen5 x16 (LPHL)
Storage Controller	Optional kits: Broadcom HBA CARD 9500-16i Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i
Storage Bays	Front Bays: 24 x 2.5" Hot-Swap drive bays Support up to 16 x NVMe + 8 x SATA/SAS* *RAID card is required to support SAS hard drives
Networking	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port
Optical Drive	1 x External ODD (optional)
Front I/O Ports	2 x USB 3.2 Gen1 ports 1 x Power Botton
Rear I/O Ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 4 x 1GbE or 2 x 10GbE LAN port
Security Solution	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	840mm x 449mm x 88.1mm (2U) 33.07" x 17.68" x 3.47"
Net Weight kg (CPU, DRAM & HDD not included)	18.31 kg
Gross Weight kg (CPU, DRAM & HDD not included, Packing included)	24.78 kg
Power Supply (Following different configuration by region)	1+1 Redundant 2600W/1600W 80 PLUS Titanium Power Supply 1+1 Redundant 2000W/1600W 80 PLUS Platinum Power Supply

RS720A-E12-RS12

Motherboard	K14PP-D24
Processor	2 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)
Chipset	System on Chip (SoC)
Memory	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB
VGA	Aspeed AST2600 64MB
Graphic	Up to 6 single-wide GPU or 3 double-wide GPU
Expansion Slots	Up to 9 PCIe Gen5 slots 6 x PCIe Gen5 x8 or 3 x PCIe Gen5 x16 (FHFL) 2 x PCIe Gen5 x8 or 1 x PCIe Gen5 x16 or 1 x OCP3.0 (FHFL) 1 x PCIe Gen5 x16 (LPHL)
Storage Controller	Optional kits: Broadcom HBA CARD 9500-16i Broadcom MegaRAID 9540-8i Broadcom MegaRAID 9560-16i
Storage Bays	Front Bays: 12 x 3.5" Hot-Swap drive bays Support up to 8 x NVMe+ 4 x SATA/SAS* Rear Bays: 2 x 2.5" Hot-Swap drive bays (Optional) Support 2 x NVMe** *RAID card is required to support SAS hard drives **Will occupied 2 PCIe slots
Networking	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port
Optical Drive	1 x External ODD (optional)
Front I/O Ports	2 x USB 3.2 Gen1 ports 1 x Power Botton
Rear I/O Ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 4 x 1GbE or 2 x 10GbE LAN port
Security Solution	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	840mm x 449mm x 88.1mm (2U) 33.07in x 17.68in x 3.47in
Net Weight kg (CPU, DRAM & HDD not included)	19.3 kg
Gross Weight kg (CPU, DRAM & HDD not included, Packing included)	25.77 kg
Power Supply (Following different configuration by region)	1+1 Redundant 2600W/1600W 80 PLUS Titanium Power Supply 1+1 Redundant 2000W/1600W 80 PLUS Platinum Power Supply

RS700A-E12-RS12U

Motherboard	K14PP-D24
Processor	2 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)
Chipset	System on Chip (SoC)
Memory	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB
VGA	Aspeed AST2600 64MB
Graphic	Up to 2 single-slot or 1 double-slot GPU cards
Expansion Slots	Up to 3 x PCIe Gen5 slots + 1 x internal RAID slot 1 x PCIe Gen5 x16 (FHFL) 1 x PCIe Gen5 x16 or OCP3.0 (FHFL) 1 x PCIe Gen5 x16 (LP) 1 x PCIe Gen4 x8 (LP, internal)
Storage Controller	Optional kits: Broadcom HBA CARD 9500-16i Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i
Storage Bays	Front Bays: 12 x 2.5" Hot-Swap drive bays Support up to 12 x NVMe/SATA/SAS* *RAID card is required to support SAS hard drives
Networking	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port
Optical Drive	1 x External ODD (optional)
Front I/O Ports	N/A
Rear I/O Ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 4 x 1GbE or 2 x 10GbE LAN port
Security Solution	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	842.5mm x 449mm x 43.85mm (1U) 33.17" x 17.68" x 1.73"
Net Weight kg (CPU, DRAM & HDD not included)	14.94 kg
Gross Weight kg (CPU, DRAM & HDD not included, Packing included)	19.94 kg
Power Supply (Following different configuration by region)	1+1 Redundant 2600W/1600W 80 PLUS Titanium Power Supply 1+1 Redundant 2000W/1600W 80 PLUS Platinum Power Supply

RS700A-E12-RS4U

Motherboard	K14PP-D24
Processor	2 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)
Chipset	System on Chip (SoC)
Memory	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB
VGA	Aspeed AST2600 64MB
Graphic	Up to 2 single-slot or 1 double-slot GPU cards
Expansion Slots	Up to 3 x PCIe Gen5 slots + 1 x internal RAID slot 1 x PCIe Gen5 x16 (FHFL) 1 x PCIe Gen5 x16 or OCP3.0 (FHFL) 1 x PCIe Gen5 x16 (LP) 1 x PCIe Gen4 x8 (LP, internal)
Storage Controller	Optional kits: Broadcom HBA CARD 9500-16i Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i
Storage Bays	Front Bays: 4 x 3.5" Hot-Swap drive bays Support up to 4 x NVMe/SATA/SAS* *RAID card is required to support SAS hard drives
Networking	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port
Optical Drive	1 x Slim-type ODD (optional)
Front I/O Ports	2 x USB 3.1 Gen1 ports 1 x VGA
Rear I/O Ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 4 x 1GbE or 2 x 10GbE LAN port
Security Solution	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	842.5mm x 449mm x 43.85mm (1U) 33.17" x 17.68" x 1.73"
Net Weight kg (CPU, DRAM & HDD not included)	13.93 kg
Gross Weight kg (CPU, DRAM & HDD not included, Packing included)	18.93 kg
Power Supply (Following different configuration by region)	1+1 Redundant 2600W/1600W 80 PLUS Titanium Power Supply 1+1 Redundant 2000W/1600W 80 PLUS Platinum Power Supply

For details, please visit our website.
All specs are subject to change without any prior notice.

For details, please visit our website.
All specs are subject to change without any prior notice.

Rack Servers

RS520A-E12-RS24U

RS520A-E12-RS12U

RS500A-E12-RS12U

	RS520A-E12-RS24U	RS520A-E12-RS12U	RS500A-E12-RS12U
Motherboard	K14PA-U24	K14PA-U24	K14PA-U24
Processor	1 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)	1 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)	1 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)
Chipset	System on Chip (SoC)	System on Chip (SoC)	System on Chip (SoC)
Memory	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB *2DPC support depends on AMD schedule	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB *2DPC support depends on AMD schedule	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB *2DPC support depends on AMD schedule
VGA	Aspeed AST2600 64MB	Aspeed AST2600 64MB	Aspeed AST2600 64MB
Graphic	Up to 4 single-slot or 2 double-slot GPU cards *24 NVMe can't support GPU	Up to 4 single-slot or 2 double-slot GPU cards	Up to 2 single-slot GPU cards
Expansion Slots	Up to 5 PCIe Gen5 slots + 1 OCP3.0 2 x PCIe Gen5 x16, FHFL or 4 x PCIe Gen5 x8, FHFL 1 x PCIe Gen5 x8, LP 1 x OCP 3.0 Slot ((PCIe Gen5 x16)	Up to 5 PCIe Gen5 slots + 1 OCP3.0 2 x PCIe Gen5 x16, FHFL or 4 x PCIe Gen5 x8, FHFL 1 x PCIe Gen5 x8, LP 1 x OCP 3.0 Slot ((PCIe Gen5 x16)	Up to 3 PCIe Gen5 slots + 1 OCP3.0 1 x PCIe x16 slot (Gen5 x16 link, FHHL) 1 x PCIe x16 slot (Gen5 x16 link, LPHL) 1 x PCIe x16 slot (Gen5 x8 link, LPHL) 1 x OCP3.0 Slot (Gen5 x16 link)
Storage Controller	Optional kits: ASUS PIKE II 3008 HBA card Broadcom Mega RAID 9560-16i	Optional kits: ASUS PIKE II 3008 HBA card Broadcom Mega RAID 9560-16i	Optional kits: ASUS PIKE II 3008 HBA card Broadcom Mega RAID 9560-16i
Storage Bays	Front bays: 24 x 2.5" Hot-Swap drive bays Support up to 24 NVMe or 16x NVMe + 8 SAS/SATA Rear bays: 2 x 2.5" SATA Hot-Swap drive bays *SAS support only from optional SAS HBA/RAID card	Front bays: 12 x 3.5" Hot-Swap drive bays Support up to 12 x NVMe/SATA/SAS Rear bays: 2 x 2.5" SATA Hot-Swap drive bays *SAS support only from optional SAS HBA/RAID card	Front bays: 12 x 2.5" Hot-Swap drive bays 12 x SATA/SAS/NVME Optional 4 x 2.5" Internal drive bays 4 x SATA/NVME *SAS support only from optional SAS HBA/RAID card
Networking	2 x 1GbE LAN ports 1 x Management port	2 x 1GbE LAN ports 1 x Management port	2 x 1GbE LAN ports 1 x Management port
Optical Drive	N/A	N/A	N/A
Front I/O Ports	2 x USB 3.2 Gen1 ports 1 x Power Botton	2 x USB 3.2 Gen1 ports 1 x Power Botton	N/A
Rear I/O Ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 2 x 1GbE LAN ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 2 x 1GbE LAN ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 2 x 1GbE LAN ports
Security Solution	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	840mm x 449mm x 88.1mm (2U) 33.07" x 17.68" x 3.47	840mm x 449mm x 88.1mm (2U) 33.07in x 17.68in x 3.47in	842.5mm x 449mm x 43.85mm (1U) 33.17" x 17.68" x 1.73"
Net Weight kg (CPU, DRAM & HDD not included)	19.14 kg	17.95 kg	14.16 kg
Gross Weight kg (CPU, DRAM & HDD not included, Packing included)	26.63 kg	25.14 kg	19.16 kg
Power Supply (Following different configuration by region)	1+1 Redundant 1600W 80 PLUS Titanium Power Supply 1+1 Redundant 1600W/1200W 80 PLUS Platinum Power Supply	1+1 Redundant 1600W 80 PLUS Titanium Power Supply 1+1 Redundant 1600W/1200W 80 PLUS Platinum Power Supply	1+1 Redundant 1600W 80 PLUS Titanium Power Supply 1+1 Redundant 1600W/1200W 80 PLUS Platinum Power Supply

For details, please visit our website.
All specs are subject to change without any prior notice.

RS500A-E12-RS4U

ESC8000A-E12

	RS500A-E12-RS4U	ESC8000A-E12
Motherboard	K14PA-U24	K14PG-D24
Processor	1 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)	2 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)
Chipset	System on Chip (SoC)	System on Chip (SoC)
Memory	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 6144GB *2DPC support depends on AMD schedule	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 3TB per socket
VGA	Aspeed AST2600 64MB	Aspeed AST2600 64MB
Graphic	Up to 2 single-slot GPU cards	Up to 8 double-slot GPU cards
Expansion Slots	Up to 3 PCIe Gen5 slots + 1 OCP3.0 1 x PCIe x16 slot (Gen5 x16 link, FHHL) 1 x PCIe x16 slot (Gen5 x16 link, LPHL) 1 x PCIe x16 slot (Gen5 x8 link, LPHL) 1 x OCP3.0 Slot (Gen5 x16 link)	8 x PCIe x16 slot (Gen5, FHFL) for dual-slot GPU card SKU-1: (3 PCIe) Front: 1 x PCIe x8 slot (Gen5 ,LPHL) for HBA/RAID cards Rear: 1 x PCIe x16 slot (Gen5 ,FHFL) for NIC card 1 x PCIe x8 slot (Gen5 FHFL) for NIC Card SKU-2: (2 PCIe + 2 NVMe) Front: 1 x PCIe x8 slot (Gen5 ,LPHL) for HBA/RAID cards Rear: 1 x PCIe x16 slot (Gen5 ,FHFL) for NIC card SKU-3: (1 PCIe + 1 OCP3.0 + 2 NVMe) Front: 1 x PCIe x8 slot (Gen5 ,LPHL) for HBA/RAID card Rear: 1 x PCIe x16 slot (Gen5 ,FHFL) for OCP socket
Storage Controller	Optional kits: ASUS PIKE II 3008 HBA card Broadcom Mega RAID 9560-16i	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i
Storage Bays	Front bays: 4 x 3.5" Hot-Swap drive bays Support up to 4 x NVMe/SATA/SAS* *RAID card is required to support SAS hard drives	Front bays: 8 x 3.5" Hot-Swap drive bays (backplane supports up to 8 x NVMe/SATA/SAS*) 1 x M.2 support (Gen3 x4 link) *RAID card is required to support SAS hard drives
Networking	2 x 1GbE LAN ports 1 x Management port	2 x 1GbE or 10GbE LAN ports 1 x Management port
Optical Drive	1 x MCIO-type ODD (optional) (MCIO TYPE)	N/A
Front I/O Ports	2 x USB 3.2 Gen1 ports 1 x VGA port	2 x USB 3.2 Gen1 ports
Rear I/O Ports	2 x USB 3.2 Gen1 ports 1 x VGA port 1 x Management port 2 x 1GbE LAN ports	1 x VGA port 1 x COM port 2 x 1GbE or 10GbE LAN ports 1 x Management port
Security Solution	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	842.5mm x 449mm x 43.85mm (1U) 33.17" x 17.68" x 1.73"	780mm x 439mm x 175.6mm (4U) 30.71" x 17.28" x 6.91"
Net Weight kg (CPU, DRAM & HDD not included)	13.15 kg	49 kg
Gross Weight kg (GPU, DRAM & HDD not included, Packing included)	18.15 kg	59 kg
Power Supply (Following different configuration by region)	1+1 Redundant 1600W 80 PLUS Titanium Power Supply 1+1 Redundant 1200W/800W 80 PLUS Platinum Power Supply	2+2 Redundant 3000W/2600W 80 PLUS Titanium Power Supply 2+1 Redundant 3000W/2600W 80 PLUS Titanium Power Supply

For details, please visit our website.
All specs are subject to change without any prior notice.

Rack Servers

ESC8000A-E12P

ESC4000A-E12

	ESC8000A-E12P	ESC4000A-E12
Motherboard	K14PG-D24	K14PG-U12
Processor	2 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)	1 x Socket SP5 (LGA 6096) AMD EPYC™ 9004 Series Processors (up to 400W)
Chipset	System on Chip (SoC)	System on Chip (SoC)
Memory	24 x DIMM slots DDR5 4800/4400 RDIMM/ 3DS RDIMM Maximum 3TB per socket	12 x DIMM slots DDR5 4800/4400 RDIMM/3DS RDIMM Maximum 3TB
VGA	Aspeed AST2600 64MB	Aspeed AST2600 64MB
Graphic	Up to 8 double-slot GPU cards	Up to 4 double-slot GPU cards
Expansion Slots	8x PCIe x16 slot (Gen5, FHFL) for dual-slot GPU card SKU-1: Front: 1 x PCIe x16 slot (Gen5 ,LPHL) for HBA/RAID cards Rear: 4 x PCIe x16 slot (Gen5 ,FHFL) for NIC card SKU-2: Front: 1 x PCIe x16 slot (Gen5 ,LPHL) for HBA/RAID cards Rear: 3 x PCIe x16 slot (Gen5 ,FHFL) for NIC card 1 x PCIe x16 slot (Gen5 ,FHFL) for OCP socket	Rear: 4 x PCIe x16 slots (Gen5 x16 link, FHFL) for dual-slot GPU cards or 8 x PCIe x16 slots (Gen5 x8 link, FHFL) for single-slot GPU cards 1 x PCIe x16 slots (Gen5 x16 link, FHHL) 1 x PCIe x16 slot (Gen5 x16/x8 link, FHHL) or OCP socket option 1 x PCIe x8 slot (Gen5 x0/x8 link, LPHL) Front: 1 x PCIe x8 slot (Gen5 x8 link, LPHL) Only for SKU1
Storage Controller	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i
Storage Bays	Front bays: 8 x 3.5" Hot-Swap drive bays (backplane supports up to 8 x NVMe/SATA/SAS*) 1 x M.2 support (Gen3 x4 link) *RAID card is required to support SAS hard drives	2 x 2.5" & 4 x 3.5" Hot-Swap drive bays SKU1: 2 x 2.5" SATA/SAS*/NVMe + 2 x 3.5" SATA/SAS*/NVMe + 2 x 3.5" SATA/SAS* SKU2: 2 x 2.5" SATA/SAS*/NVMe + 4 x 3.5" SATA/SAS*/NVMe (Occupy 1 x PCIe x8 link) **RAID card is required to support SAS hard drives **For SKU1 additional 2 x NVMe support required a RAID card
Networking	2 x 1GbE or 10GbE LAN ports 1 x Management port	2 x 1GbE LAN ports 1 x Management port
Optical Drive	N/A	N/A
Front I/O Ports	2 x USB 3.2 Gen1 ports	4 x USB 3.2 Gen1 ports
Rear I/O Ports	1 x VGA port 1 x COM port 2 x 1GbE or 10 GbE LAN ports 1 x Management port	2 x USB 3.2 Gen1 ports 1 x VGA port 2 x 1GbE LAN ports 1 x Management port
Security Solution	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	780mm x 439mm x 175.6mm (4U) 30.71" x 17.28" x 6.91"	800mm x 439.5mm x 88.9mm (2U) 31.5" x 17.3" x 3.5"
Net Weight kg (CPU, DRAM & HDD not included)	52 kg	24 kg
Gross Weight kg (GPU, DRAM & HDD not included, Packing included)	62 kg	34.8 kg
Power Supply (Following different configuration by region)	2+2 Redundant 3000W/2600W 80 PLUS Titanium Power Supply 2+1 Redundant 30000W/2600W 80 PLUS Titanium Power Supply	1+1 Redundant 2600W 80 PLUS Titanium Power Supply

For details, please visit our website.
All specs are subject to change without any prior notice.

RS720Q-E11-RS8U

RS720-E11-R24U

RS720-E11-R12U

	RS720Q-E11-RS8U	RS720-E11-R24U	RS720-E11-R12U
Motherboard	Z13PH-D16	Z13PP-D32	Z13PP-D32
Processor	Per node: 2 x Socket P(LGA4677) 4th Gen Intel® Xeon® Scalable Processors Family (with Air cool up to 205W, with Liquid cool up to 350W)	2 x Socket P (LGA 4677) 4th Gen Intel® Xeon® Scalable Processors Family (up to 350w)	2 x Socket P (LGA 4677) 4th Gen Intel® Xeon® Scalable Processors Family (up to 350w)
Chipset	Intel® C741A Chipset	Intel® C741 Chipset	Intel® C741 Chipset
Memory	Per node: 16 x DIMM slots DDR5 up to 4800 RDIMM (1DP) Maximum 2TB + 4TB (DDR5 + Crow Pass)	32 x DIMM slots DDR5 up to 4800 RDIMM (1DP)/4400(2DPC) Maximum 4 TB + 8 TB (DDR5 + Crow Pass)	32 x DIMM slots DDR5 up to 4800 RDIMM (1DP)/4400(2DPC) Maximum 4 TB + 8 TB (DDR5 + Crow Pass)
VGA	Aspeed AST2600 64MB	Aspeed AST2600 64MB	Aspeed AST2600 64MB
Graphic	N/A	Up to 2 single-slot GPU (FHFL) or 1 double-slot GPU (FHFL) support	Up to 4 double-slot GPU cards
Expansion Slots	Per node: up to 2 slots 1 x PCIe Gen5 x16 (HHHL) 1 x PCIe Gen5 x16 (LP)	Up to 4 PCIe Gen5 slots 2 x PCIe Gen5 x8 or 1 x PCIe Gen5 x16 (FHFL) 1 x OCP3.0 (FHFL) 1 x PCIe Gen5 x16 (LP)	6 x PCIe Gen5 x8 link or 3 x PCIe Gen5 x16 link (FHFL or FHHL) 1 x PCIe Gen5 x16 link (FHHL) 1 x PCIe Gen5 x16 link (LP) 1 x OCP 3.0
Storage Controller	Per node: Support RAID 0, 1 Optional Broadcom SAS3008 12G Controller	N/A	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i
Storage Bays	8 x 2.5" Hot-Swap drive bays (NVMe/SATA/SAS*) *SATA/SAS support from optional CB board	Front Bays: 24 x 2.5" Hot-Swap drive bays Support up to 12 x NVMe/SATA/SAS*+ 12x NVMe *RAID card is required to support SAS hard drives	12 x 3.5" Hot-Swap drive bays 8 x NVMe/SAS*/SATA + 4 x NVMe/SATA *PIKE/RAID card is required to support SAS hard drives
Networking	Per node: 2 x 10GbE LAN ports 1 x Management port	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port
Optical Drive	N/A	N/A	N/A
Front I/O Ports	N/A	N/A	N/A
Rear I/O Ports	Per node: 2 x USB 3.2 Gen1 ports 1 x VGA port 2 x 10GbE ports 1 x Management port	2 x USB 3.1 Gen1 ports 1 x VGA port 1 x Management port 2 x 10GbE or 4 x 1GbE LAN port	2 x USB 3.1 Gen1 ports 1 x VGA port 1 x Management port 2 x 10GbE or 4 x 1GbE LAN port
Security Solution	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	800mm x 444mm x 88mm (2U) 31.5" x 17.48" x 3.46"	800mm x 444mm x 88mm (2U) 31.5" x 17.48" x 3.46"	840mm x 447mm x 88mm(2U) 33.07" x 17.60" x 3.46"
Net Weight kg (CPU, DRAM & HDD not included)	37.5 kg	20.3 kg	14.94 kg
Gross Weight kg (GPU, DRAM & HDD not included, Packing included)	46.5 kg	26.77 kg	19.94 kg
Power Supply (Following different configuration by region)	1+1 Redundant 3000W 80 PLUS Titanium Power Supply	1+1 Redundant 2600W 80 PLUS Titanium Power Supply 1+1 Redundant 1600W 80 PLUS Platinum Power Supply	1+1 Redundant 2600W 80 PLUS Titanium Power Supply 1+1 Redundant 1600W 80 PLUS Platinum Power Supply

For details, please visit our website.
All specs are subject to change without any prior notice.

Rack Servers

RS700-E11-RS12U

RS700-E11-RS4U

ESC-N8-E11

	RS700-E11-RS12U	RS700-E11-RS4U	ESC-N8-E11
Motherboard	Z13PP-D32	Z13PP-D32	Z13PN-D32
Processor	2 x Socket P (LGA 4677) 4th Gen Intel® Xeon® Scalable Processors Family (up to 350w)	2 x Socket P (LGA 4677) 4th Gen Intel® Xeon® Scalable Processors Family (up to 350w)	2 x Socket P (LGA 4677) 4th Gen Intel® Xeon® Scalable Processors Family (up to 350w)
Chipset	Intel® C741 Chipset	Intel® C741 Chipset	Intel® C741 Chipset
Memory	32 x DIMM slots DDR5 up to 4800 RDIMM (1DP)/4400(2DPC) Maximum 4 TB + 8 TB (DDR5 + Crow Pass)	32 x DIMM slots DDR5 up to 4800 RDIMM (1DP)/4400(2DPC) Maximum 4 TB + 8 TB (DDR5 + Crow Pass)	32 x DIMM slots DDR5 4800/4400 RDIMM/RDIMM 3DS Maximum 4 TB + 8 TB (DDR5 + Crow Pass)
VGA	Aspeed AST2600 64MB	Aspeed AST2600 64MB	Aspeed AST2600 64MB
Graphic	Up to 2 single-slot or 1 double-slot GPU cards	Up to 2 single-slot or 1 double-slot GPU cards	NVIDIA® HGX 8-GPU baseboard
Expansion Slots	Up to 3+1 PCIe slot 1 x OCP 3.0 or PCIe Gen5 x16 (FHFL) 1 x PCIe Gen5 x16 (FHFL) 1 x PCIe Gen5 x8 (LP, internal) 1 x PCIe Gen5 x16 (LP)	Up to 3+1 PCIe slot 1 x OCP 3.0 or PCIe Gen5 x16 (FHFL) 1 x PCIe Gen5 x16 (FHFL) 1 x PCIe Gen5 x8 (LP, internal) 1 x PCIe Gen5 x16 (LP)	10 + 1* PCIe Gen5 slots [PCIe Switch directly] 4 x PCIe Gen5 LP (CPU1) + 4 x PCIe Gen5 LP (CPU2) [CPU directly] 1 x PCIe Gen5 x16 FHHL (CPU1) + 1 x PCIe Gen5 x16 FHHL (CPU2) *1 x Internal RAID Card
Storage Controller	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i	8 x NVMe from PCIe Switch, 2 x NVMe from CPU2, 8 x SATA 6Gb/s ports, Optional Kits: Broadcom Mega RAID 9560-16i
Storage Bays	12 x 3.5" Hot-Swap drive bays 12 x NVMe/SATA/SAS* *PIKE/RAID card is required to support SAS hard drives	4 x 3.5" Hot-Swap drive bays 4 x NVMe/SATA/SAS* *PIKE/RAID card is required to support SAS hard drives	10 x 2.5" Hot-Swap drive bays (8 x NVMe, 2 x NVMe/SATA/SAS*) 2 x M.2 support (Gen5 x8 link) (PLX 89088 SKU only) *RAID card is required to support SAS hard drives
Networking	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port	4 x 1GbE or 2 x 10GbE LAN port 1 x Management port	2 x10GbE LAN ports 1 x Management port
Optical Drive	N/A	N/A	N/A
Front I/O Ports	N/A	N/A	4 x USB3.1 Gen1 ports 1 x VGA port 2 x 10Gb LAN module 1 x Management port
Rear I/O Ports	2 x USB 3.1 Gen1 ports 1 x VGA port 1 x Management port 2 x 10GbE or 4 x 1GbE LAN port	2 x USB 3.1 Gen1 ports 1 x VGA port 1 x Management port 2 x 10GbE or 4 x 1GbE LAN port	N/A
Security Solution	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module
Management Solution	ASUS Control Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	842.5mm x 439.5mm x 44mm (1U) 33.17" x 17.3" x 1.73"	842.5mm x 439.5mm x 44mm (1U) 33.17" x 17.3" x 1.73"	885mm x 447mm x 306.65mm (7U) 34.84" x 17.6" x 12.07"
Net Weight kg (CPU, DRAM & HDD not included)	13.93 kg	19.93 kg	100 kg
Gross Weight kg (GPU, DRAM & HDD not included, Packing included)	18.93 kg	25.77 kg	TBD
Power Supply (Following different configuration by region)	1+1 Redundant 1200W 80 PLUS Platinum Power Supply 1+1 Redundant 1600W 80 PLUS Titanium Power Supply	1+1 Redundant 1200W 80 PLUS Platinum Power Supply 1+1 Redundant 1600W 80 PLUS Titanium Power Supply	3+3 Redundant 3000W 54V 80 PLUS Titanium Power Supply 4+1 Redundant 3000W 54V 80 PLUS Titanium Power Supply

For details, please visit our website.
All specs are subject to change without any prior notice.

ESC8000-E11

ESC8000-E11P

ESC4000-E11

	ESC8000-E11	ESC8000-E11P	ESC4000-E11
Motherboard	Z13PG-D32	Z13PG-D32	Z13PG-D16/V2
Processor	2 x Socket P (LGA 4677) 4th Gen Intel® Xeon® Scalable Processors Family (up to 350w)	2 x Socket P (LGA 4677) 4th Gen Intel® Xeon® Scalable Processors Family (up to 350w)	2 x Socket P (LGA 4677) 4th Gen Intel® Xeon® Scalable Processors Family (up to 350w)
Chipset	Intel® C741 Chipset	Intel® C741 Chipset	Intel® C741 Chipset
Memory	32 x DIMM slots DDR5 4800/4400 RDIMM/RDIMM 3DS Maximum 4TB + 8TB (DDR5 + Crow Pass)	32 x DIMM slots DDR5 4800/4400 RDIMM/RDIMM 3DS Maximum 4TB + 8TB (DDR5 + Crow Pass)	16 x DIMM slots DDR5 4800/4400 RDIMM/3DS RDIMM Maximum 4TB
VGA	Aspeed AST2600 64MB	Aspeed AST2600 64MB	Aspeed AST2600 64MB
Graphic	Up to 8 double-slot GPU cards	Up to 8 double-slot GPU cards	Up to 4 double-slot GPU cards
Expansion Slots	8 x PCIe x16 slot (Gen5, FHFL) for dual-slot GPU card SKU-1: (3 PCIe) Front: 1 x PCIe x8 slot (Gen5 ,LPHL) for HBA/RAID cards Rear: 1 x PCIe x16 slot (Gen5 ,FHFL) for NIC card 1 x PCIe x8 slot (Gen5 FHFL) for NIC Card SKU-2: (2 PCIe + 2 NVMe) Front: 1 x PCIe x8 slot (Gen5 ,LPHL) for HBA/RAID cards. Rear: 1 x PCIe x16 slot (Gen5 ,FHFL) for NIC card SKU-3: (1x PCIe + 1x OCP3.0 + 2 x NVMe) Front: 1 x PCIe x8 slot (Gen5 ,LPHL) for HBA/RAID cards Rear: 1 x PCIe x16 slot (Gen5 ,FHFL) for OCP socket	8x PCIe x16 slot (Gen5, FHFL) for dual-slot GPU card SKU-1: Front: 1 x PCIe x16 slot (Gen5 ,LPHL) for HBA/RAID cards Rear: 4 x PCIe x16 slot (Gen5 ,FHFL) for NIC card SKU-2: Front: 1 x PCIe x16 slot (Gen5 ,LPHL) for HBA/RAID cards Rear: 3 x PCIe x16 slot (Gen5 ,FHFL) for NIC card 1 x PCIe x16 slot (Gen5 ,FHFL) for OCP socket	Rear: 4 x PCIe x16 slots (Gen5 x16 link, FHFL) for dual-slot GPU cards or 8 x PCIe x16 slots (Gen5 x8 link, FHFL) for single-slot GPU cards 2 x PCIe x16 slots (Gen5 x16 link, FHHL) Front: 1 x PCIe x8 slot (Gen4 x8 link, LPHL) Only for SKU1
Storage Controller	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i	Optional kits: ASUS PIKE II 3008 HBA card ASUS PIKE II 3108 RAID card Broadcom Mega RAID 9540-8i Broadcom Mega RAID 9560-16i
Storage Bays	Front Bays: 8 x 3.5" Hot-Swap drive bays (backplane supports up to 8 x NVMe/SATA/SAS*) 1 x M.2 support (Gen3 x4 link) *RAID card is required to support SAS hard drives	Front Bays: 8 x 3.5" Hot-Swap drive bays (backplane supports up to 8 x NVMe/SATA/SAS*) 1 x M.2 support (Gen3 x4 link) *RAID card is required to support SAS hard drives	SKU-1:2 x 2.5" SATA/SAS*/NVMe + 2 x 3.5" SATA/SAS*/NVMe + 2 x 3.5" SATA/SAS* SKU-2:2 x 2.5" SATA/SAS*/NVMe + 4 x 3.5" SATA/SAS*/NVMe (Occupy 1 x PCIe x8 link), 1 x M.2 socket (Gen3 x4 link PCIe mode, up to 2280) *RAID card is required to support SAS hard drives **For SKU1 additional 2 x NVMe support required a RAID card
Networking	2 x 1GbE or 10GbE LAN ports 1 x Management port	2 x GbE or 10GbE LAN ports 1 x Management port	2 x 1GbE LAN ports 1 x Management port
Optical Drive	N/A	N/A	N/A
Front I/O Ports	2 x USB 3.2 Gen1 ports	2 x USB 3.2 Gen1 ports	4 x USB 3.2 Gen1 ports
Rear I/O Ports	1 x VGA port 1 x COM port 2 x 1GbE or 10GbE LAN ports 1 x Management port	1 x VGA port 1 x COM port 2 x 1GbE or 10GbE LAN ports 1 x Management port	2 x USB 3.2 Gen1 ports 1 x VGA port 2 x 1GbE LAN ports 1 x Management port
Security Solution	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module	Optional TPM module Optional PFR module
Management Solution	ASUS Contorl Center ASUS ASMB11-iKVM (on-board)	ASUS Contorl Center ASUS ASMB11-iKVM (on-board)	ASUS Control Center ASUS ASMB11-iKVM (on-board)
Dimension	780mm x 439mm x 175.6mm (4U) 30.71" x 17.28" x 6.91"	780mm x 439mm x 175.6mm (4U) 30.71" x 17.28" x 6.91"	800mm x 439.5mm x 88.9mm (2U) 31.5" x 17.3" x 3.5"
Net Weight kg (CPU, DRAM & HDD not included)	49 kg	52 kg	TBD
Gross Weight kg (GPU, DRAM & HDD not included, Packing included)	59 kg	62 kg	TBD
Power Supply (Following different configuration by region)	2+2 Redundant 3000W/2600W 80 PLUS Titanium Power Supply 2+1 Redundant 30000W/2600W 80 PLUS Titanium Power Supply	2+2 Redundant 3000W/2600W 80 PLUS Titanium Power Supply 2+1 Redundant 3000W/2600W 80 PLUS Titanium Power Supply	1+1 Redundant 2600W 80 PLUS Titanium Power Supply

For details, please visit our website.
All specs are subject to change without any prior notice.


ASUS
IN SEARCH OF INCREDIBLE
spec®
NO.1
World Records
Leading computing performance
Dual-and single-socket servers
No.1
Achieved 1,183+ world-record benchmarks with SPEC CPU® 2017, and still growing
No.1
World's most power-efficient servers on SPECpower
No.1
2P server on SPECjbb-Composite and SPECjbb-Multi-JVM performance
No.1
Ranked Top 20 on the Top 500 list of the world's most powerful supercomputers and Top 10 on the Green500 list in 2018 by supporting TAIWANIA 2
No.1
Ranked No.1 on the Green500 list of energy-efficient supercomputers in 2014