

# AMD EPYC™ 9005 Processors

## Optimized Performance for AI-enable Data Center Workloads

General Purpose Storage/All-flash NVMe/Multi-node/GPU Barebones/Server Motherboards



**AMD**  
**EPYC**

# Server Platform Naming Rule

## TURIN2D16-2T/ROT

Character	Representation	Options
N	CPU Type	<ul style="list-style-type: none"><li>TURIN, GENOA, BERGAMO = AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors</li></ul>
N+1	Number of CPU Supported	<ul style="list-style-type: none"><li>2 = Dual</li><li>NA = Single</li></ul>
Others	Number of DIMM Supported	<ul style="list-style-type: none"><li>D8 = 8 DIMM</li><li>D12 = 12 DIMM</li><li>D16 = 16 DIMM</li><li>D24 = 24 DIMM</li><li>D48 = 48 DIMM</li></ul>
	Form Factor	<ul style="list-style-type: none"><li>H = Half-width</li><li>UD = Deep Micro-ATX (10.4"x10.5")</li><li>T = T-shape</li></ul>
	Feature	<ul style="list-style-type: none"><li>N = Non-shading side-by-side CPU</li><li>G = For GPU server</li><li>ROT = Root of Trust</li><li>Q = OCP slot not in standard I/O area, multi-SlimSAS to the front</li><li>M3 = OCP NIC 3.0 slot</li><li>2Q = Dual 25GbE SFP28 by Broadcom BCM57414</li><li>2T = Dual 10GbE RJ45 by Intel X710</li><li>2T/X550 = Dual 10GbE RJ45 by Intel X550</li><li>2T/BCM = Dual 10GbE RJ45 by Broadcom BCM57416</li><li>2L = Dual 1GbE RJ45 by Intel i210</li><li>2L+ = Dual 1GbE RJ45 by Intel i350</li></ul>

## 1U4L4E-GENOA/2T

Character	Representation	Options
1 <sup>st</sup> + 2 <sup>nd</sup>	System Height	<ul style="list-style-type: none"><li>1U = 1U chassis</li><li>2U = 2U chassis</li><li>4U = 4U chassis</li><li>10U = 10U chassis</li><li>20U = 20U chassis</li></ul>
Others	Drive Bay	<ul style="list-style-type: none"><li>L = 3.5" HDD Bay</li><li>S = 2.5" HDD/SSD Bay</li><li>E = U.2 Bay</li><li>E1S = E1.S Bay</li></ul>
	Feature	<ul style="list-style-type: none"><li>G = Dual-slot cards supported</li><li>X = NVIDIA HGX platform integrated</li><li>M = AMD Instinct MI300X/MI325X platform integrated</li><li>N = Number of nodes</li><li>F = Front I/O</li><li>EVAC = Extended Volume Air Cooling heatsink</li></ul>



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# Content

BAREBONE		
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## About ASRock Rack

ASRock Rack Inc., established in 2013, specialized in the field of Cloud Computing server hardware. Inheriting ASRock's design concepts, Creativity, Consideration and Cost-effectiveness, the company is dedicated bringing the Server Industry out of the box thinking with the passion to innovate. Leveraged by ASRock's growing momentum and distribution channels, this young and vibrant company targets at the booming market of cloud computing and commits to serve the market with user friendly, eco-friendly, Do-It-Yourself Server hardware, featuring flexible and reliable products.

### GPU Servers

Accelerating imaginations and breakthroughs with cutting-edge technology, the ASRock Rack GPU server lineup unlocks unmatched performance, excelling across a wide range of workloads including AI, HPC, cloud gaming, and video rendering for cloud, on-prem, and edge environments.



### All-Flash NVMe Storage Servers

Built to support a high density of NVMe drives, the ASRock Rack All-Flash storage server delivers unparalleled speed, ultra-low latency, and high throughput—making it ideal for AI, HPC, CDN, and performance-driven environments where fast, reliable data access is critical.

### Multi-Node Servers

Maximize performance and efficiency with ASRock Rack Multi-Node Servers—architected to deliver high-density computing, optimized resource utilization, and seamless scalability for modern data centers, cloud computing and web hosting.

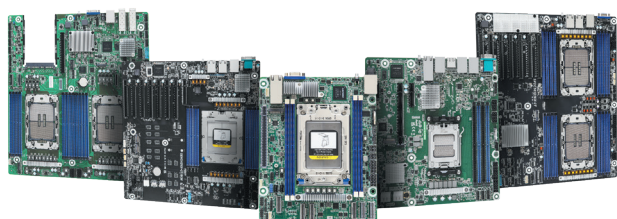


### OCP

ASRock Rack OCP solutions are designed to enhance power efficiency, streamline rack integration, and promote sustainability in alignment with an open standard.

### Rack Servers

ASRock Rack extensive portfolio of general purpose, compute, and storage servers in 1U, 2U, or 4U for diverse workloads from small business, virtualization, VDI, e-commerce to hyper-converged infrastructure, and more.



### Server Motherboards

Tailor your servers and workstations with ASRock Rack versatile motherboards, powered by high-performance x86 and ARM-based processors. Choose from both single and dual socket options, and a wide range of form factors, to build the ideal solution for your unique computing needs.

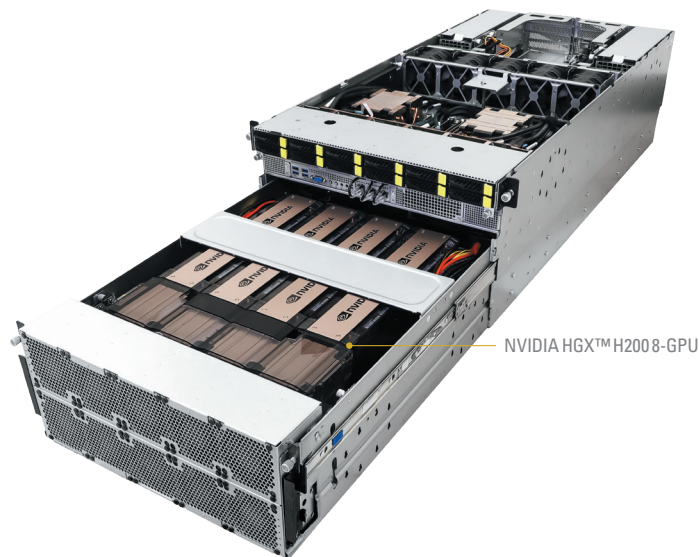
# 6U8X-TURIN2 SYN H200



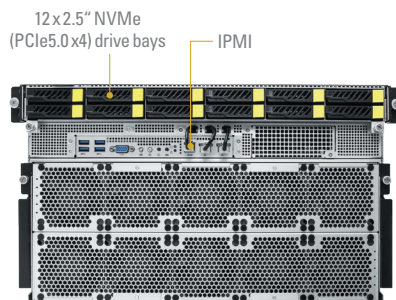
NVIDIA HGX  
H200



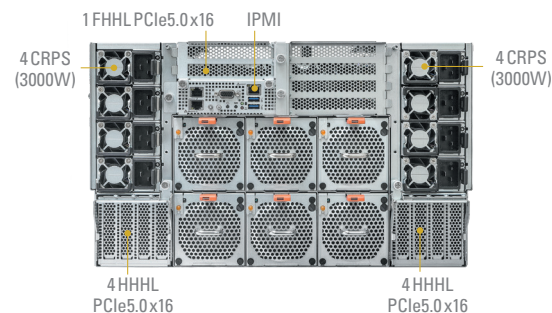
PCI-E 5.0



NVIDIA HGX™ H200 8-GPU



12x2.5" NVMe  
(PCIe5.0x4) drive bays IPMI



1 FHHL PCIe5.0x16 IPMI  
4 CRPS (3000W) 4 CRPS (3000W)  
4 HHHL PCIe5.0x16 4 HHHL PCIe5.0x16

## Application

- Generative AI and Virtual Assistants
- Large Language Models
- AI Training and Inference

## 6U8X-TURIN2 SYN H200

CPU	Socket	1+1 Socket SP5 (LGA6096); AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 500W
GPU	Supported GPU	Supports eight NVIDIA H200 GPUs
PCIe Switch	PCIe Switch	PEX89104
	Operation Mode	Synthetic mode for optimized performance of GPU-to-CPU, GPUDirect RDMA NIC, and GPUDirect Storage
DIMM	Slot	12+12 DDR5 (1DPC)
System	Form Factor	6U Rackmount
Physical Status	Chassis Dimension	930 x 448 x 264.7mm (36.6" x 17.6" x 10.4")
Front Panel	Buttons	Power w/ LED, Reset, NMI, UID
	LEDs	System Fault LED, HDD Activity LED
	I/O	2 RJ45 (1GbE) by Intel® i350-AM2
		1 dedicated IPMI 4 Type-A (USB3.2 Gen1)
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i350-AM2, shares with front panel 1 dedicated IPMI, shares with front panel
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID w/ LED
Expansion Slots	Rear	8 HHHL PCIe5.0x16 1 FHHL PCIe5.0x16
Drive Bay/ Storage	External	8 Hot-swap 2.5" NVMe (PCIe5.0x4) drive bays from PCIe Switch 4 Hot-swap 2.5" NVMe (PCIe5.0x4) drive bays from CPU
	Internal	1 M-key (PCIe3.0x2 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] 1 M-key (PCIe3.0x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU1]
Power Supply	Module	4+4, 80-PLUS Titanium, 3000W CRPS
System Cooling	Fan	21 PWM 80x80 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory



# 6U8M-TURIN2 SYN MI325X

## 6U8M-TURIN2 SYN MI300X

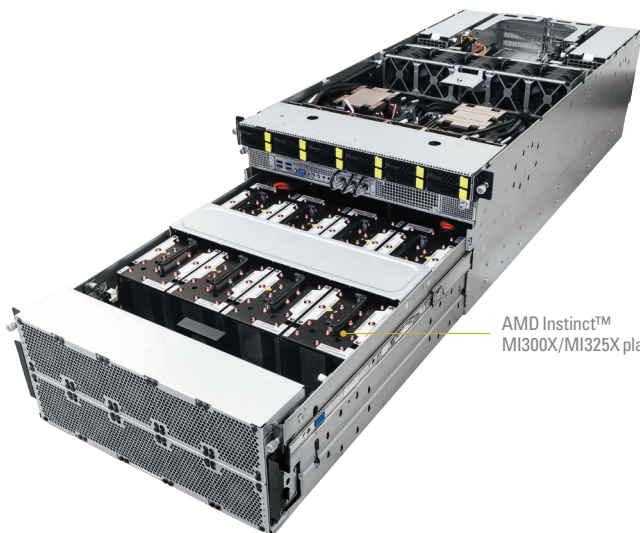
## 6U8M-GENOA2 MI300X



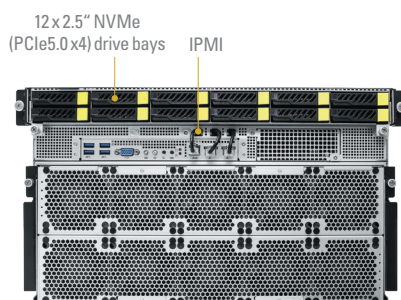
AMD Instinct™  
MI325X/MI300X



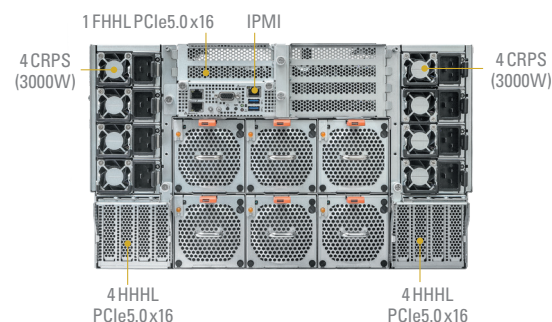
PCI-E 5.0



AMD Instinct™  
MI300X/MI325X platform



12 x 2.5" NVMe  
(PCIe 5.0 x4) drive bays IPMI



1 FHHL PCIe 5.0 x16 IPMI  
4 CRPS (3000W) 4 HHHL PCIe 5.0 x16  
4 HHHL PCIe 5.0 x16

### Application

- AI Training and Inference
- Intelligent Applications
- High Performance Computing

		6U8M-TURIN2 SYN MI325X	6U8M-TURIN2 SYN MI300X	6U8M-GENOA2 MI300X
CPU	Socket	1+1 Socket SP5 (LGA6096), supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors		
	TDP	Up to 500W		
GPU	Supported GPU	AMD Instinct™ MI325X 8-GPU with Infinity Fabric™ Links		
PCIe Switch	PCIe Switch	PEX89104		
	Operation Mode	Synthetic mode for optimized performance of GPU-to-CPU, GPUDirect RDMA NIC, and GPUDirect Storage		
DIMM	Slot	12+12 DDR5 (1DPC)		
System	Form Factor	6U Rackmount		
Physical Status	Chassis Dimension	930 x 448 x 264.7mm (36.6" x 17.6" x 10.4")		
Front Panel	Buttons	Power w/ LED, Reset, NMI, UID		
	LEDs	System Fault LED, HDD Activity LED		
	I/O	2 RJ45 (1GbE) by Intel® i350-AM2 ; 1 dedicated IPMI ; 4 Type-A (USB3.2 Gen1)		
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i350-AM2, shares with front panel		
		1 dedicated IPMI, shares with front panel		
	USB	2 Type-A (USB3.2 Gen1)		
Expansion Slots	Others	1 DB15 (VGA), 1 UID w/ LED		
	Rear	8 HHHL PCIe 5.0 x16 ; 1 FHHL PCIe 5.0 x16		
Drive Bay/Storage	External	8 Hot-swap 2.5" NVMe (PCIe 5.0 x4) drive bays from PCIe switch		
		4 Hot-swap 2.5" NVMe (PCIe 5.0 x4) drive bays from CPU		
	Internal	1 M-key (PCIe 3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] 1 M-key (PCIe 3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU1]		
Power Supply	Module	4+4, 80-PLUS Titanium, 3000W CRPS		
System Cooling	Fan	21 PWM 80x80 mm fans		
Management		ASPEED BMC AST2600		
Security		TPM by optional accessory		

# 4U8X-TURIN2/DLC SYN B200



NVIDIA HGX  
B200

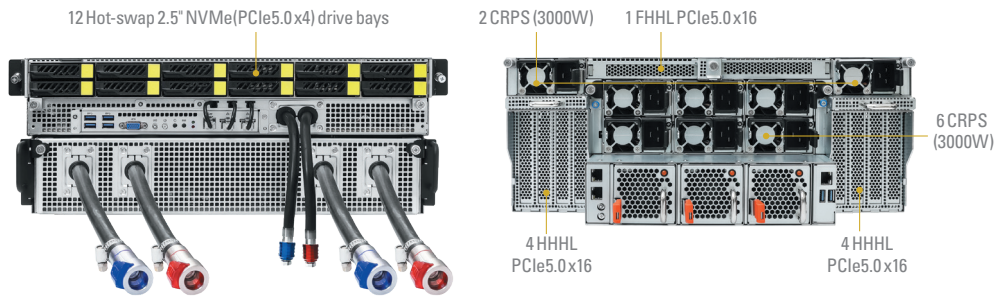


PCI-E 5.0



## Application

- AI Real-time Inference
- Large Language Models
- Mixture-of-Experts Models



## 4U8X-TURIN2/DLC SYN B200

<b>CPU</b>	Socket TDP	1+1 Socket SP5 (LGA6096); AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors Up to 500W
<b>GPU</b>	Supported GPU	Supports eight NVIDIA B200 GPUs
<b>PCIe Switch</b>	PCIe Switch	PEX89104
	Operation Mode	Synthetic mode for optimized performance of GPU-to-CPU, GPUDirect RDMA NIC, and GPUDirect Storage
<b>DIMM</b>	Slot	12+12 DIMM (1DPC)
<b>System</b>	Form Factor	4U Rackmount
<b>Physical Status</b>	Chassis Dimension	900 x 448 x 175mm (35.4" x 17.6" x 6.9")
<b>Front Panel</b>	Buttons	Power button w/ LED, Reset button, NMI button, UID button
	LEDs	System fault LED, HDD activity LED
	I/O	2 RJ45 (1GbE) by Intel i350, shares with Rear IO
		1 dedicated IPMI, shares with Rear IO
<b>Rear IO</b>	RJ45	4 Type-A (USB3.2 Gen1)
		1 DB15 (VGA)
	Others	2 RJ45 (1GbE) by Intel® i350, shares with Front Panel 1 dedicated IPMI, shares with Front Panel UID button, 1 DB15 (VGA), 2 Type-A (USB3.2 Gen1)
<b>Expansion Slots</b>	Rear	8 FHHL PCIe5.0x16 from PCIe Switch
		1 FHHL PCIe5.0x16 from CPU
<b>Drive Bay/ Storage</b>	External	8 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays from PCIe Switch
	Internal	4 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays from CPU
		1 M-key (PCIe3.0 x2 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] 1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU1]
<b>Power Supply</b>	Module	4+4, 80-PLUS Titanium, 3000W CRPS
<b>System Cooling</b>	Fan	10 PWM 60x56 mm fans
<b>Management</b>		ASPEED BMC AST2600
<b>Security</b>		TPM by optional accessory



# 4U8M-TURIN2/DLC SYN MI325X



AMD Instinct™  
MI325X

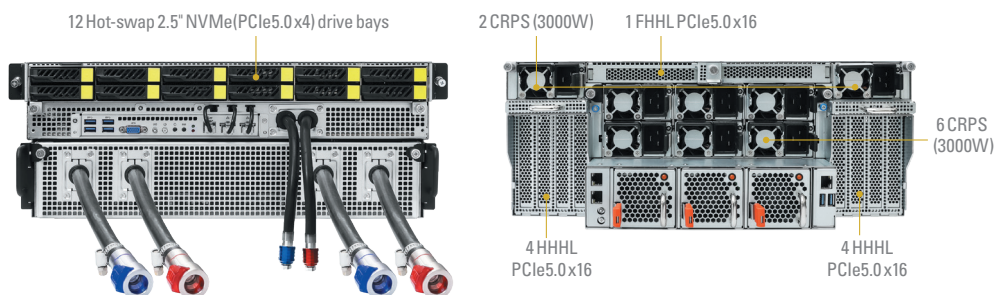


PCI-E 5.0



## Application

- AI Real-time Inference
- Large Language Models
- Mixture-of-Experts Models



## 4U8M-TURIN2/DLC SYN MI325X

CPU	Socket	1+1 Socket SP5 (LGA6096); AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 500W
GPU	Supported GPU	AMD Instinct™ MI325X 8-GPU with Infinity Fabric™ Links
PCIe Switch	PCIe Switch	PEX89104
	Operation Mode	Synthetic mode for optimized performance of GPU-to-CPU, GPUDirect RDMA NIC, and GPUDirect Storage
DIMM	Slot	12+12 DIMM (1DPC)
System	Form Factor	4U Rackmount
Physical Status	Chassis Dimension	900 x 448 x 175mm (35.4" x 17.6" x 6.9")
Front Panel	Buttons	Power button w/ LED, Reset button, NMI button, UID button
	LEDs	System fault LED, HDD activity LED
	I/O	2 RJ45 (1GbE) by Intel i350, shares with Rear IO
		1 dedicated IPMI, shares with Rear IO
Rear IO	RJ45	4 Type-A (USB3.2 Gen1)
		1 DB15 (VGA)
	Others	2 RJ45 (1GbE) by Intel® i350, shares with Front Panel
Expansion Slots	Rear	1 dedicated IPMI, shares with Front Panel
		UID button, 1 DB15 (VGA), 2 Type-A (USB3.2 Gen1)
Drive Bay/ Storage	External	8 FHHL PCIe5.0x16 from PCIe Switch
		1 FHHL PCIe5.0x16 from CPU
	Internal	8 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays from PCIe Switch
		4 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays from CPU
Power Supply	Module	1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0]
		1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU1]
System Cooling	Fan	4+4, 80-PLUS Titanium, 3000W CRPS
Management		10 PWM 60x56 mm fans
Security		ASPEED BMC AST2600
		TPM by optional accessory

# 8U8X-TURIN2 SYN B200

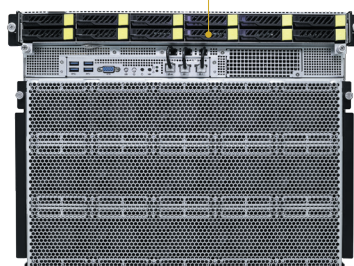
NVIDIA HGX  
B200

PCI-E 5.0

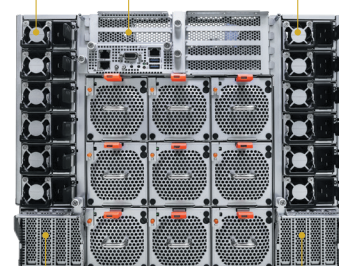


NVIDIA HGX™ B200 8-GPU

12 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays



6 CRPS (3000W) 1 FHHL PCIe5.0 x16 6 CRPS (3000W)

4 HHHL  
PCIe5.0 x164 HHHL  
PCIe5.0 x16

## Application

- Generative AI and Virtual Assistants
- Large Language Models
- AI Training and Inference

### 8U8X-TURIN2 SYN B200

CPU	Socket TDP	1+1 Socket SP5 (LGA6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors Up to 500W
GPU	Supported GPU	Supports eight NVIDIA B200 GPUs
PCIe Switch	PCIe Switch	PEX89104
	Operation Mode	Synthetic mode for optimized performance of GPU-to-CPU, GPUDirect RDMA NIC, and GPUDirect Storage
DIMM	Slot	12+12 DIMM (1DPC)
System	Form Factor	8U Rackmount
Physical Status	Chassis Dimension	930 x 448 x 353.6mm (36.6" x 17.6" x 13.9")
Front Panel	Buttons	Power button w/ LED, Reset button, NMI button, UID button
	LEDs	System fault LED, HDD activity LED
	I/O	2 RJ45 (1GbE) by Intel® i350, shares with Rear IO
		1 dedicated IPMI, shares with Rear IO
Rear IO	RJ45	4 Type-A (USB3.2 Gen1)
		1 DB15 (VGA)
	Others	2 RJ45 (1GbE) by Intel® i350, shares with Front Panel
Expansion Slots	Rear	1 dedicated IPMI, shares with Front Panel
		1 UID button, 1 DB15 (VGA), 1 Type-A (USB3.2 Gen1)
		8 HHHL PCIe5.0 x16
Drive Bay/ Storage	External	1 FHHL PCIe5.0 x16
		8 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays from PCIe Switch
	Internal	4 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays from CPU
		1 M-key (PCIe3.0 x2 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] 1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU1]
Power Supply	Module	6+6, 80-PLUS Titanium, 3000W CRPS
System Cooling	Fan	29 PWM 80x80 mm fans + 4 PWM 40x40 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory



# 1U1G-GENOA/M3



OCP NIC 3.0



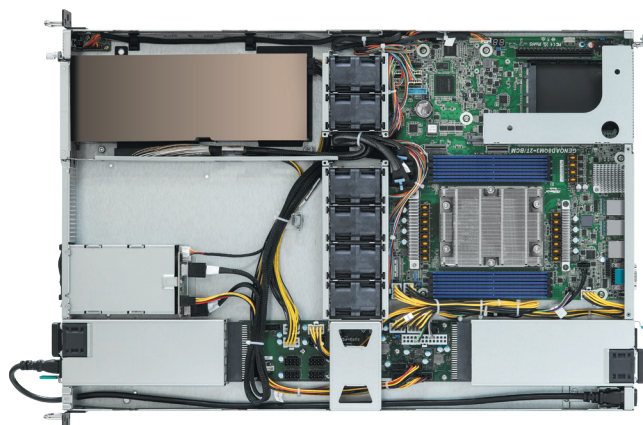
PCI-E 5.0



GPGPU



10Gbase-T



2 Hot-swap 2.5" NVMe drive bays



1 FHFL dual-slot PCIe5.0 x16

1 CRPS (1600W)



IPMI

1 FHHL PCIe5.0 x16

1 CRPS (1600W)

2 RJ45  
(10GbE)

1 OCP NIC 3.0

## Application

- Rendering
- Virtualization
- Visualization
- Deep Learning

## 1U1G-GENOA/M3

<b>CPU</b>	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
<b>DIMM</b>	Slot	8 DDR5 (1DPC)
<b>System Physical Status</b>	Form Factor	1U Rackmount
	Chassis Dimension	653.5 x 438.0 x 43.5 mm (25.73" x 17.24" x 1.71")
<b>Front Panel</b>	Buttons	Power button w/ LED, UID button w/ LED, System Reset
	LEDs	System Fault, LAN1/LAN2 Activity
<b>Rear IO</b>	I/O	2 Type-A (USB3.2 Gen1)
	RJ45	2 RJ45 (10GbE) by Intel® Broadcom BCM57416
		1 dedicated IPMI
	Others	1 DB15 (VGA), 1 DB9 (COM)
<b>Expansion Slots</b>	Front	1 FHFL dual-slot PCIe5.0 x16
	Rear	1 FHHL PCIe5.0 x16 via RB1UX16R_G5
		1 OCP NIC 3.0 (PCIe5.0 x16)
<b>Drive Bay/ Storage</b>	External	2 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
	Internal	1 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor
		1 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 2280 form factor
<b>Power Supply</b>	Module	1+1, 1600W CRPS
<b>System Cooling</b>	Fan	6 PWM dual-rotor 40x56 mm fans
<b>Management</b>		ASPEED BMC AST2600
<b>Security</b>		SPI TPM by optional accessory

# 2U2G-GENOA



OCP NIC 3.0



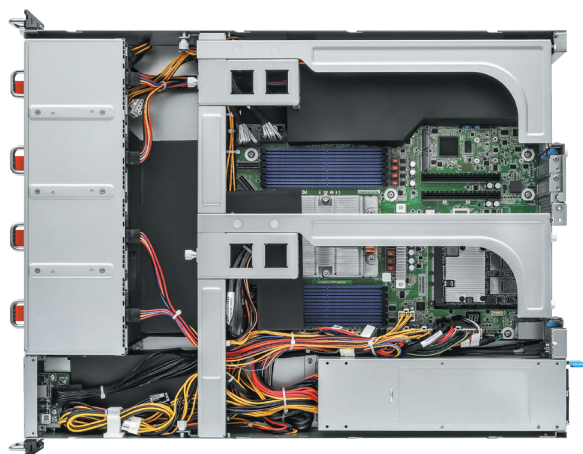
PCI-E 5.0



GPGPU

## Application

- AI Inference
- Virtualization
- Visual Computing



2 Hot-swap 2.5" NVMe  
(PCIe 4.0 x4) drive bays



2 FHFL dual-slot  
PCIe 5.0 x16



1+1 CRPS  
(2000W)

IPMI

1 OCP NIC 3.0  
(PCIe 5.0 x16)

2 HHHL single-slot  
PCIe 5.0 x16

## 2U2G-GENOA

CPU	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
DIMM	Slot	12 DDR5 (1DPC)
System Physical	Form Factor	2U Rackmount
Status	Chassis Dimension	580 x 438 x 87 mm (22.8" x 17.2" x 3.4")
Front Panel	Buttons	Power button w/ LED, ID button w/ LED, System reset
	LEDs	HDD Activity, LAN 1/2, System Event
	I/O	2 Type-A (USB 3.2 Gen1)
Rear IO	RJ45	1 dedicated IPMI
	Others	2 Type-A (USB 3.2 Gen1), 1 UID button, 1 DB15 (VGA), 1 DB9 (COM)
Expansion Slots	Rear	2 FHFL dual-slot PCIe 5.0 x16 2 HHHL single-slot PCIe 5.0 x16 1 OCP NIC 3.0 (PCIe 5.0 x16)
Drive Bay/Storage	External	2 Hot-swap 2.5" NVMe (PCIe 4.0 x4) drive bays
	Internal	2 M-key (PCIe 5.0 x4 or SATA 6Gb/s), supports 22110/2280/2260 form factor
Power Supply	Module	1+1, 80-PLUS Titanium, 2000W CRPS
System Cooling	Fan	Front: 4 PWM Hot-swap 80x56 mm fans, Middle: 1 PWM fixed 40x28 mm fan
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

# 2U4G-GENOA/M3



OCP NIC 3.0



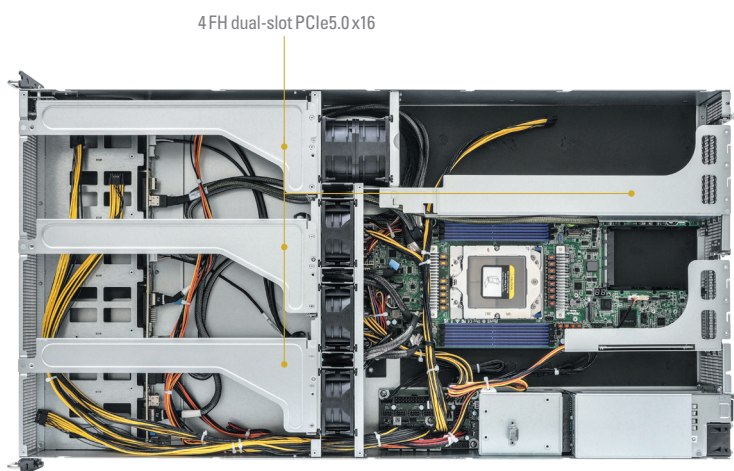
PCI-E 5.0



GP GPU

## Application

- Artificial Intelligence
- Machine Learning
- HPC
- Virtualization

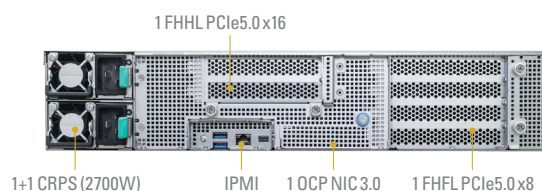


4 FH dual-slot PCIe5.0x16



4 hot-swap 2.5" NVMe

2 hot-swap 2.5" SATA



1 FHFL PCIe5.0x16

1+1 CRPS (2700W)

IPMI

1 OCP NIC 3.0

1 FHFL PCIe5.0x8

## 2U4G-GENOA/M3

CPU	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 400W
DIMM	Slot	8 DDR5 (1DPC)
System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	850 x 438 x 87.5 mm (33.5" x 17.2" x 3.5")
Front Panel	Buttons	Power, UID
	LEDs	System fault, UID, Power LEDs
	I/O	2 Type-A (USB2.0)
Rear IO	RJ45	1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 mini-DisplayPort (VGA), 1 UID button w/ LED
Expansion Slots	Front	3 FHFL dual-slot PCIe5.0 x16
	Rear	1 FHFL dual-slot PCIe5.0 x16
		1 OCP NIC 3.0 PCIe5.0 x16
		1 FHFL PCIe5.0 x16
		1 FHFL PCIe5.0 x8
Drive Bay/ Storage	External	4 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays
		2 Hot-swap 2.5" SATA drive bays
	Internal	2 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor
Power Supply	Module	1+1, 80-PLUS Platinum, 2700W CRPS
System Cooling	Fan	1 PWM hot-swap 80x80 mm fans
		3 PWM hot-swap 80x38 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

# 4U8G-TURIN2

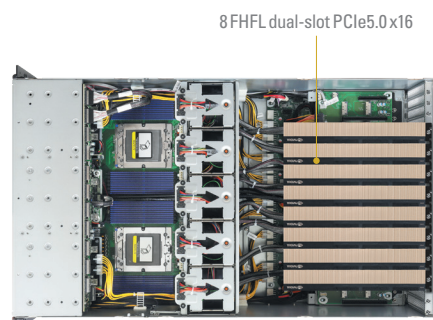
## 4U10G-TURIN2



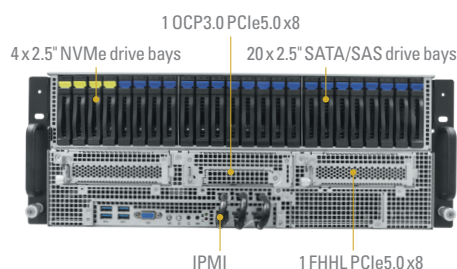
OCP NIC 3.0



PCI-E 5.0



8 FHFL dual-slot PCIe5.0 x16



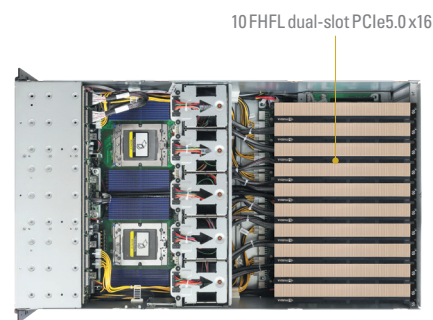
1 OCP3.0 PCIe5.0 x8

4 x 2.5" NVMe drive bays

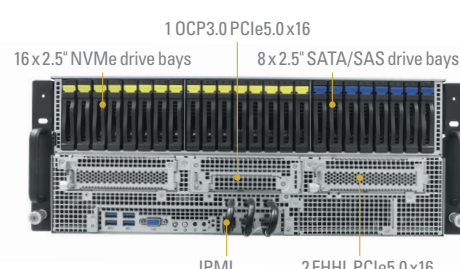
20 x 2.5" SATA/SAS drive bays

IPMI

1 FHFL PCIe5.0 x8



10 FHFL dual-slot PCIe5.0 x16



1 OCP3.0 PCIe5.0 x16

16 x 2.5" NVMe drive bays

8 x 2.5" SATA/SAS drive bays

IPMI

2 FHFL PCIe5.0 x16



3+1 CRPS (2700W)

IPMI



3+1 CRPS (3200W)

IPMI

### Application

- Big Data Analytics
- Machine Learning
- AI Training and Inference

### 4U8G-TURIN2

### 4U10G-TURIN2

<b>CPU</b>	Socket	1+1 Socket SP5 (LGA 6096); AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors	
	TDP	Up to 500W	
<b>DIMM</b>	Slot	12+12 DDR5 (1DPC)	
<b>System</b>	Form Factor	4U Rackmount	
<b>Physical Status</b>	Chassis Dimension	786 x 438 x 176.5 mm (30.9" x 17.2" x 6.9")	
<b>Front Panel</b>	Buttons	Power button w/ LED, Reset button, NMI button, UID button	
	LEDs	System fault LED, HDD activity LED	
	I/O	2 RJ45 (1GbE) by Intel® i350, shares with Rear IO	
		4 Type-A (USB3.2 Gen1) 1 DB15 (VGA)	
<b>Rear IO</b>	RJ45	2 RJ45 (1GbE) by Intel® i350, shares with Front Panel 1 dedicated IPMI, shares with Front Panel	
	Others	2 Type-A (USB3.2 Gen1), UID button, 1 DB15 (VGA)	
<b>Expansion Slots</b>	Front	1 FHFL PCIe5.0 x8 1 OCP NIC 3.0 PCIe5.0 x8	2 FHFL PCIe5.0 x16 1 OCP NIC 3.0 PCIe5.0 x16
	Rear	8 FHFL dual-slot PCIe5.0 x16	10 FHFL dual-slot PCIe5.0 x16 from PCIe Switch 1 FHFL single-slot PCIe5.0 x16 from CPU 2 FHFL single-slot PCIe5.0 x8 from PCIe Switch
<b>Drive Bay/Storage</b>	External	4 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays or 24 Hot-swap 2.5" SATA/SAS <sup>Note1</sup> drive bays	
	Internal	1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0]	
		1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 2280 form factor [CPU1]	
<b>Power Supply</b>	Module	3+1, 80-PLUS Titanium, 2700W CRPS	3+1, 80-PLUS Titanium, 3200W CRPS
<b>System Cooling</b>	Fan	5 Middle Hot-swap 80x80 mm fans	
<b>Management</b>		ASPEED BMC AST2600	
<b>Security</b>		TPM by optional accessory	

Note1: Additional RAID/HBA card required to support the 24 x 2.5" SATA/SAS drive bays.



## 4U8G-GENOA2

## 4U10G-GENOA2



OCP NIC 3.0



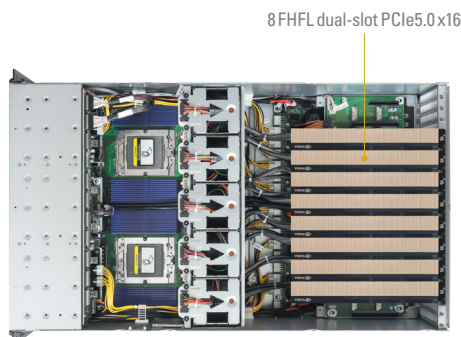
PCI-E 5.0



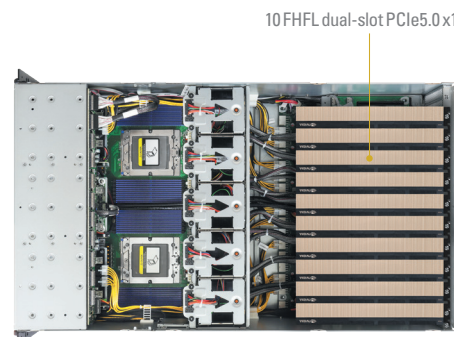
GPGPU

### Application

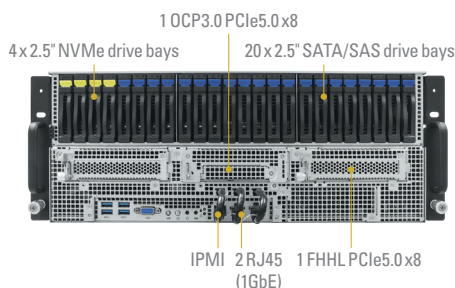
- Deep Learning
- Big Data Analytics
- HPC
- Machine Learning



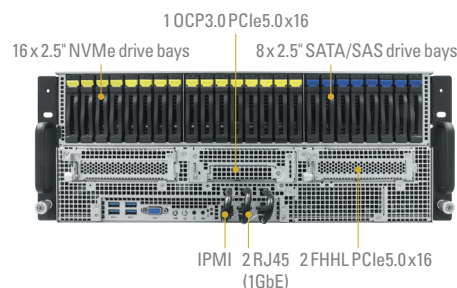
8 FHFL dual-slot PCIe 5.0 x16



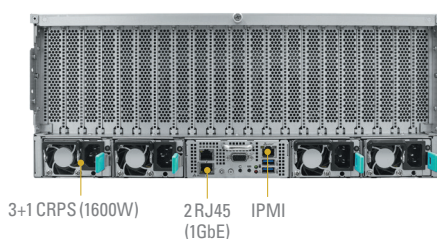
10 FHFL dual-slot PCIe 5.0 x16



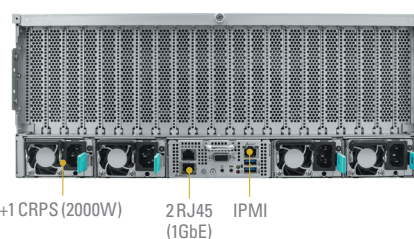
1 OCP 3.0 PCIe 5.0 x8  
4 x 2.5" NVMe drive bays  
20 x 2.5" SATA/SAS drive bays  
IPMI 2 RJ45 1 FHFL PCIe 5.0 x8 (1GbE)



1 OCP 3.0 PCIe 5.0 x16  
16 x 2.5" NVMe drive bays  
8 x 2.5" SATA/SAS drive bays  
IPMI 2 RJ45 2 FHFL PCIe 5.0 x16 (1GbE)



3+1 CRPS (1600W) 2 RJ45 (1GbE) IPMI



3+1 CRPS (2000W) 2 RJ45 (1GbE) IPMI

### 4U8G-GENOA2

### 4U10G-GENOA2

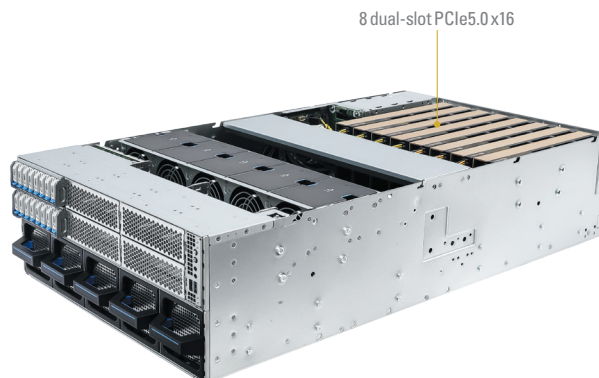
CPU	Socket	1+1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors	
DIMM	Slot	12+12 DDR5 (1DPC)	
System	Form Factor	4U Rackmount	
Physical Status	Chassis Dimension	786 x 438 x 176.5 mm (30.9" x 17.24" x 6.95")	
Front Panel	Buttons	Power button w/ LED, Reset button, NMI button, UID button	
	LEDs	System fault LED, HDD activity LED	
Rear IO	I/O	2 RJ45 (1GbE) by Intel® i350, shares with Rear IO 4 Type-A (USB3.2 Gen1) 1 DB15 (VGA)	
	RJ45	2 RJ45 (1GbE) by Intel® i350, shares with Front Panel 1 dedicated IPMI, shares with Front Panel	
Expansion Slots	Others	2 Type-A (USB3.2 Gen1), UID button, 1 DB15 (VGA)	
	Front	1 FHFL PCIe 5.0 x8 1 OCP 3.0 PCIe 5.0 x8	2 FHFL PCIe 5.0 x16 1 OCP NIC 3.0 PCIe 5.0 x16
Drive Bay/Storage	Rear	8 FHFL dual-slot PCIe 5.0 x16	10 FHFL dual-slot PCIe 5.0 x16 ; 1 FHFL single-slot PCIe 5.0 x16
	External	4 Hot-swap 2.5" NVMe (PCIe 5.0 x4) drive bays or 24 Hot-swap 2.5" SATA/SAS <sup>Note1</sup> drive bays	16 Hot-swap 2.5" NVMe (PCIe 5.0 x4) drive bays or 24 Hot-swap 2.5" SATA/SAS <sup>Note1</sup> drive bays
Power Supply	Internal	1 M-key (PCIe 3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] 1 M-key (PCIe 3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU1]	
	Module	3+1, 80-PLUS Platinum, 1600W CRPS	3+1, 80-PLUS Platinum/Titanium, 2000W CRPS
System Cooling	Fan	5 Middle Hot-swap 80x80 mm fans	
Management		ASPEED BMC AST2600	
Security		TPM by optional accessory	

Note1: Additional RAID/HBA card required to support the 24 x 2.5" SATA/SAS drive bays

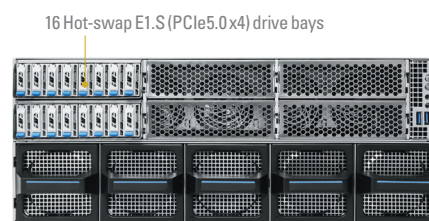
# 4UXGM-TURIN2



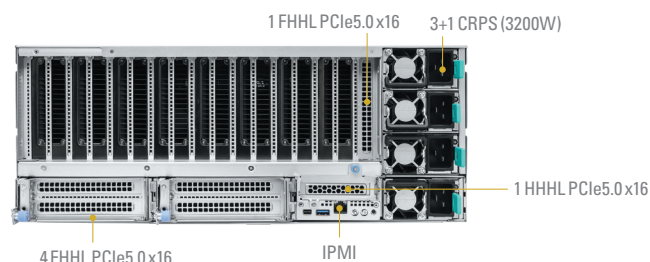
PCI-E 5.0



8 dual-slot PCIe5.0 x16



16 Hot-swap E1.S (PCIe5.0 x4) drive bays



1 FHHL PCIe5.0 x16 3+1 CRPS (3200W)

4 FHHL PCIe5.0 x16

IPMI

1 HHHL PCIe5.0 x16

## Application

- High Performance Computing
- Data Analytics
- AI Inference

## 4UXGM-TURIN2

CPU	Socket	1+1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 500W
DIMM	Slot	12+12 DDR5 288-pin (1DPC)
System	Form Factor	4U Rackmount, NVIDIA MGX 4U Compliant
Physical Status	Chassis Dimension	800 x 438 x 176.5 mm (31.5" x 17.2" x 6.9")
Front Panel	Buttons	Power button w/ LED, Reset button, NMI button, UID button w/ LED
	LEDs	System fault LED, HDD activity LED, LAN1/LAN2 activity LED
	I/O	2 Type-A (USB3.2 Gen1)
Rear IO	RJ45	1 dedicated IPMI
	Others	UID button, Reset button, Power button, 1 Type-A (USB3.2 Gen1), 1 Mini-DisplayPort (VGA)
Expansion Slots	Rear	8 FHFL dual-slot PCIe5.0 x16
		5 FHHL PCIe5.0 x16
		1 HHHL PCIe5.0 x16
Drive Bay/ Storage	External	16 Hot-swap E1.S (PCIe5.0 x4) drive bays, supports 9.5mm/15mm width
	Internal	1 M-key (PCIe3.0 x4), supports 2280 form factor [CPU0]
		1 M-key (PCIe3.0 x4), supports 2280 form facotr [CPU1]
Power Supply	Module	3+1, 80-PLUS Titanium, 3200W CRPS
System Cooling	Fan	10 Hot-swap 80x80 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

# 4U4G-GENOAX



10Gbase-T



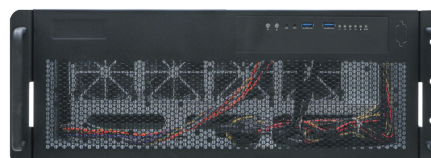
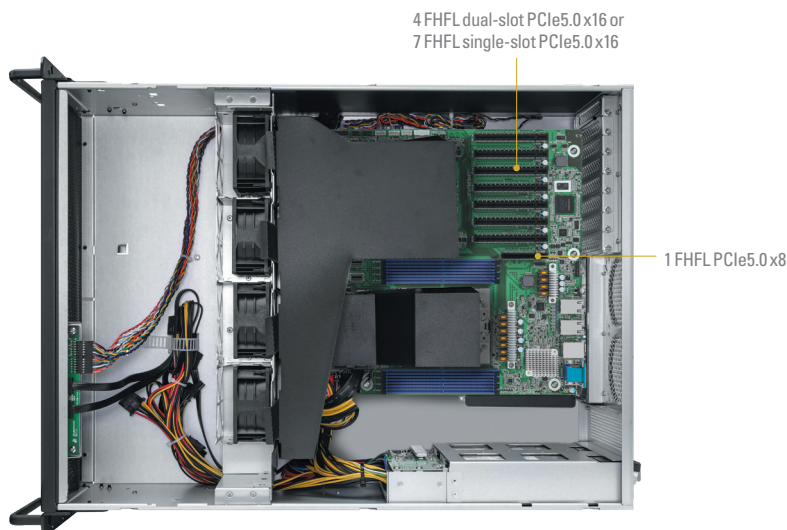
PCI-E 5.0



GPGPU

## Application

- Data Processing
- Deep Learning
- Mainstream Workstation



1+1 CRPS (2100W)

2 RJ45 (10GbE)

## 4U4G-GENOAX

<b>CPU</b>	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 320W
<b>DIMM</b>	Slot	8 DDR5 (1DPC)
<b>System Physical Status</b>	Form Factor	4U Rackmount
	Chassis Dimension	596 x 430.4 x 174.8 mm (23.5" x 16.9" x 6.9")
<b>Front Panel</b>	Buttons	Power w/ LED, ID w/ LED, System Reset, NMI
	LEDs	LAN Activity, HDD Activity, System Event
	I/O	2 Type-A (USB3.2 Gen1)
<b>Rear IO</b>	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416 1 dedicated IPMI
	Others	2 Type-A (USB3.2 Gen1), 1 UID button w/ LED, 1 DB15 (VGA), 1 DB9 (COM)
<b>Expansion Slots</b>	Rear	4 FHFL dual-slot PCIe5.0 x16 or 7 FHFL single-slot PCIe5.0 x16 Note1 1 FHFL PCIe5.0 x8
<b>Drive Bay/ Storage</b>	Internal	1 M-key (PCIe5.0 x4 or 4 SATA 6Gb/s), supports 22110/2280 form factor
		1 M-key (PCIe5.0 x4), supports 22110/2280 form factor
<b>Power Supply</b>	Module	1+1, 80-PLUS Platinum, 2100W CRPS
<b>System Cooling</b>	Fan	2 PWM fixed 80x56 mm fans
		2 PWM fixed 80x38 mm fans
<b>Management</b>		ASPEED BMC AST2600
<b>Securit</b>		TPM by optional accessory

# 1U4L4E-GENOA/2T



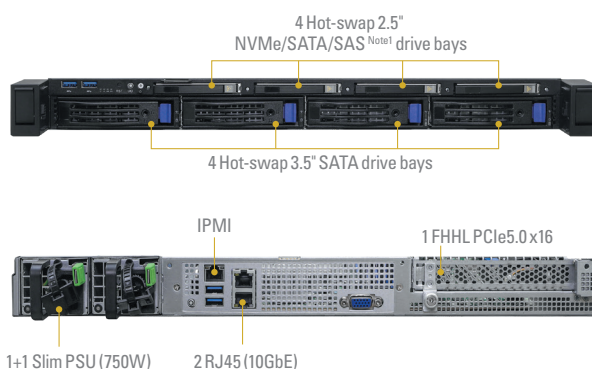
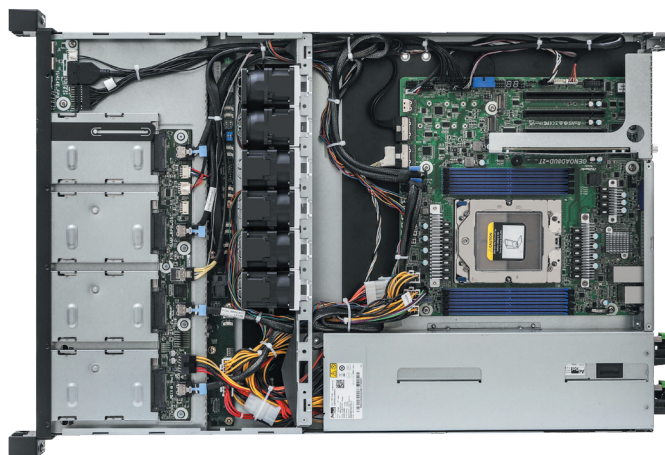
10Gbase-T



Storage



PCI-E5.0



## Application

- Hybrid-storage Server
- Cloud Computing
- Enterprise Server

## 1U4L4E-GENOA/2T

CPU	Socket	1 Socket SP5 (LAG 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 300W
DIMM	Slot	8 DDR5 (1DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	676.5 x 438 x 43.4 mm (26.6" x 17.2" x 1.7")
Front Panel	Buttons	Power button w/ LED, UID button w/ LED, System reset
	LEDs	HDD Activity, LAN 1/2, System Event
	I/O	2 Type-A (USB3.2 Gen1)
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID button w/ LED
Expansion Slots	Rear	1 FHHL PCIe5.0 x16 via RB1UX16R_G5 (Up to 75W)
Drive Bay/ Storage	External	4 hot-swap 2.5" NVMe/SATA/SAS <sup>Note1</sup> drive bays 4 hot-swap 3.5" SATA drive bays
	Internal	2 M-key (PCIe5.0 x4); support 2280/2260/2242/2230 form factor
Power Supply	Module	1+1, 80-PLUS Platinum, 750W Slim PSU
System Cooling	Fan	6 PWM Easy-swap 40x56 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

Note1: SAS drive is only supported with additional RAID/HBA cards



# 1U4L-GENOA/2T



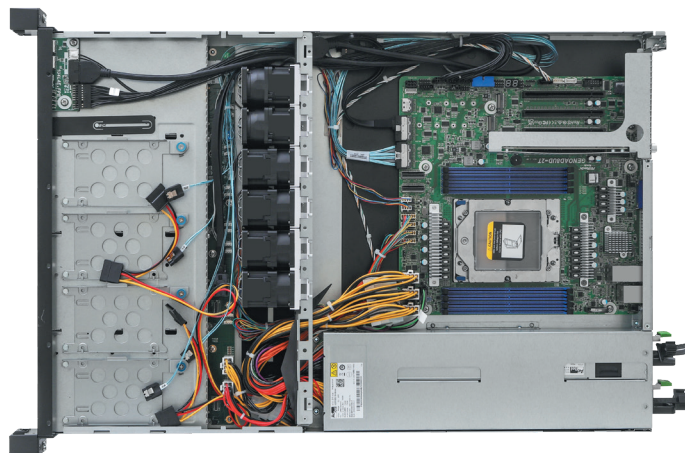
10Gbase-T



Storage

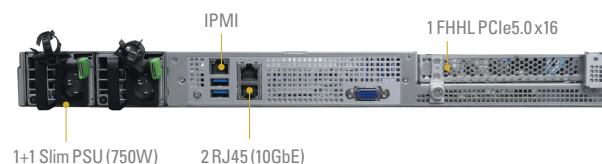
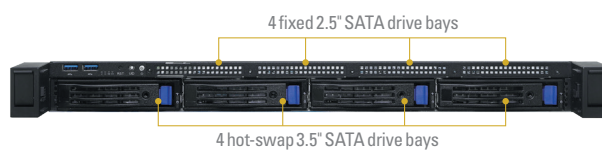


PCI-E5.0



## Application

- Enterprise Server
- General Purpose Server
- Web Hosting



## 1U4L-GENOA/2T

CPU	Socket	1 Socket SP5 (LAG 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 300W
DIMM	Slot	8 DDR5 (1DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	676.5 x 438 x 43.4 mm (26.6" x 17.2" x 1.7")
Front Panel	Buttons	Power button w/ LED, UID button w/ LED, System reset
	LEDs	HDD Activity, LAN 1/2, System Event
	I/O	2 Type-A (USB3.2 Gen1)
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID button w/ LED
Expansion Slots	Rear	1 FHHL PCIe5.0x16 via RB1UX16R_G5 (Up to 75W)
Drive Bay/ Storage	External	4 hot-swap 3.5" SATA drive bays
	Internal	4 fixed 2.5" SATA drive bays 2 M-key (PCIe5.0x4); support 2280/2260/2242/2230 form factor
Power Supply	Module	1+1, 80-PLUS Platinum, 750W Slim PSU
System Cooling	Fan	6 PWM Easy-swap 40x56 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

# 1U8S4E-GENOA/2T



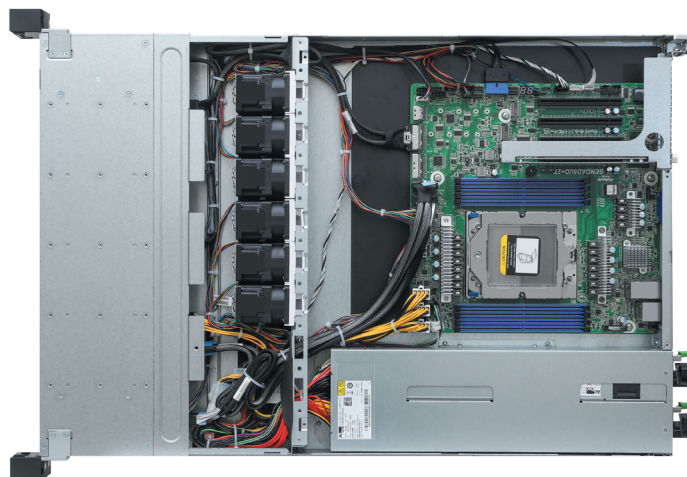
10Gbase-T



Storage



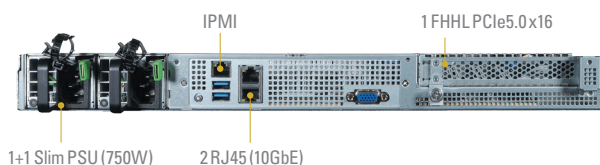
PCI-E5.0


8 hot-swap 2.5" SATA/SAS drive bays<sup>Note1</sup>


4 hot-swap 2.5" NVMe (PCIe5.0x4) drive bays

## Application

- Hybrid-storage Server
- Enterprise Server



1+1 Slim PSU (750W)

2 RJ45 (10GbE)

1 FHHL PCIe5.0x16

## 1U8S4E-GENOA/2T

CPU	Socket	1 Socket SP5 (LAG 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 300W
DIMM	Slot	8 DDR5 (1DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	676.5 x 438 x 43.4 mm (26.6" x 17.2" x 1.7")
Front Panel	Buttons	Power button w/ LED, ID button w/ LED, System reset, NMI button
	LEDs	HDD Activity, LAN 1/2, System Event
	I/O	1 Type-A (USB3.2 Gen1)
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID button w/ LED
Expansion Slots	Rear	1 FHHL PCIe5.0x16 via RB1UX16R_G5 (Up to 75W)
Drive Bay/ Storage	External	4 hot-swap 2.5" NVMe (PCIe5.0x4) drive bays 8 hot-swap 2.5" SATA/SAS drive bays <sup>Note1</sup>
	Internal	2 M-key (PCIe5.0x4); support 2280/2260/2242/2230 form factor
Power Supply	Module	1+1, 80-PLUS Platinum, 750W Slim PSU
System Cooling	Fan	6 PWM Easy-swap 40x56 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

Note1: SAS drive is only supported with additional RAID/HBA cards

# 1U12E-GENOA/2L2T



10Gbase-T



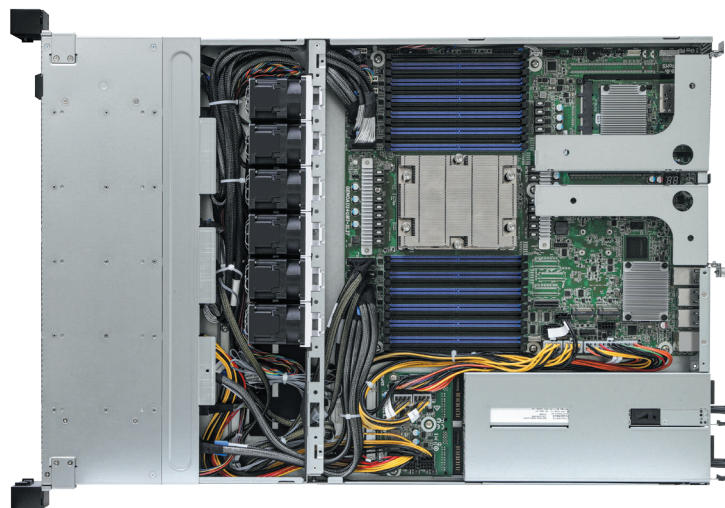
Storage



OCP NIC 3.0



PCI-E 5.0


12 Hot-swap 2.5" NVMe (PCIe5.0 x4)  
/SATA/SAS <sup>Note1</sup> drive bays

2 RJ45  
IPMI (1GbE) 1 FHHL PCIe5.0 x16 1 FHHL PCIe5.0 x16


1+1 Slim PSU (1000W)

2 RJ45  
(10GbE)

1 OCP NIC 3.0

## Application

- Data Center Server
- All-flash Storage Server
- SMB and Database Processing & Storage

## 1U12E-GENOA/2L2T

CPU	Socket	1 Socket SP5 (LAG 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 300W
DIMM	Slot	24 DDR5 (2DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	676.5 x 438 x 43.4 mm (26.6" x 17.2" x 1.7")
Front Panel	Buttons	Power, Reset, UID
	LEDs	Power, UID, System Fail, LAN1/LAN2
	I/O	1 Type-A (USB3.2 Gen1)
Rear IO	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID w/ LED
Expansion Slots	Rear	2 FHHL PCIe5.0 x16 1 OCP NIC 3.0 (PCIe5.0 x16)
Drive Bay/ Storage	External	12 Hot-swap 2.5" NVMe (PCIe5.0 x4)/SATA/SAS <sup>Note1</sup> drive bays
	Internal	2 M-key (PCIe5.0 x4), supports 22110/2280/2260 form factor
Power Supply	Module	1+1, 80-Plus Platinum, 1000W Slim PSU
System Cooling	Fan	6 PWM Hot-swap 40x56 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

Note1: SAS drive is only supported with additional RAID/HBA cards

# 1U12E-TURIN/EVAC



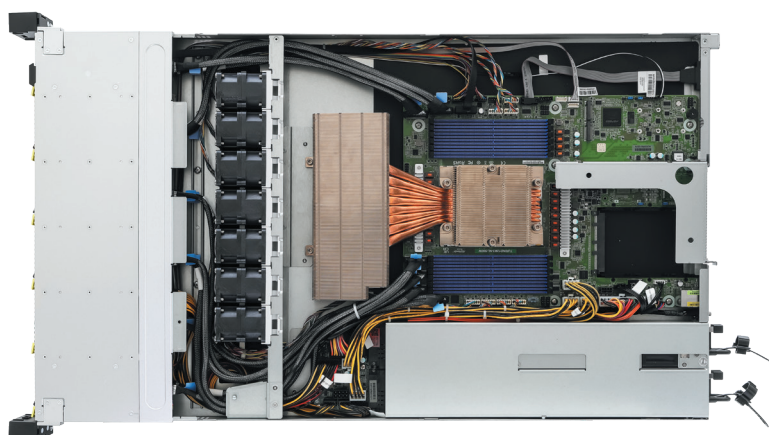
PCI-E 5.0



Storage



OCP NIC 3.0



12 Hot-swap 2.5" NVMe (PCIe5.0x4) drive bays



1 FHHL PCIe5.0x16


1+1 Slim RPSU  
(1600W)

IPMI

1 OCP NIC 3.0

## Application

- Data Center Server
- All-flash storage server
- SMB and Database Processing & Storage

## 1U12E-TURIN/EVAC

<b>CPU</b>	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 360W
<b>DIMM</b>	Slot	12 DDR5 (1DPC)
<b>System</b>	Form Factor	1U Rackmount
<b>Physical Status</b>	Chassis Dimension	776.5 x 438 x 43.5 mm (30.6" x 17.2" x 1.7")
<b>Front Panel</b>	Buttons	Power, Reset, UID
	LEDs	Power, LAN 1/2, System Event, ID LEDs
	I/O	1 Type-A (USB3.2 Gen1)
<b>Rear IO</b>	RJ45	1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 DB9 (COM)
<b>Expansion Slots</b>	Rear	1 FHHL PCIe5.0x16
		1 OCP NIC 3.0 (PCIe5.0x16)
<b>Drive Bay/Storage</b>	External	12 hot-swap 2.5" NVMe (PCIe5.0x4) drive bays
	Internal	2 M-key (PCIe5.0x4 or SATA 6Gb/s), supports 22110/2280/2260 form factor
<b>Power Supply</b>	Module	1+1, 80-Plus Platinum, 1600W Slim RPSU
<b>System Cooling</b>	Fan	7 PWM Hot-swap 40x56 mm fans
<b>Management</b>		ASPEED BMC AST2600
<b>Security</b>		TPM by optional accessory



# 1U12E-GENOA/EVAC



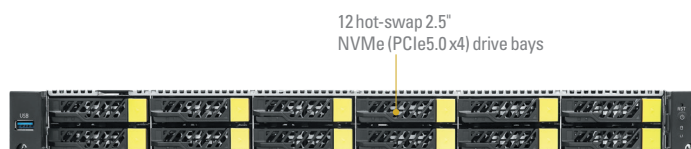
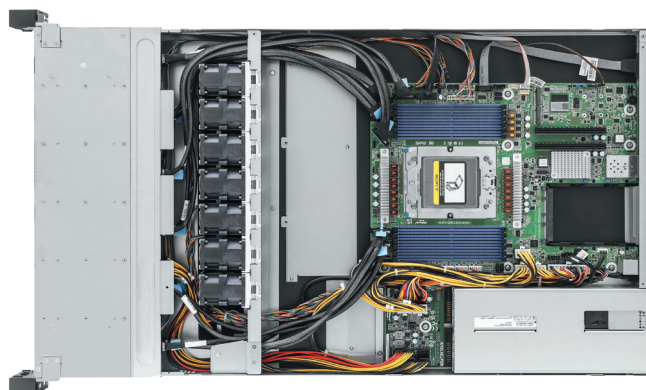
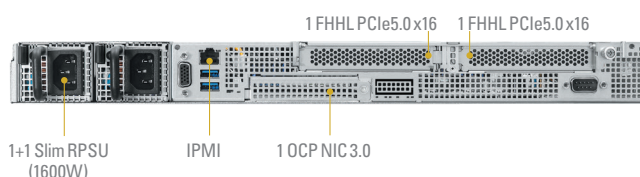
PCI-E 5.0



Storage



OCP NIC 3.0


12 hot-swap 2.5"  
NVMe (PCIe5.0 x4) drive bays


1 FHHL PCIe5.0 x16    1 FHHL PCIe5.0 x16

1+1 Slim RPSU  
(1600W)

IPMI

1 OCP NIC 3.0

## Application

- Data Center Server
- All-flash storage server
- SMB and Database Processing & Storage

## 1U12E-GENOA/EVAC

<b>CPU</b>	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 360W
<b>DIMM</b>	Slot	12 DDR5 (1DPC)
<b>System Physical Status</b>	Form Factor	1U Rackmount
	Chassis Dimension	776.5 x 438 x 43.5 mm (30.6" x 17.2" x 1.7")
<b>Front Panel</b>	Buttons	Power, Reset, UID
	LEDs	Power, LAN 1/2, System Event, ID LEDs
	I/O	1 Type-A (USB3.2 Gen1)
<b>Rear IO</b>	RJ45	1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 DB9 (COM)
<b>Expansion Slots</b>	Rear	2 FHHL PCIe5.0 x16
		1 OCP NIC 3.0 (PCIe5.0 x16)
<b>Drive Bay/Storage</b>	External	12 hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays
	Internal	2 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280/2260 form factor
<b>Power Supply</b>	Module	1+1, 80-Plus Platinum, 1600W Slim RPSU
<b>System Cooling</b>	Fan	7 PWM Hot-swap 40x56 mm fans
<b>Management</b>		ASPEED BMC AST2600
<b>Security</b>		TPM by optional accessory

# 1U12E3S-TURIN/EVAC



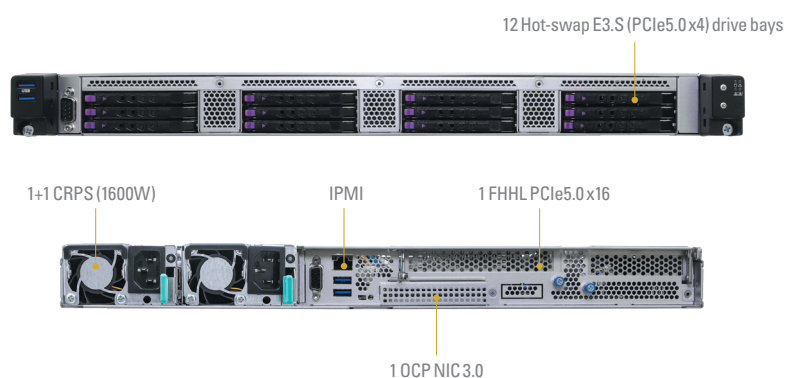
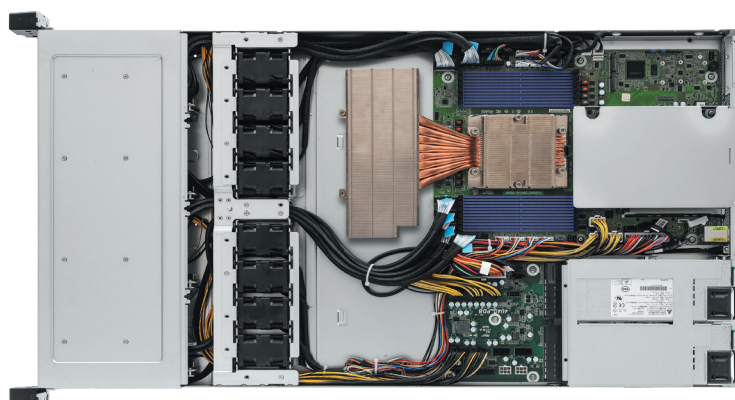
PCI-E 5.0



Storage



OCP NIC 3.0



## Application

- Data Center Server
- All-flash storage server
- SMB and Database Processing & Storage

## 1U12E3S-TURIN/EVAC

<b>CPU</b>	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
<b>DIMM</b>	Slot	12 DDR5 (1DPC)
<b>System</b>	Form Factor	1U Rackmount
<b>Physical Status</b>	Chassis Dimension	820 x 438 x 43.5 mm (32.3" x 17.2" x 1.7")
<b>Front Panel</b>	I/O	1 Type-A (USB3.2 Gen1), 1 DB9 (COM)
<b>Rear IO</b>	RJ45	1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID button
<b>Expansion Slots</b>	Rear	1 FHHL PCIe5.0 x16
		1 OCP NIC 3.0 (PCIe5.0 x16)
<b>Drive Bay/Storage</b>	External	12 Hot-swap E3.S (PCIe5.0 x4) drive bays
	Internal	2 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280/2260 form factor
<b>Power Supply</b>	Module	1+1, 80-Plus Platinum, 1600W CRPS
<b>System Cooling</b>	Fan	8 PWM 40x56 mm dual-rotor fans
<b>Management</b>		ASPEED BMC AST2600
<b>Security</b>		TPM by optional accessory

# 1U24E1S-GENOA/2L2T



10Gbase-T



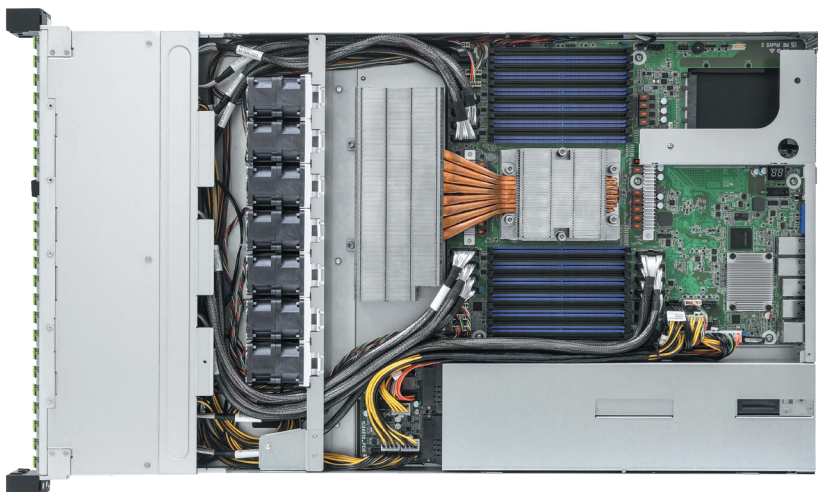
Storage



OCP NIC 3.0



PCI-E 5.0



## Application

- All-flash Storage Server
- Data Center Server
- SMB and Database Processing & Storage



24 hot-swap E1.S (PCIe5.0 x4) drive bays



1+1 RPSU (1600W)

IPMI

1 FHHL PCIe5.0 x16

1 OCP NIC 3.0

## 1U24E1S-GENOA/2L2T

CPU	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 300W
DIMM	Slot	24 DIMM (2DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	776.5 x 438 x 43.5mm (30.6" x 17.2" x 1.7")
Front Panel	Buttons	Power button w/ LED, ID button W/LED, System reset, NMI
	LEDs	HDD activity LED, LAN1/2, System fault
Rear IO	RJ45	Broadcom BCM57416: 2 RJ45 (10GbE) Intel® i210: 2 RJ45 (1GbE) 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID button w/ LED
Expansion Slots	Rear	1 FHHL PCIe5.0 x16 1 OCP NIC 3.0 (PCIe5.0 x16)
Drive Bay/ Storage	External	24 Hot-swap E1.S (PCIe5.0 x4) drive bay, supports 9.5mm/15mm width
Power Supply	Module	1+1 ,80-PLUS Platinum, 1600W RPSU
SystemCooling	Fan	7 PWM Hot-swap 40x56 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory



# 1U12L4E-GENOA/2Q



SFP28



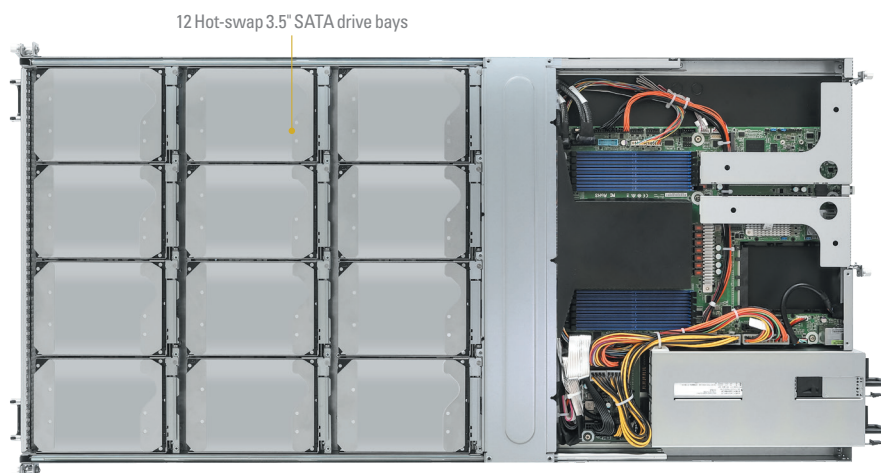
Storage



OCP NIC 3.0



PCI-E 5.0



12 Hot-swap 3.5" SATA drive bays

## Application

- Cloud Datacenter Storage
- Software-defined Storage



4 Hot-swap 2.5" NVMe drive bays



1+1 Slim RPSU (1000W)

1 OCP NIC 3.0

## 1U12L4E-GENOA/2Q

CPU	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 300W
DIMM	Slot	12 DDR5 (1DPC)
	Form Factor	1U Rackmount
System Physical Status	Chassis Dimension	955 x 438 x 43.5 mm (37.6" x 17.2" x 17.1")
	Buttons	Power Switch, ID Switch, System reset
Front Panel	LEDs	Power status, UID, HDD activity, System Fault
	I/O	N/A
Rear IO	LAN	2 SFP28 (25GbE) by Broadcom BCM57414
	USB	1 dedicated IPMI
	Others	2 Type-A (USB3.2 Gen1) 1 UID button
Expansion Slots	Rear	1 FHHL PCIe5.0 x16 via RB1UX16R_G5 (Up to 75W)
		1 HHHL PCIe5.0 x16 via RB1UX16L_G5
		1 OCP NIC 3.0 (PCIe5.0 x16)
Drive Bay/Storage	External	4 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
	Internal	12 Hot-swap 3.5" SATA drive bays
Power Supply	Module	2 M-key (PCIe5.0 x4 or 4 SATA 6Gb/s), supports 22110/2280/2260 form factor
System Cooling	Fan	1+1, 80-PLUS Platinum, 1000W Slim RPSU
Management		6 PWM Hot-swap 40x56 mm fans
Security		ASPEED BMC AST2600
		TPM by optional accessory

# 4U36L6E-GENOA/2T



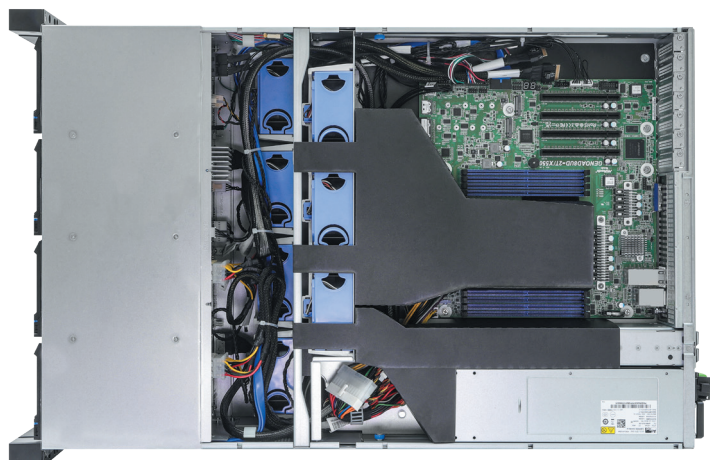
10Gbase-T



PCI-E 5.0



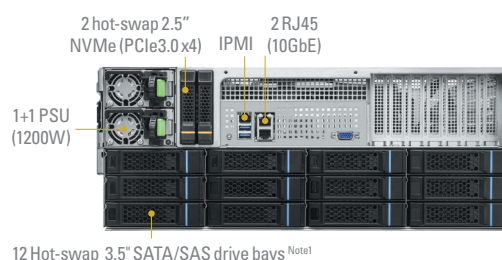
Storage


20 Hot-swap  
3.5" SATA/SAS  
drive bays<sup>Note1</sup>

4 Hot-swap  
3.5" SATA/SAS drive bays<sup>Note1</sup>  
or 4 hot-swap 2.5" NVMe (PCIe3.0 x4)

## Application

- Corporate Database
- Enterprise Server


12 Hot-swap 3.5" SATA/SAS drive bays<sup>Note1</sup>

## 4U36L6E-GENOA/2T

CPU	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 300W
DIMM	Slot	8 DDR5 (1DPC)
System	Form Factor	4U Rackmount
Physical Status	Chassis Dimension	699 x 432 x 176 mm (27.52" x 17.01" x 6.93")
Front Panel	Buttons	Power button, System reset
	LEDs	Power Status, LAN1/LAN2 activity, System fail, HDD status
	I/O	2 Type-A (USB3.2 Gen1)
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID button w/ LED
Expansion Slots	Rear	4 HHHL PCIe5.0 x16
Drive Bay/ Storage	External	Front: 20 Hot-swap 3.5" SATA/SAS drive bays <sup>Note1</sup> 4 Hot-swap 3.5" SATA/SAS drive bays <sup>Note1</sup> or 4 Hot-swap 2.5" NVMe (PCIe3.0 x4) drive bays
		Rear: 12 Hot-swap 3.5" SATA/SAS drive bays <sup>Note1</sup> 2 Hot-swap 2.5" NVMe (PCIe3.0 x4) drive bays
Power Supply	Internal	2 M-key (PCIe5.0 x4); support 2280/2260/2242/2230 form factor
	Module	1+1, 80-PLUS Platinum, 1200W PSU
System Cooling	Fan	7 Hot-swap 80x38mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

Note1: Additional RAID/HBA card required to support the 36 Hot-swap 3.5" SATA/SAS drive bays

# 4U60L8E-GENOA/2T



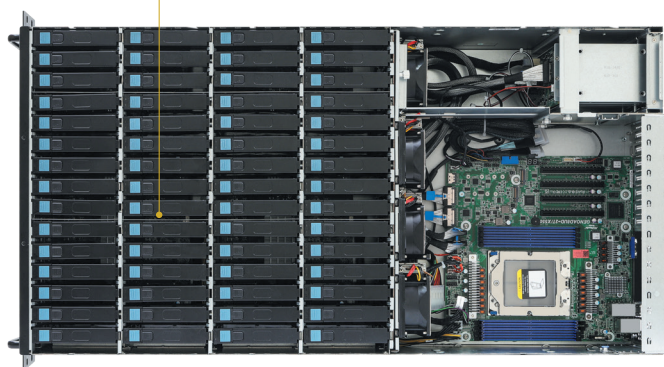
Storage



PCI-E 5.0



10Gbase-T

60 hot-swap 3.5" SATA/SAS drive bays <sup>Note1</sup>

## Application

- Hyper-scale Cloud Datacenter Storage
- Software-defined Storage Applications
- Virtual Tape Library



## 4U60L8E-GENOA/2T

CPU	Socket	1 Socket SP5 (LGA 6096)
	TDP	AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors Up to 270W
DIMM	Slot	8 DDR5 (1DPC)
System	Form Factor	4U Rackmount
Physical Status	Chassis Dimension	853 x 434 x 176mm (33.5" x 17.1" x 6.9")
Front Panel	Buttons	System power on/off, System Reset, ID
	LEDs	Power, HDD Activity, LAN Activity, System Fault, ID
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID button w/ LED
Expansion Slots	Rear	4 FHHL PCIe5.0x16
Drive Bay/	External	8 hot-swap 2.5" NVMe (PCIe5.0x4) drive bays
Storage	Internal	60 hot-swap 3.5" SATA/SAS drive bays <sup>Note1</sup>
		2 M-key (PCIe5.0x4); support 2280/2260/2242/2230 form factor
Power Supply	Module	2+2, 80-PLUS Platinum, 800W CRPS
System Cooling	Fan	4 hot-swap 80x38mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

Note1: Additional RAID/HBA card required to support the 60 x 3.5" SATA/SAS drive bays



## 2U4N-F/GENOA-M3



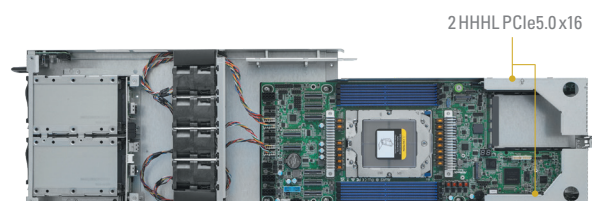
2U High  
Density Storage



PCI-E 5.0



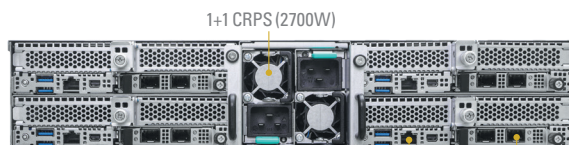
OCP NIC 3.0



2 HHHL PCIe 5.0 x16



4 hot-swap 2.5" NVMe (PCIe 5.0 x4)/  
SATA/SAS <sup>Note1</sup> drive bays



1+1 CRPS (2700W)

IPMI

1 OCP NIC 3.0

### Application

- All-flash Storage Server
- Database Processing
- Virtualization
- E-commerce

### 2U4N-F/GENOA-M3

CPU (per node)	Socket	1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
DIMM (per node)	Slot	8 DDR5 (1DPC)
System	Form Factor	2U Rackmount
Physical Status	Chassis Dimension	750 X 438 X 86.6mm (29.5" x 17.2" x 3.4")
Front Panel (per node)	Buttons	Power, Reset
	LEDs	System fail, UID, Power
	I/O	2 Type-A (USB3.2 Gen1)
Rear IO (per node)	RJ45	1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 mini-DisplayPort (VGA), 1 UID button w/ LED
Expansion	Rear	2 HHHL PCIe 5.0 x16
Slots (per node)		1 OCP NIC 3.0 (PCIe 5.0 x16)
Drive Bay/Storage (per node)	External	4 hot-swap 2.5" NVMe (PCIe 5.0 x4)/SATA/SAS <sup>Note1</sup> drive bays or 8 hot-swap 9.5mm E1.S (PCIe 5.0 x4) drive bays
	Internal	1 M-key (PCIe 5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor 1 M-key (PCIe 4.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor
Power Supply	Module	1+1, 80-PLUS Platinum/Titanium, 2700W CRPS
System	Fan	4 PWM hot-swap dual-rotor 40x56 mm fans
Cooling (per node)		
Management (per node)		ASPEED BMC AST2600
Security (per node)		TPM by optional accessory

Note1: SAS drive is only supported with additional RAID/HBA cards

# 1U12E-TURIN2/EVAC



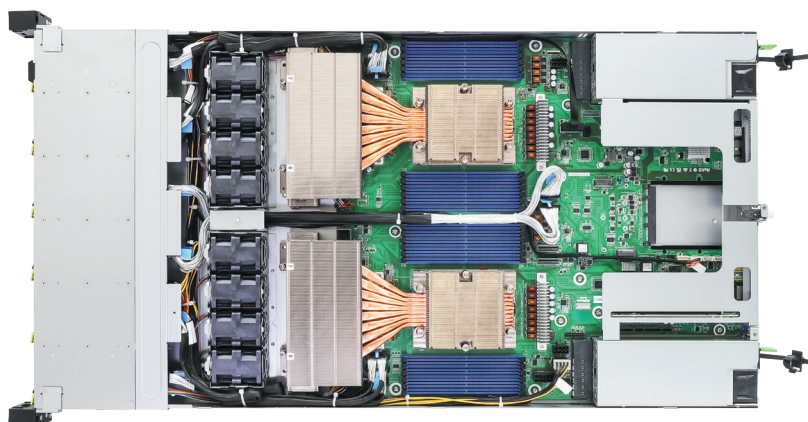
Storage



PCI-E 5.0



OCP NIC 3.0


12 hot-swap 2.5"  
NVMe drive bays


1 FHHL PCIe5.0 x16

1 FHHL PCIe5.0 x16


1+1 CRPS  
(2000W)

IPMI

1 OCP 3.0  
PCIe5.0 x16

2 RJ45  
(1GbE)

1+1 CRPS  
(2000W)

## Application

- E-commerce
- Virtualization
- Data Center Server
- Database Processing

## 1U12E-TURIN2/EVAC

<b>CPU</b>	Socket	1+1 Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 360W
<b>DIMM</b>	Slot	12+12 DDR5 (1DPC)
<b>System Physical Status</b>	Form Factor	1U Rackmount
	Chassis Dimension	830 x 438 x 43.5 mm (32.7" x 17.2" x 1.7")
<b>Front Panel</b>	Buttons	Power button w/ LED, ID button w/ LED, System reset
	LEDs	HDD Activity, LAN 1/2, System Event
	I/O	2 Type-A (USB3.2 Gen1)
<b>Rear IO</b>	RJ45	2 RJ45 (1GbE) by Intel® i350 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1DB9 (COM), 1 UID w/ LED
<b>Expansion Slots</b>	Rear	2 FHHL PCIe5.0 x16 [CPU0] [CPU1] 1 OCP NIC 3.0 (PCIe5.0 x16) [CPU1]
<b>Drive Bay/ Storage</b>	External	12 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays
	Internal	1 M-key (PCIe3.0 x4), supports 2280/2260/2242/2230 form factor [CPU0] 1 M-key (PCIe3.0 x4), supports 2280/2242 form factor [CPU1]
<b>Power Supply</b>	Module	1+1, 80-PLUS Platinum, 2000W CRPS
<b>System Cooling</b>	Fan	8 easy-swap 40x56 mm fans
<b>Management</b>		ASPEED BMC AST2600

# 1U12E-TURIN2



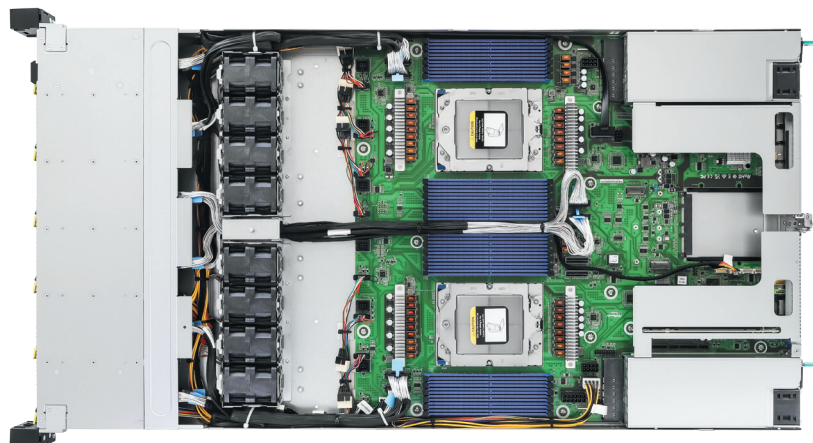
OCP NIC 3.0



Storage



PCI-E 5.0


12 hot-swap 2.5"  
NVMe drive bays


1 FHHL PCIe5.0x16

2 RJ45  
(1GbE)

1 FHHL PCIe5.0x16



1+1 CRPS (1600W)

IPMI

1 OCP 3.0 PCIe5.0x16

1+1 CRPS (1600W)

## Application

- All-flash Storage Server
- Database Processing
- Virtualization
- E-commerce

## 1U12E-TURIN2

<b>CPU</b>	Socket	1+1 Socket SP5 (LAG 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 240W
<b>DIMM</b>	Slot	12+12 DDR5 (1DPC)
<b>System</b>	Form Factor	1U Rackmount
<b>Physical Status</b>	Chassis Dimension	830 x 438 x 43.5 mm (32.7" x 17.2" x 1.7")
<b>Front Panel</b>	Buttons	Power button w/ LED, ID button w/ LED, System reset, NMI
	LEDs	HDD Activity, LAN 1/2, System fault
	I/O	1 Type-A (USB3.2 Gen1)
<b>Rear IO</b>	RJ45	2 RJ45 (1GbE) by Intel® i350 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 RJ45 (COM), 1 UID w/ LED
<b>Expansion Slots</b>	Rear	2 FHHL PCIe5.0x16 [CPU0] [CPU1] 1 OCP3.0 PCIe5.0x16 [CPU0]
<b>Drive Bay/ Storage</b>	External	12 Hot-swap 2.5" NVMe (PCIe5.0x4) drive bays
	Internal	1 M-key (PCIe3.0 x4), supports 2280/2260/2242/2230 form factor [CPU0]; 1 M-key (PCIe3.0 x4), supports 2280/2242 form factor [CPU1]
<b>Power Supply</b>	Module	1+1, 80-PLUS Platinum, 1600W CRPS
<b>System Cooling</b>	Fan	8 Easy-swap 40x56 mm fans
<b>Management</b>		ASPEED BMC AST2600
<b>Security</b>		TPM by optional accessory

## 2U12L8E-GENOA2



OCP NIC 3.0



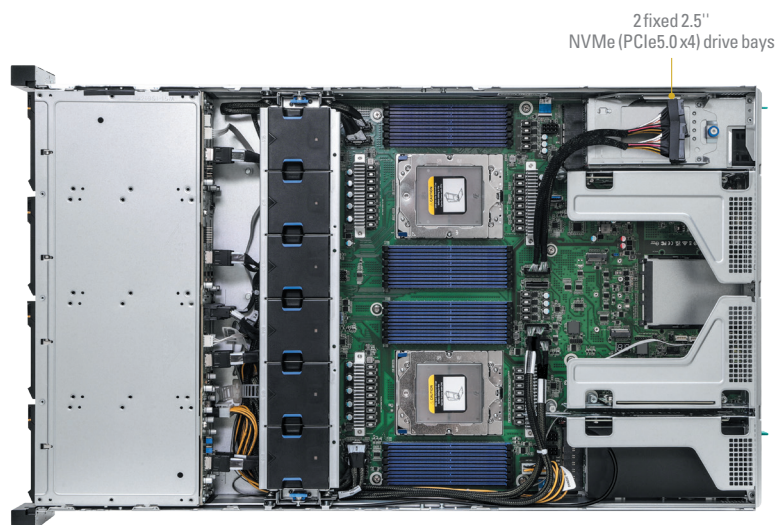
Storage



PCI-E 5.0

### Application

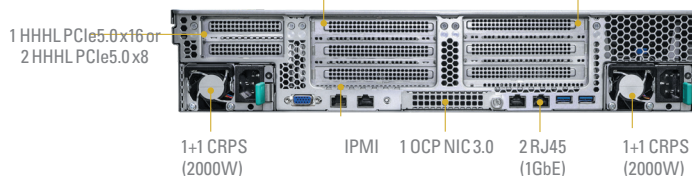
- Software-defined Storage
- Data Analytics



12 hot-swap 3.5"/2.5" drive bays



2 FHHL PCIe 5.0 x16 or 1 FHHL PCIe 5.0 x16, 2 FHHL PCIe 5.0 x8      2 FHHL PCIe 5.0 x16 or 1 FHHL PCIe 5.0 x16, 2 FHHL PCIe 5.0 x8



### 2U12L8E-GENOA2

CPU	Socket	1+1 Socket SP5 (LAG 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 360W
DIMM	Slot	12+12 DDR5 (1DPC)
System	Form Factor	2U Rackmount
Physical Status	Chassis Dimension	770.0 X 438.0 X 86.4 mm (30.3" x 17.2" x 3.4")
Front Panel	Buttons	Power, UID, Reset
	LEDs	Power Status, LAN Activity, HDD Activity, System status
	I/O	1 Type-A (USB3.2 Gen1), 1 Type-A (USB2.0)
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i350-AM2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 RJ45 (COM), 1 UID w/ LED
Expansion Slots	Rear	2 FHHL PCIe 5.0 x16 or 1 FHHL PCIe 5.0 x16, 2 FHHL PCIe 5.0 x8 [CPU0] 2 FHHL PCIe 5.0 x16 or 1 FHHL PCIe 5.0 x16, 2 FHHL PCIe 5.0 x8 [CPU1] 1 HHHL PCIe 5.0 x16 or 2 HHHL PCIe 5.0 x8 [CPU0] 1 OCP NIC 3.0 (PCIe 5.0 x16) [CPU1]
Drive Bay/ Storage	External	8 Hot-swap 3.5"/2.5" NVMe (PCIe 4.0 x4)/SATA drive bays 4 Hot-swap 3.5"/2.5" SATA drive bays <sup>Note1</sup>
	Internal	2 fixed 2.5" NVMe (PCIe 5.0 x4) drive bays 1 M-key (PCIe 3.0 x4), supports 2280/2260/2242/2230 form factor [CPU0]; 1 M-key (PCIe 3.0 x4), supports 2280/2242 form factor [CPU1]
Power Supply	Module	1+1, 80-PLUS Platinum, 2000W CRPS
System Cooling	Fan	6 PWM hot-swap 60x38 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory



## 2U24E-GENOA2



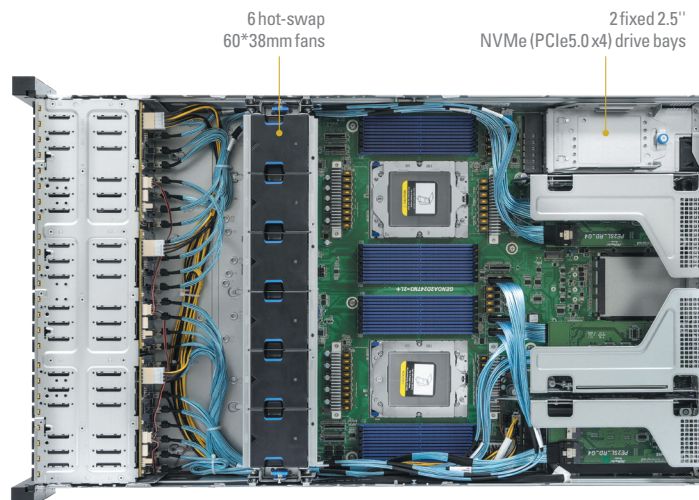
OCP NIC 3.0



Storage



PCI-E 5.0

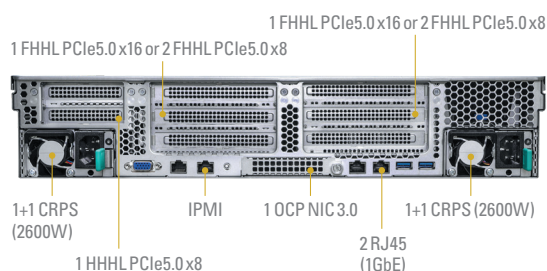


24 hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays



### Application

- All-flash Storage Server
- Data Processing
- Virtualization
- Cloud Computing
- High-end Enterprise Server
- Hyperconverged Storage



### 2U24E-GENOA2

CPU	Socket	1+1 Socket SP5 (LAG 6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 360W
DIMM	Slot	12+12 DDR5 (1DPC)
System	Form Factor	2U Rackmount
Physical Status	Chassis Dimension	770.0 x 438.0 x 86.4 mm (30.3" x 17.2" x 3.4")
Front Panel	Buttons	Power, UID, Reset
	LEDs	Power Status, LAN Activity, HDD Activity, System status
	I/O	1 Type-A (USB3.2 Gen1), 1 Type-A (USB2.0)
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i350-AM2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 RJ45 (COM), 1 UID w/ LED
	Expansion Slots	1 FHHL PCIe5.0 x16 or 2 FHHL PCIe5.0 x8 [CPU0], 1 FHHL PCIe5.0 x16 or 2 FHHL PCIe5.0 x8 [CPU1] 1 HHHL PCIe5.0 x8 [CPU0], 1 OCP NIC 3.0 (PCIe5.0 x16) [CPU1]
Drive Bay/ Storage	External	24 hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays
	Internal	2 fixed 2.5" NVMe (PCIe5.0 x4) drive bays 1 M-key (PCIe3.0 x4), supports 2280/2260/2242/2230 form factor [CPU0]; 1 M-key (PCIe3.0 x4), supports 2280/2242 form factor [CPU1]
	Power Supply	1+1, 80-PLUS Titanium, 2600W CRPS
System Cooling	Fan	6 PWM hot-swap 60x38 mm fans
Management		ASPEED BMC AST2600
Security		TPM by optional accessory

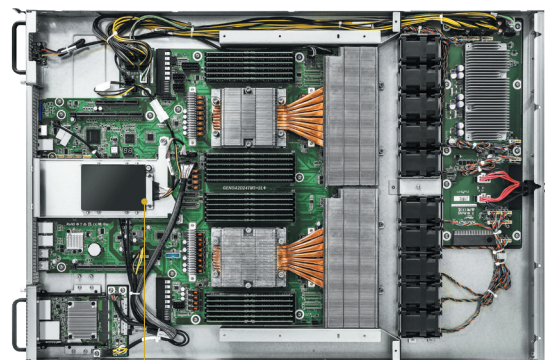
# 10U1N-TURIN2



OCP NIC 3.0



PCI-E 5.0



1 Easy-swap 2.5" NVMe (PCIe5.0x4) drive bay



1 OCP NIC 3.0 (PCIe5.0x16)



IT Gear connect

## Application

- Data Center Processing

### 10U1N-GEN0A2

<b>CPU</b>	Socket	1+1 Socket SP5 (LGA6096), supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	TDP	Up to 400W
<b>DIMM</b>	Slot	12+12 DDR5 (1DPC)
<b>System</b>	Form Factor	10U, one-bay Shelf for Open Rack V2
<b>Physical Status</b>	Chassis Dimension	537 x 800 x 45.5 mm (D/W/H, Shelf Dimensions)
<b>Front Panel</b>	Buttons	Power, Reset, UID button w/ LED
	LEDs	Power
	I/O	2 Type-A (USB3.2 Gen1), 1 dedicated IPMI
<b>Rear Panel</b>	Power connector	1 IT Gear connector for ORv2 54V busbar
<b>Expansions Slots</b>	External	1 OCP NIC 3.0 (PCIe5.0x16)
<b>Drive Bay/Storage</b>	External	1 Easy-swap 2.5" NVMe (PCIe5.0x4) drive bay
	Internal	1 M-key (PCIe3.0x4), supports 2280/2260/2242/2230 form factor [CPU0]
		1 M-key (PCIe3.0x4), supports 2280/2242 form factor [CPU1]
<b>Power Supply</b>	Module	Centralized 54V busbar to 10U1N_PDB, CRPS_IPB distributed up to 2600W
<b>Management</b>		ASPEED BMC AST2600
<b>Security</b>		TPM by optional accessory

# 20U3N-GENOA



OCP NIC 3.0



PCI-E 5.0

4 Hot-swap 2.5" NVMe drive bays



1 OCP NIC 3.0 (PCIe5.0 x16)



IT Gear connect

## Application

- Data Center Processing

## 20U3N-GENOA

CPU (per sled)	Socket	1 Socket SP5 (LGA6096), supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
DIMM (per sled)	Slot	8 DDR5 (1DPC)
System	Form Factor	20U, three-bay Shelf for Open Rack V3
Physical Status	Chassis Dimension	573 x 800 x 88 mm (D/W/H, Shelf Dimensions)
Front Panel (per sled)	Buttons	Power, Reset, UID button w/ LED
	LEDs	Power, system fault LED
	I/O	1 Mini-DisplayPort (VGA), 2 Type-A (USB3.2 Gen1), 1 dedicated IPMI
Rear Panel	Power connector	1 IT Gear connector for ORv3 50V busbar
Expansions Slots (per sled)	External	1 HHHL PCIe5.0 x16
		1 OCP NIC 3.0 (PCIe5.0 x16)
Drive Bay/Storage (per sled)	External	4 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
	Internal	2 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor
Power Supply	Module	Centralized 50V busbar to OCPV3_PDB/1V distributed up to 1000W
System Cooling (per sled)	Fan	2 system fans (80 x 56 mm)
Management (per sled)		ASPEED BMC AST2600
Security (per sled)		TPM by optional accessory

# TURIND8UD-2T/X550



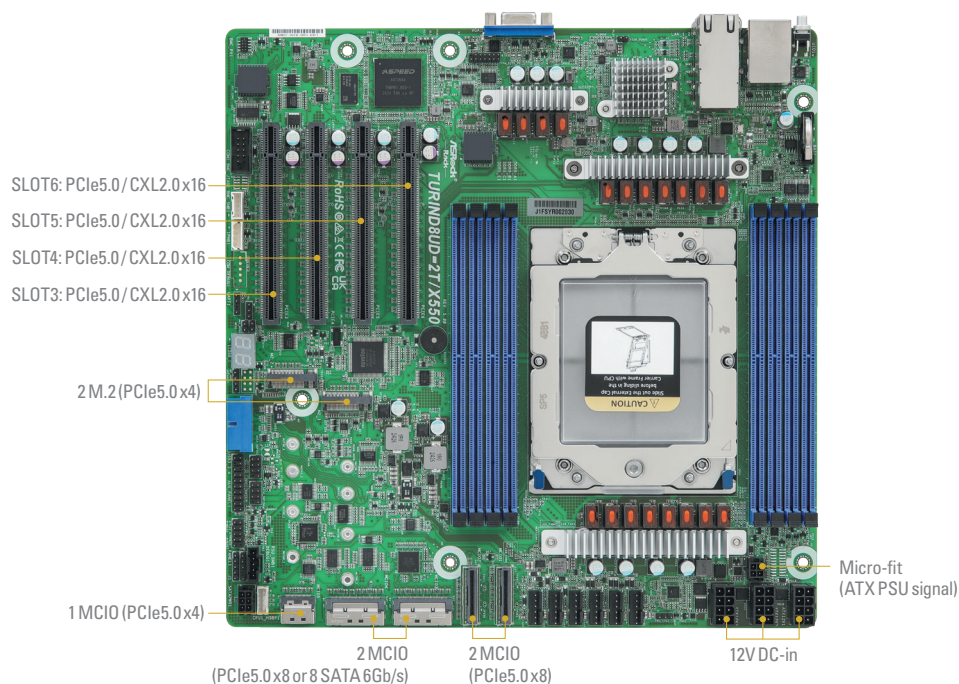
10Gbase-T



PCI-E 5.0



6400MHz



## Application

- Compact Storage Server
- Enterprise NAS
- Compact GPU Tower



## TURIND8UD-2T/X550

Power source		Supports ATX PSU and 12V DC-in
Form Factor		10.4" x 10.5"
Processor System	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
Memory	Capacity	8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 6400MHz; 3DS RDIMM: up to 512GB, max. 6400MHz
Expansion	PCIe slot	SL0T6: PCIe5.0 / CXL2.0 x16 <sup>Note1</sup> SL0T5: PCIe5.0 / CXL2.0 x16 <sup>Note1</sup> SL0T4: PCIe5.0 / CXL2.0 x16 <sup>Note1</sup> SL0T3: PCIe5.0 / CXL2.0 x16 <sup>Note1</sup>
	Others	2 MCIO (PCIe5.0 x8) 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) 1 MCIO (PCIe5.0 x4)
Storage	M.2	2 M-key (PCIe5.0 x4), supports 2280/2260/2242/2230 form factor
	SATA port	16 SATA 6 Gb/s: 2 MCIO
Network	RJ45	2 RJ45 (10GbE) by Intel® X550
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
I/O	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA)
Security	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors



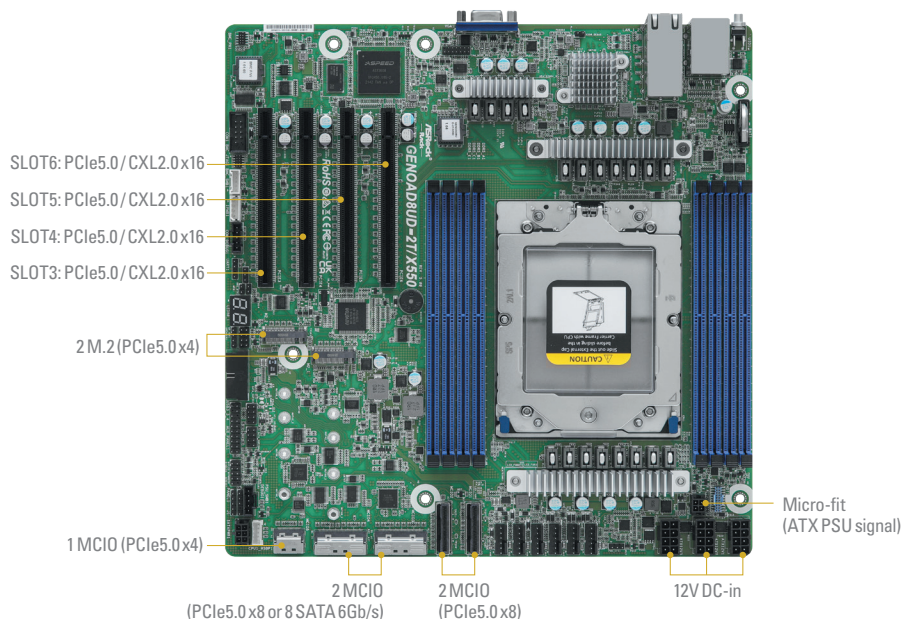
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10Gbase-T

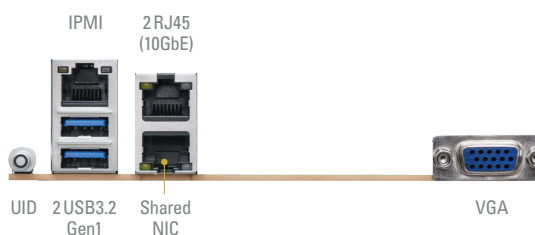


PCI-E 5.0



## Application

- Compact Storage Server
- Enterprise NAS
- Compact GPU Tower



## GENOAD8UD-2T/X550

<b>Power source</b>		Supports ATX PSU and 12V DC-in
<b>Form Factor</b>		10.4" x 10.5"
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
<b>Expansion</b>	PCIe slot	SLOT6: PCIe5.0/CXL2.0 x16 <sup>Note1</sup> SLOT5: PCIe5.0/CXL2.0 x16 <sup>Note1</sup> SLOT4: PCIe5.0/CXL2.0 x16 <sup>Note1</sup> SLOT3: PCIe5.0/CXL2.0 x16 <sup>Note1</sup>
	Others	2 MCIO (PCIe5.0 x8) 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) 1 MCIO (PCIe5.0 x4)
<b>Storage</b>	M.2	2 M-key (PCIe5.0 x4), supports 2280/2260/2242/2230 form factor
	SATA port	16 SATA 6 Gb/s: 2 MCIO
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Intel® X550
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA)
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

# TURIND8-2L2T



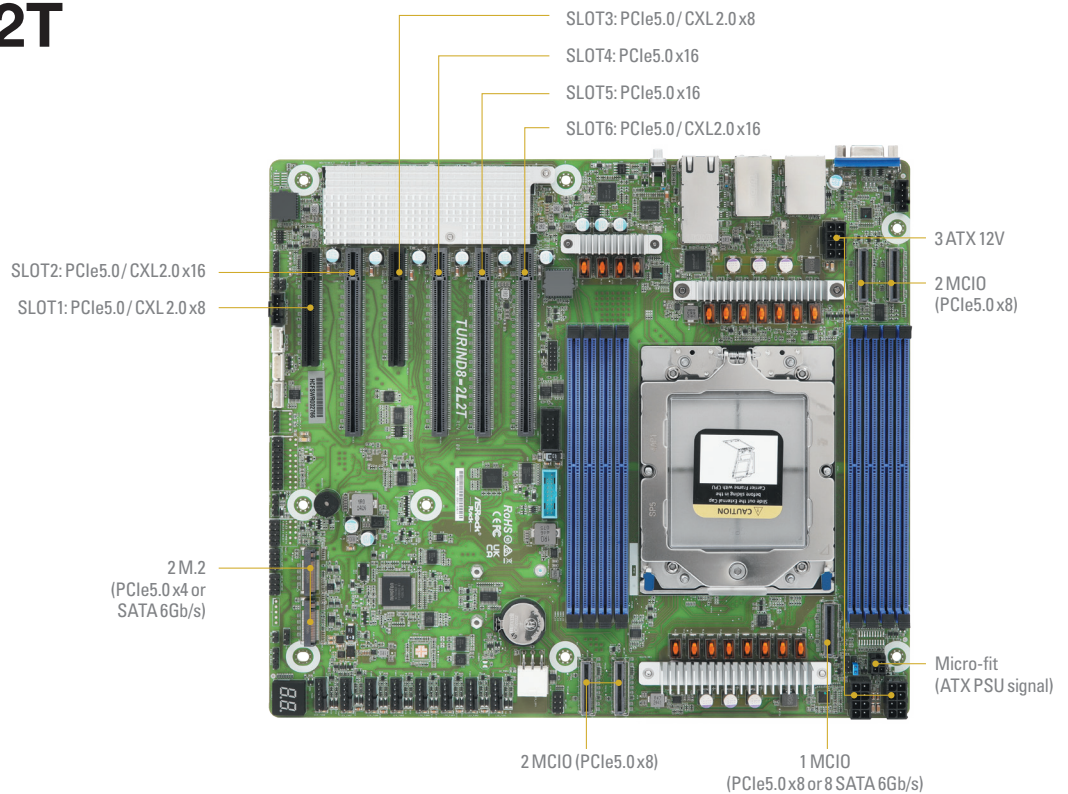
10Gbase-T



PCI-E 5.0

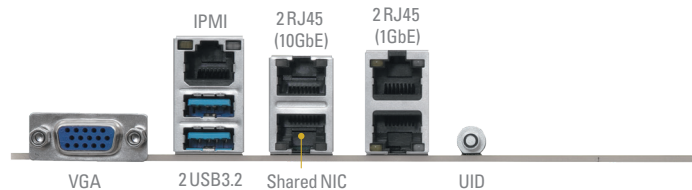


6400MHz



## Application

- Mainstream Server/Workstation
- Web Hosting



## TURIND8-2L2T

<b>Form Factor</b>		CEB (12" x 10.5")
<b>Processor</b>	CPU	1 Socket SP5 (LGA-6096)
<b>System</b>		AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM up to 128GB (2Rx4) each, max. 6400MHz RDIMM-3DS up to 512GB (2Rx4) each, max. 6400MHz
<b>Expansion</b>	PCIe slot	SLOT6, 2: FL PCIe5.0/ CXL2.0Note1 x16 SLOT5: FL PCIe5.0x16 SLOT4: FL PCIe5.0x16 SLOT3, 1: FL PCIe5.0/ CXL2.0Note1 x8
	Others	1 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) 4 MCIO (PCIe5.0 x8)
<b>Storage</b>	M.2	1 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 2280 form factor 1 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor
	SATA port	10 SATA 6Gb/s: 1 MCIO, 2 M.2
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2 2 RJ45 (1GbE) by Intel® i210
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA)
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

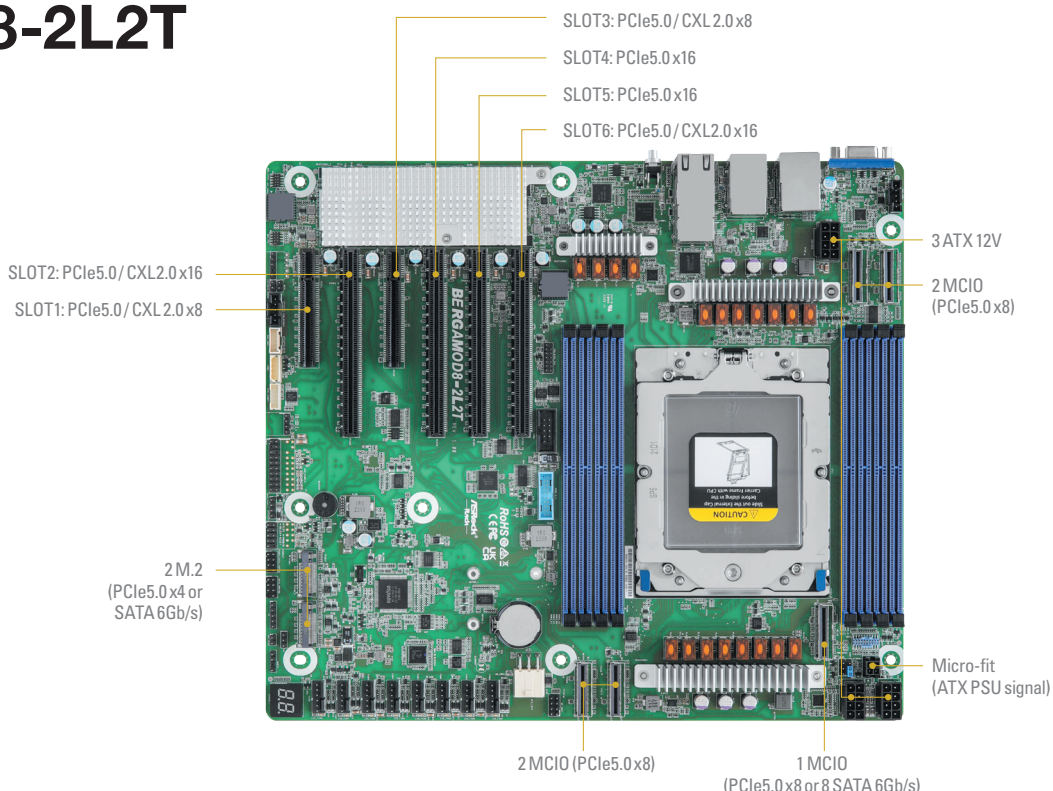
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10Gbase-T

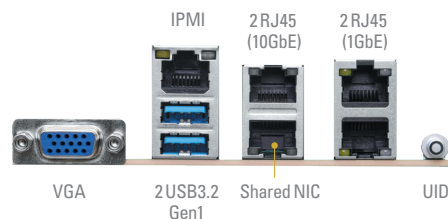


PCI-E 5.0



## Application

- Mainstream Server/Workstation
- Web Hosting



## BERGAMOD8-2L2T

<b>Form Factor</b>		CEB (12" x 10.5")
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096) Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
	PCle slot	SLOT6, 2: PCIe5.0/CXL 2.0 x16 <sup>Note1</sup> SLOT5: PCIe5.0 x16 SLOT4: PCIe5.0 x16 SLOT3, 1: PCIe5.0/CXL 2.0 x8 <sup>Note1</sup>
<b>Expansion</b>	Others	1 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) 4 MCIO (PCIe5.0 x8)
<b>Storage</b>	M.2	1 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 2280 form factor 1 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor
	SATA port	10 SATA 6Gb/s: 1 MCIO, 2 M.2
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2 2 RJ45 (1GbE) by Intel® i210
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA)
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors



# TURIND8X-2T/500W



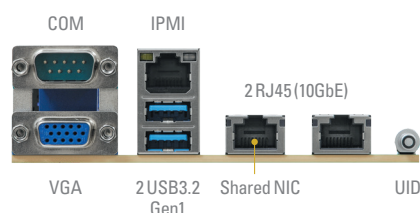
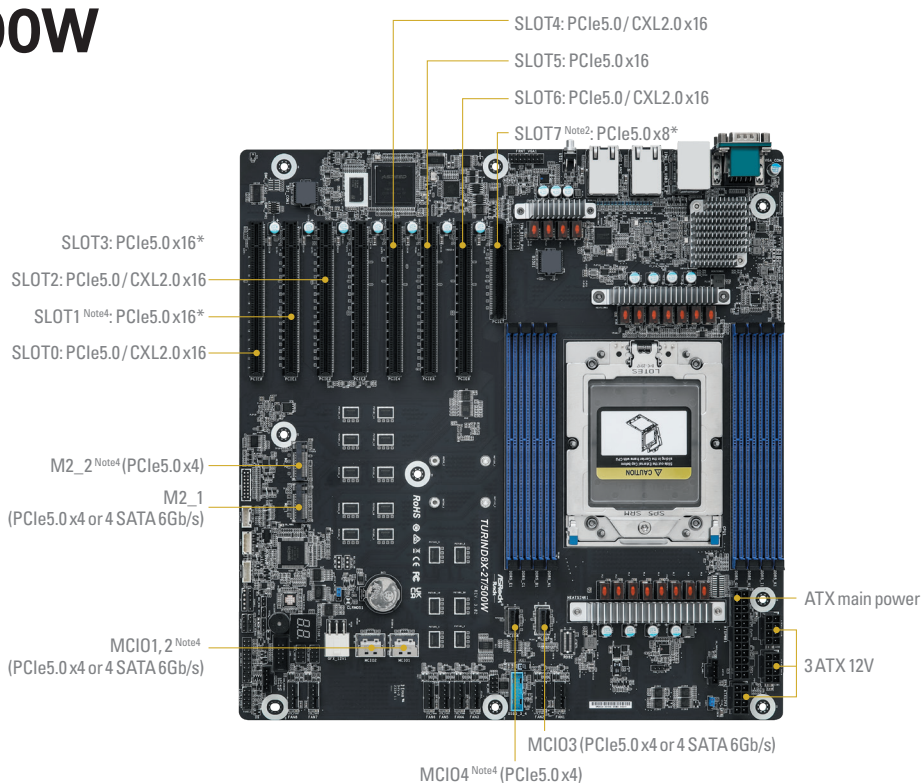
10Gbase-T



PCI-E 5.0



6400MHz



## Application

- Mainstream Server/Workstation
- Web Hosting

## TURIND8X-2T/500W

<b>Form Factor</b>		EEB like (12.63" x 13")
<b>Processor</b>	CPU	1 Socket SP5 (LGA-6096)
<b>System</b>		AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
	TDP	Up to 500W
<b>Memory</b>	Capacity	8 DDR5 DIMM Slots (1DPC); Supports: RDIMM up to 128GB each, max. 6400MHz RDIMM-3DS up to 512GB each, max. 6400MHz
<b>Expansion</b>	PCIe slot	SLOT7: PCIe5.0x8 SLOT6, 4, 2, 0: PCIe5.0/CXL 1.1 x16 SLOT5, 3, 1: PCIe5.0x16
	Others	3 MCIO (PCIe5.0x4 or 4 SATA 6Gb/s) 1 MCIO (PCIe5.0x4)
<b>Storage</b>	M.2	1 M-key (PCIe5.0x4 or 4 SATA 6Gb/s), supports 22110/2280 form factor 1 M-key (PCIe5.0x4), supports 22110/2280 form factor
	SATA port	13 SATA 6Gb/s: 3 MCIO, 1 M.2
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 DB9 (COM), 1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules



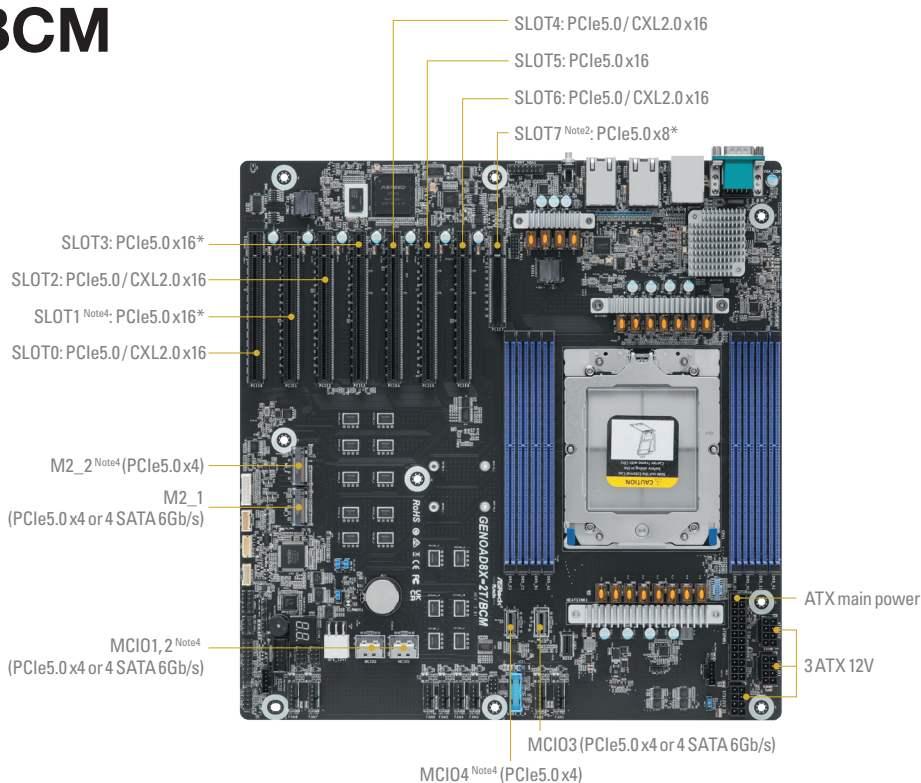
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10Gbase-T

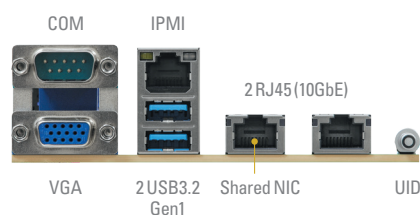


PCI-E 5.0



## Application

- Mainstream Server/Workstation
- Web Hosting



## GENOAD8X-2T/BCM

<b>Form Factor</b>		EEB (12.63" x 13") <sup>Note1</sup>
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
<b>Expansion</b>	PCIe slot	SLOT7 <sup>Note2</sup> : PCIe5.0x8 SLOT6, 4, 2, 0: PCIe5.0/ CXL2.0x16 <sup>Note3</sup> SLOT5, 3: PCIe5.0x16 SLOT1 <sup>Note4</sup> : PCIe5.0x16
	Others	MCI01, 2 <sup>Note2</sup> (PCIe5.0x4 or 4 SATA 6Gb/s) MCI03 (PCIe5.0x4 or 4 SATA 6Gb/s) MCI04 <sup>Note4</sup> (PCIe5.0x4)
<b>Storage</b>	M.2	M2_1 (PCIe5.0x4 or SATA 6Gb/s), supports 22110/2280 form factor, M2_2 <sup>Note4</sup> (PCIe5.0x4), supports 22110/2280 form factor
	SATA port	13 SATA 6Gb/s: 3 MCI0, 1 M.2
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 DB9 (COM), 1 (9-pin) header
	Video	1 DB15 (VGA)
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Extend 10.1mm left and 6mm right

Note2: SLOT7 share lanes with MCI01 and MCI02. When SLOT7 occupied, MCI01 will not function and MCI02 can be enabled by jumper setting. When selecting MCI02, SLOT7 will switch to PCIe4.

Note3: Supports CXL1.1 while installing AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

Note4: SLOT1 shared lanes with MCI04 and M2\_2. SLOT1 auto-switch to PCIe5.0 x8 when either MCI04 or M2\_2 populated.

\* Via re-drivers.

# TURIND8QM3-2T/500W



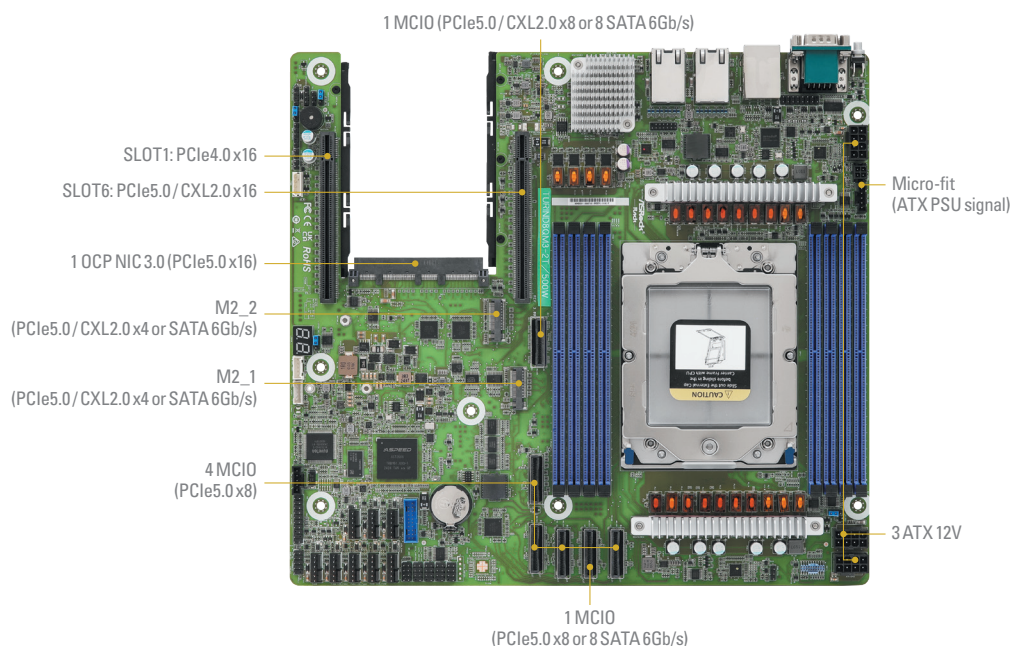
10Gbase-T



PCI-E 5.0

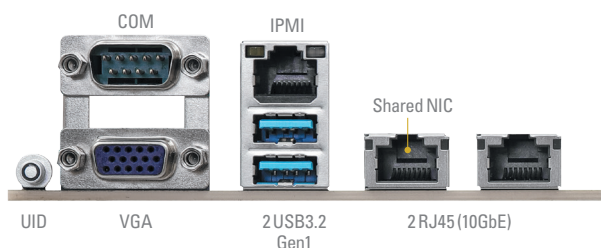


6400MHz



## Application

- NVMe Storage Server
- Web Hosting
- General Purpose Server



## TURIND8QM3-2T/500W

<b>Form Factor</b>		CEB (12" x 11")
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
	TDP	Up to 500W
<b>Memory</b>	Capacity	8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 6400MHz; 3DS RDIMM: up to 512GB, max. 6400MHz
<b>Expansion</b>	PCIe slot	SLOT6: PCIe5.0/ CXL2.0 x16 <sup>Note1</sup> SLOT1: PCIe4.0x16
	Others	1 MCIO (PCIe5.0/ CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) 4 MCIO (PCIe5.0 x8)
<b>Storage</b>	M.2	M2_1 (PCIe5.0/ CXL2.0 x4 or SATA 6Gb/s) <sup>Note1</sup> , supports 22110/2280 form factor M2_2 (PCIe5.0/ CXL2.0 x4 or SATA 6Gb/s) <sup>Note1</sup> , supports 2280 form factor
	SATA port	26 SATA 6Gb/s: 3 MCIO, 2 M.2
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0 x16)
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 DB9 (COM)
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

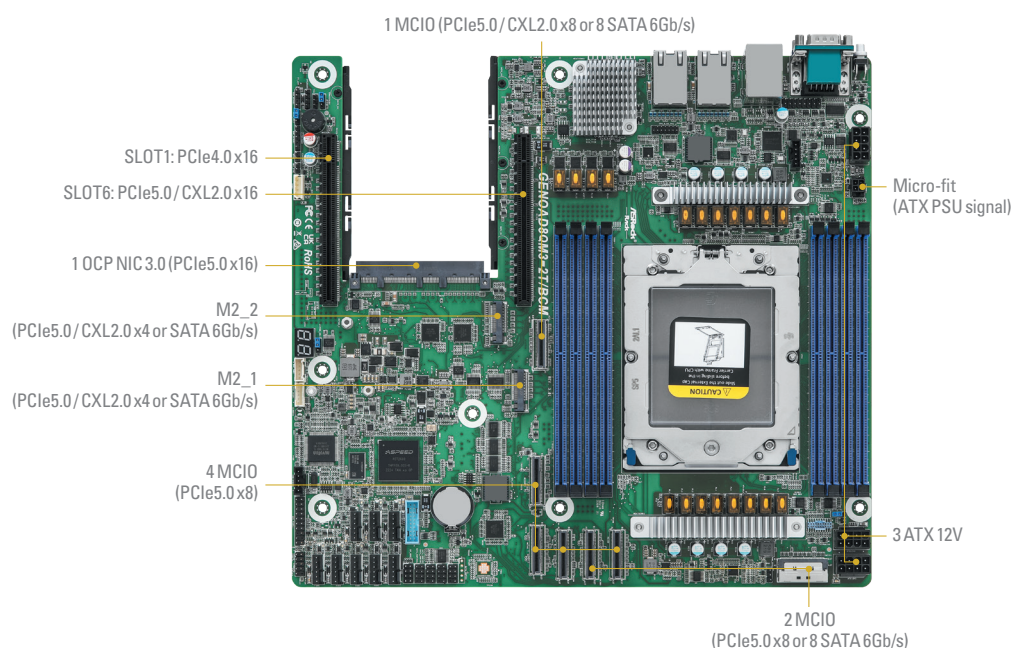
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PCI-E5.0

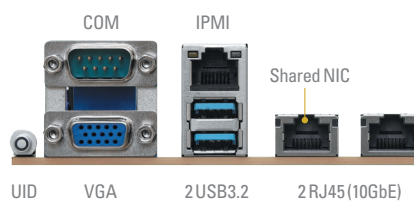


OCP NIC 3.0



## Application

- NVMe Storage Server
- Web Hosting
- General Purpose Server



## GENOAD8QM3-2T/BCM

<b>Form Factor</b>		CEB (12" x 11")
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
<b>Expansion</b>	PCIe slot	SLOT6: PCIe5.0/ CXL2.0 x16 <sup>Note1</sup> SLOT1: PCIe4.0x16
	Others	1 MCIO (PCIe5.0/ CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) 4 MCIO (PCIe5.0 x8)
<b>Storage</b>	M.2	M2_1 (PCIe5.0/ CXL2.0 x4 or SATA 6Gb/s) <sup>Note1</sup> , supports 22110/2280 form factor M2_2 (PCIe5.0/ CXL2.0 x4 or SATA 6Gb/s) <sup>Note1</sup> , supports 2280 form factor
	SATA port	26 SATA 6Gb/s: 3 MCIO, 2 M.2
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0 x16)
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 DB9 (COM)
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

# TURIND8HM3



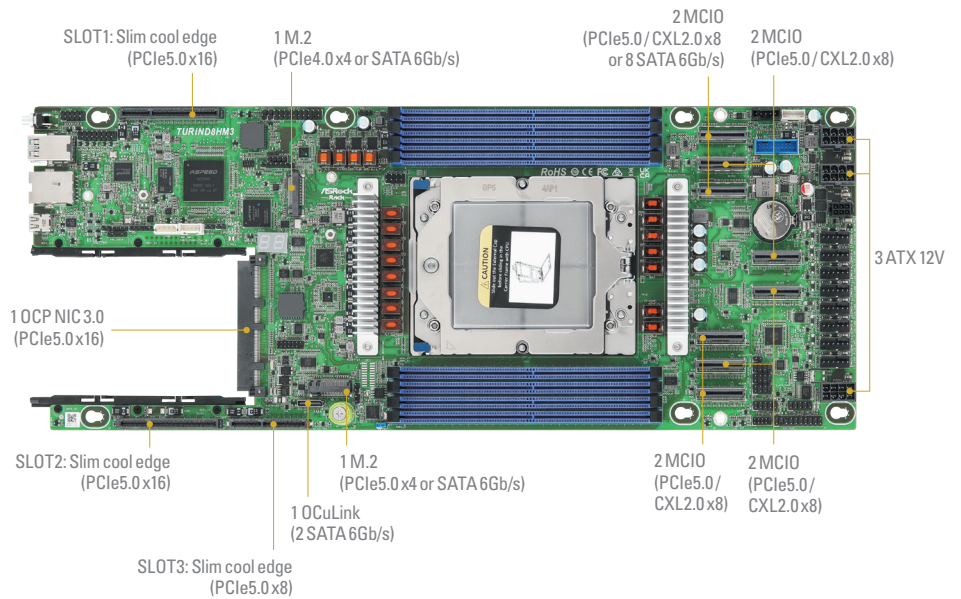
OCP NIC 3.0



PCI-E 5.0

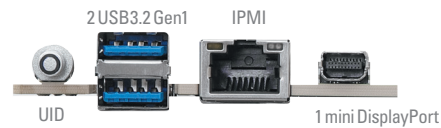


6400MHz



## Application

- Multi-node Server
- Edge Server



## TURIND8HM3

<b>Form Factor</b>		Half-Width (6.6" x 17")
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 6400MHz; 3DS RDIMM: up to 512GB, max. 6400MHz
<b>Expansion</b>	PCIe slot	SLOT3: Slim cool edge (PCIe5.0 x8) SLOT2: Slim cool edge (PCIe5.0 x16) SLOT1: Slim cool edge (PCIe5.0 x16)
	Others	2 MCIO (PCIe5.0 / CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> 6 MCIO (PCIe5.0 / CXL2.0 x8) <sup>Note1</sup> 1 OCuLink (2 SATA 6Gb/s)
<b>Storage</b>	M.2	1 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor 1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor
	SATA port	18 SATA 6Gb/s: 2 MCIO, 2 M.2 2 SATA 6Gb/s by ASM1061: 1 OCuLink
<b>Network</b>	OCP NIC	1 OCP NIC 3.0 (PCIe5.0 x16)
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 mini DisplayPort (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors



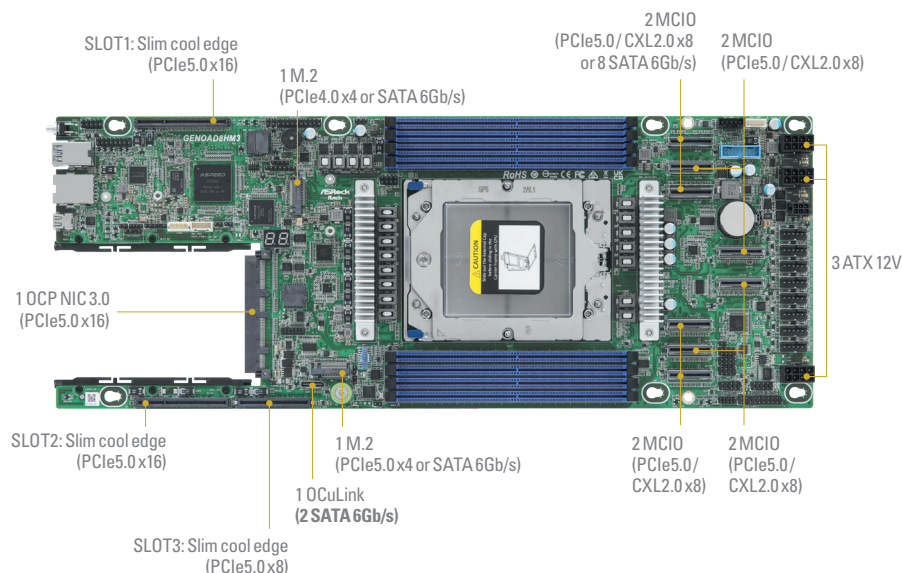
# GENOAD8HM3



OCP NIC 3.0

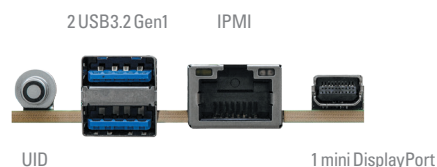


PCI-E 5.0



## Application

- Multi-node Server
- Edge Server



## GENOAD8HM3

<b>Form Factor</b>		Half-Width (6.6" x 17")
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
<b>Expansion</b>	PCIe slot	SLOT3: Slim cool edge (PCIe5.0 x8) SLOT2: Slim cool edge (PCIe5.0 x16) SLOT1: Slim cool edge (PCIe5.0 x16)
	Others	2 MCIO (PCIe5.0/CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> 6 MCIO (PCIe5.0/CXL2.0 x8) <sup>Note1</sup> 1 OCuLink (2 SATA 6Gb/s)
<b>Storage</b>	M.2	1 M-key (PCIe5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor 1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor
	SATA port	18 SATA 6Gb/s: 2 MCIO, 2 M.2 2 SATA 6Gb/s by ASM1061: 1 OCuLink
<b>Network</b>	OCP NIC	1 OCP NIC 3.0 (PCIe5.0 x16)
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 mini DisplayPort (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

# GENOAD24QM3-2L2T/BCM



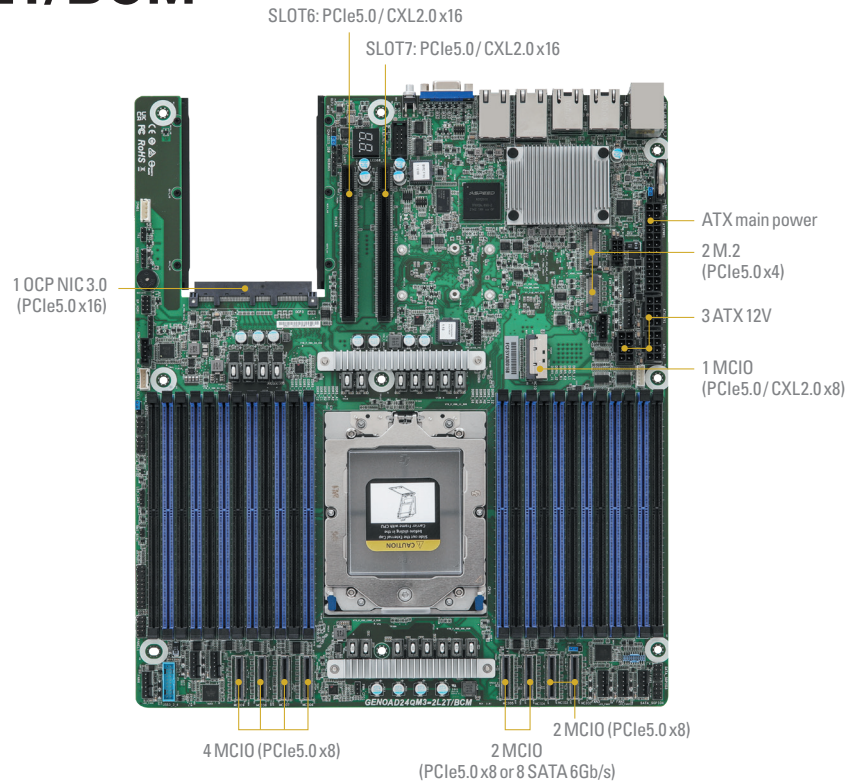
PCI-E5.0



10Gbase-T

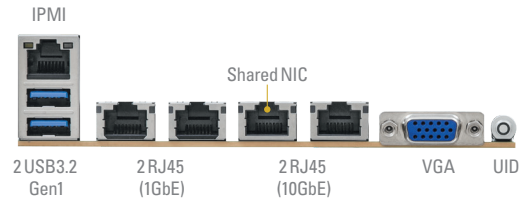


OCP NIC 3.0



## Application

- CSP
- All-flash Storage Server
- Cloud Computing



## GENOAD24QM3-2L2T/BCM

<b>Form Factor</b>		EEB (12" x 14")
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	24 DDR5 DIMM Slots (2DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
<b>Expansion</b>	PCIe slot	SLOT7: PCIe5.0/CXL2.0 x16 <sup>Note1</sup> SLOT6: PCIe5.0/CXL2.0 x16 <sup>Note1</sup>
	Others	1 MCIO (PCIe5.0/CXL2.0 x8) <sup>Note1</sup> 6 MCIO (PCIe5.0 x8) 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s)
<b>Storage</b>	M.2	2 M-key (PCIe5.0 x4/CXL2.0 x4) <sup>Note1</sup> , supports 22110/2280/2260 form factor
	SATA port	16 SATA 6 Gb/s: 2 MCIO
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416 2 RJ45 (1GbE) by Intel® i210
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0/CXL2.0 x16) <sup>Note1</sup>
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F-CG
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 1 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA)
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

# GENOAD24QM32-2L2T/BCM



PCI-E5.0

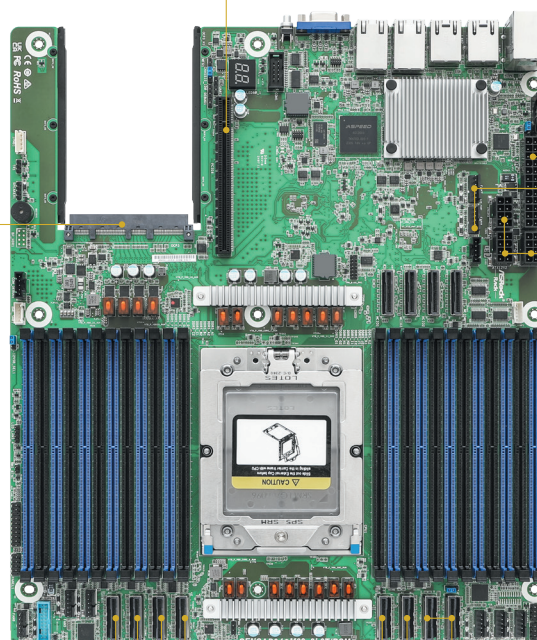


10Gbase-T



OCP NIC 3.0

SLOT6: PCIe5.0/CXL2.0 x16

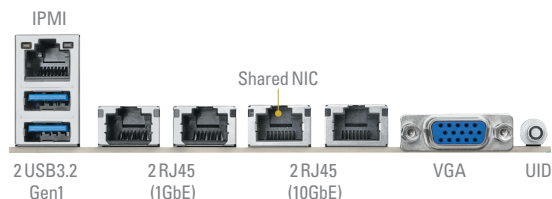
1 OCP NIC 3.0  
(PCIe5.0 x16)ATX main power  
2 M.2  
(PCIe5.0 x4)  
3 ATX 12V

4 MCIO (PCIe5.0 x8)

2 MCIO (PCIe5.0 x8)  
2 MCIO  
(PCIe5.0 x8 or 8 SATA 6Gb/s)

## Application

- CSP
- All-flash Storage Server
- Cloud Computing

2 USB3.2  
Gen12 RJ45  
(1GbE)

Shared NIC

2 RJ45  
(10GbE)

VGA

UID

## GENOAD24QM32-2L2T/BCM

<b>Form Factor</b>		EEB (12" x 14")
<b>Processor System</b>	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	24 DDR5 DIMM Slots (2DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
<b>Expansion</b>	PCIe slot	SLOT6: PCIe5.0/CXL2.0 x16
	Others	1 MCIO (PCIe5.0/CXL2.0 x8), 6 MCIO (PCIe5.0 x8) 10 MCIO (PCIe5.0 x8) 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s)
	SATA port	16 SATA 6 Gb/s: 2 MCIO
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416 2 RJ45 (1GbE) by Intel® i210
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0/CXL2.0 x16)
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F-CG
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 1 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA)
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

# TURIND12M3-2Q/500W



PCI-E 5.0

OCP NIC 3.0

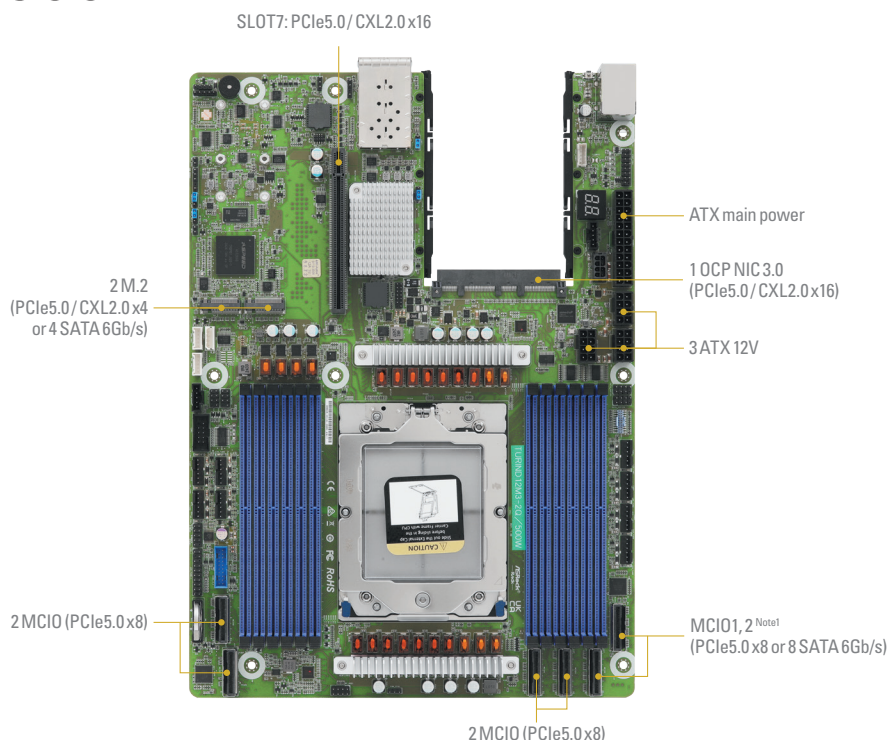


SFP28

6400MHz

## Application

- All-flash Storage Server
- Cloud Computing
- CSP



## TURIND12M3-2Q/500W

Form Factor		9.6" x 13.39"
Processor System	CPU	1 Socket SP5 (SM-LGA-6096) Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
	TDP	Up to 500W
Memory	Capacity	12 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 6400MHz; 3DS RDIMM: up to 512GB, max. 6400MHz
Expansion	PCIe slot	SLOT7: PCIe5.0/CXL2.0 x16 <sup>Note1</sup> SLOT6: PCIe5.0/CXL2.0 x16 <sup>Note1</sup>
	Others	6 MCIO (PCIe5.0 x8) 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s)
Storage	M.2	2 M-key (PCIe5.0/CXL2.0 x4 or 4 SATA 6Gb/s) <sup>Note1</sup> , supports 22110/2280/2260 form factor
	SATA port	Up to 24 SATA 6Gb/s: 2 MCIO, 8 SATA via optional M2U2_HD_G4 M.2 device
Network	SFP28	2 SFP28 (25GbE) by Broadcom BCM57414
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0/CXL2.0 x16) <sup>Note1</sup>
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
I/O	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 (15-pin) header
Security	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors



# GENOAD12M3-2Q



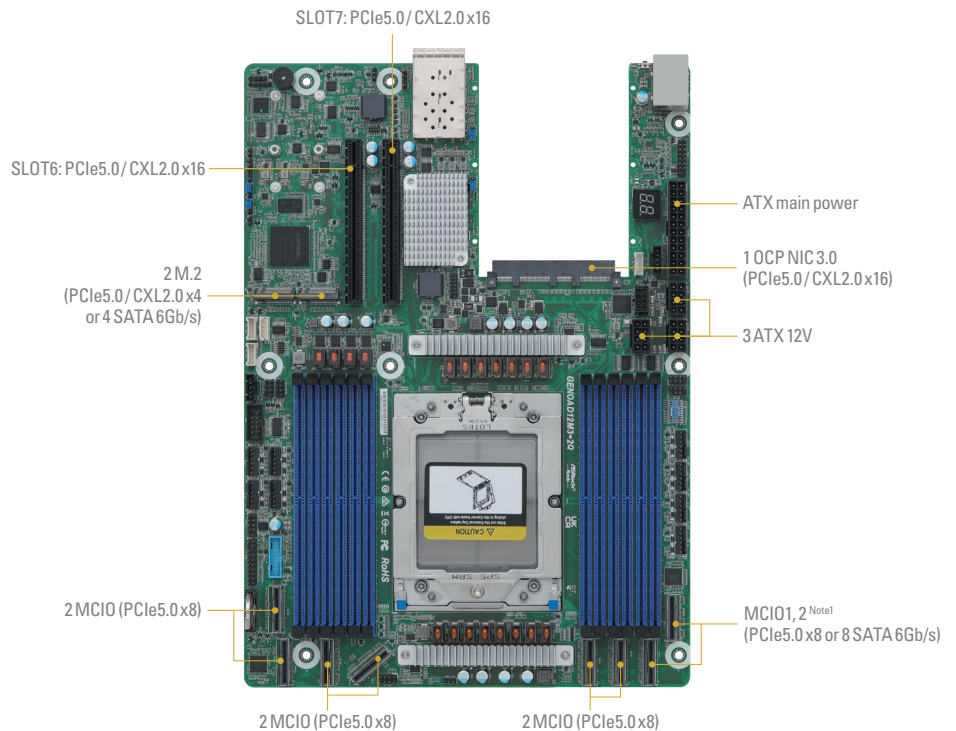
PCI-E5.0



OCP NIC 3.0



SFP28



## Application

- All-flash Storage Server
- Cloud Computing
- CSP



## GENOAD12M3-2Q

Form Factor		9.6" x 13.39"
Processor System	CPU	1 Socket SP5 (SM-LGA-6096) Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
Memory	Capacity	12 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
Expansion	PCIe slot	SLOT7: PCIe5.0/CXL2.0 x16 <sup>Note1</sup> SLOT6: PCIe5.0/CXL2.0 x16 <sup>Note1</sup>
	Others	6 MCIO (PCIe5.0 x8) 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s)
Storage	M.2	2 M-key (PCIe5.0/CXL2.0 x4 or 4 SATA 6Gb/s) <sup>Note1</sup> , supports 22110/2280/2260 form factor
	SATA port	Up to 24 SATA 6Gb/s: 2 MCIO, 8 SATA via optional M2U2_HD_G4 M.2 device
Network	SFP28	2 SFP28 (25GbE) by Broadcom BCM57414
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0/CXL2.0 x16) <sup>Note1</sup>
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
I/O	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 (15-pin) header
Security	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

# TURIN2D16-2T/ROT



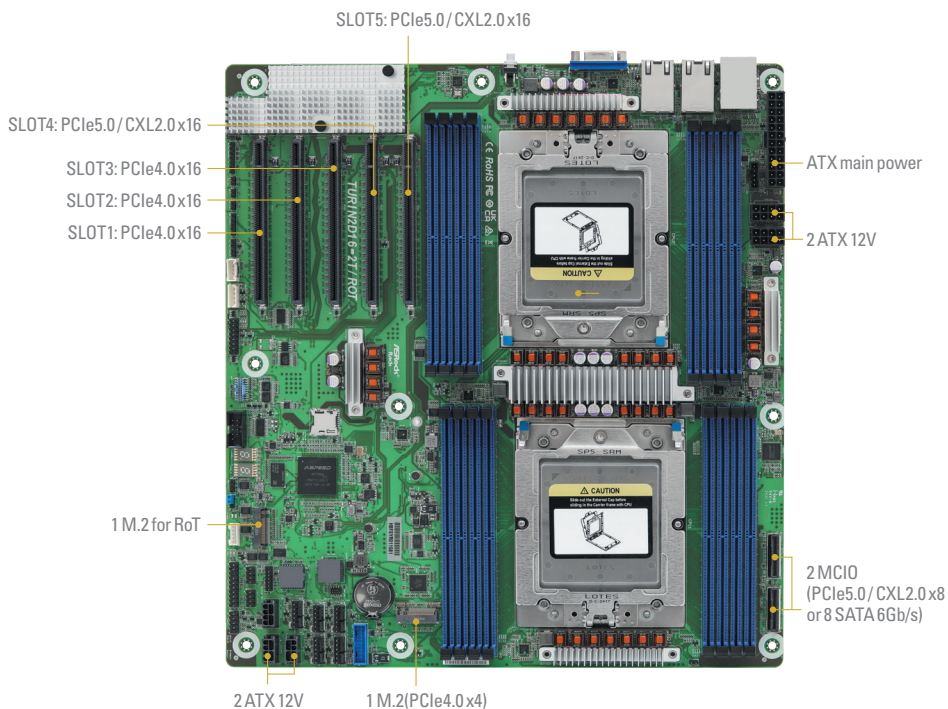
PCI-E5.0



10Gbase-T

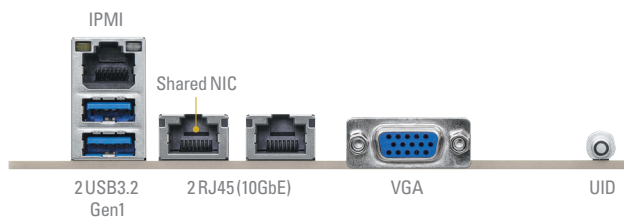


6400MHz



## Application

- Mainstream Server for SMB
- High-end Workstation / Industrial Application



## TURIN2D16-2T/ROT

<b>Form Factor</b>		EEB (12" x 13.2")
<b>Processor System</b>	CPU	1+1 Socket SP5 (SM-LGA-6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8+8 DDR5 DIMM Slots (1DPC); Supports: RDIMM up to 128GB each, max. 6400MHz RDIMM-3DS up to 512GB each, max. 6400MHz
	PCIe slot	SL0T5: PCIe5.0/CXL2.0 x16 <sup>Note1</sup> [CPU1] SL0T4: PCIe5.0/CXL2.0 x16 <sup>Note1</sup> [CPU1] SL0T3: PCIe4.0 x16 [CPU1] SL0T2: PCIe4.0 x16 [CPU0] SL0T1: PCIe4.0 x16 [CPU0]
<b>Storage</b>	Others	2 MCIO (PCIe5.0/CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU0]
	M.2	1 M-key (PCIe4.0 x4), supports 22110/2280 form factor [CPU0] 1 M-key for RoT function, supports 3060 form factor
	SATA port	16 SATA 6Gb/s: 2 MCIO
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

# TURIN2D16-2T



PCI-E5.0



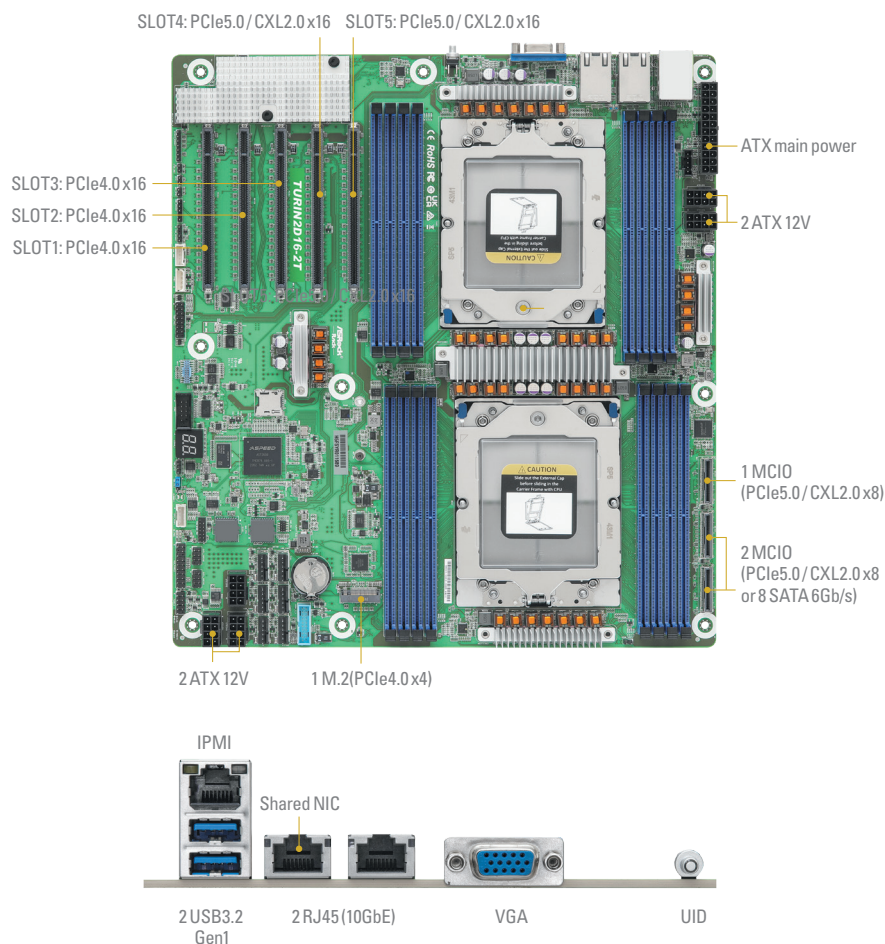
10Gbase-T



6400MHz

## Application

- Mainstream Server for SMB
- High-end Workstation / Industrial Application



## TURIN2D16-2T

<b>Form Factor</b>		EEB (12"x 13.2")
<b>Processor System</b>	CPU	1+1 Socket SP5 (SM-LGA-6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8+8 DDR5 DIMM Slots (1DPC); Supports RDIMM up to 128GB each, max. 6400MHz RDIMM-3DS up to 512GB each, max. 6400MHz
<b>Expansion</b>	PCIe slot	SLOT5: PCIe5.0/ CXL2.0 x16 <sup>Note1</sup> [CPU1] SLOT4: PCIe5.0/ CXL2.0 x16 <sup>Note1</sup> [CPU1] SLOT3: PCIe4.0 x16 [CPU1] SLOT2: PCIe4.0 x16 [CPU0] SLOT1: PCIe4.0 x16 [CPU0]
	Others	2 MCIO (PCIe5.0/ CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU0] 1 MCIO (PCIe5.0/ CXL2.0 x8) <sup>Note1</sup> [CPU0]
<b>Storage</b>	M.2	1 M-key (PCIe4.0 x4), supports 22110/2280 form factor [CPU0]
	SATA port	16 SATA 6Gb/s: 2 MCIO
<b>Network</b>	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

# TURIN2D24TM3-2L+/500W



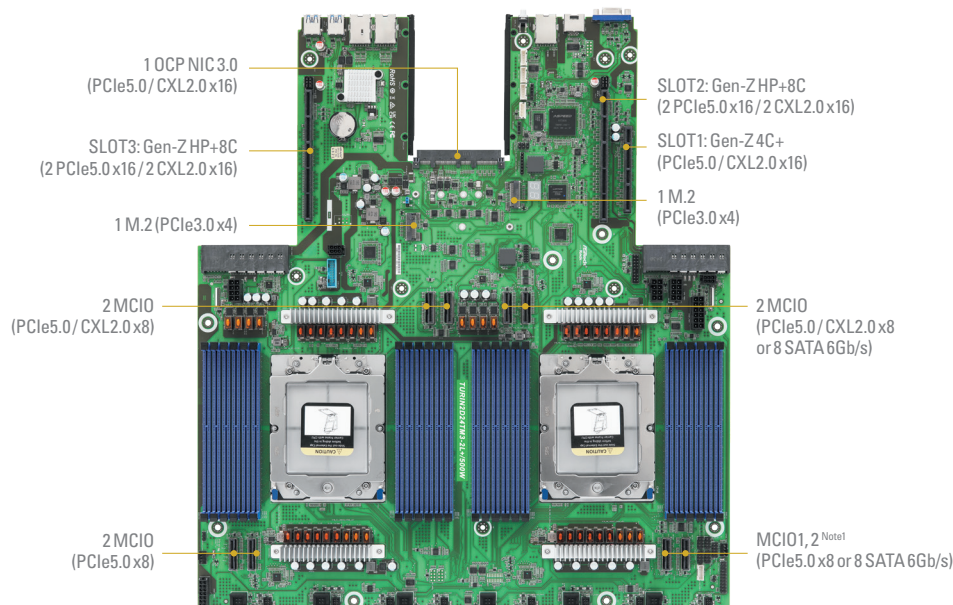
OCP NIC 3.0



PCI-E 5.0



6400MHz



## Application

- Software-defined application
- E-commerce
- HCI



## TURIN2D24TM3-2L+/500W

<b>Form Factor</b>		Proprietary T-shape (17.0149" x 18.8607")
<b>Processor System</b>	CPU	1+1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
	TDP	Up to 500W
<b>Memory</b>	Capacity	12+12 DDR5 DIMM Slots (1DPC); Supports RDIMM up to 128GB each, max. 6400MHz; RDIMM-3DS up to 512GB each, max. 6400MHz
<b>Expansion</b>	PCIe slot	SLOT3: Gen-Z HP+8C (2 PCIe5.0 x16/ 2 CXL2.0 x16) <sup>Note1</sup> [CPU1] SLOT2: Gen-Z HP+8C (2 PCIe5.0 x16/ 2 CXL2.0 x16) <sup>Note1</sup> [CPU0] SLOT1: Gen-Z 4C+ (PCIe5.0/ CXL2.0 x16) <sup>Note1</sup> [CPU0]
	Others	MCIO1, 2 (PCIe5.0 x8 or 8 SATA 6Gb/s) [CPU0] <sup>Note2</sup>
		2 MCIO (PCIe5.0/ CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU0]
		2 MCIO (PCIe5.0/ CXL2.0 x8) <sup>Note1</sup> [CPU1]
		2 MCIO (PCIe5.0 x8) [CPU1]
<b>Storage</b>	M.2	1 M-key (PCIe3.0 x4), supports 2280/2260/2242/2230 form factor [CPU0] 1 M-key (PCIe3.0 x4), supports 2280/2242 form factor [CPU1]
	SATA port	Up to 32 SATA 6 Gb/s: 4 MCIO
<b>Network</b>	RJ45	2 RJ45 (1GbE) by Intel® i350
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0/ CXL2.0 x16) <sup>Note1</sup> [CPU1]
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 1 via 26-pin header, 1 via 19-pin header
	COM port	1 RJ45 (COM)
	Video	1 DB15 (VGA)
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

Note2: MCIO1 and MCIO2 support PCIe only while installing 2 processors



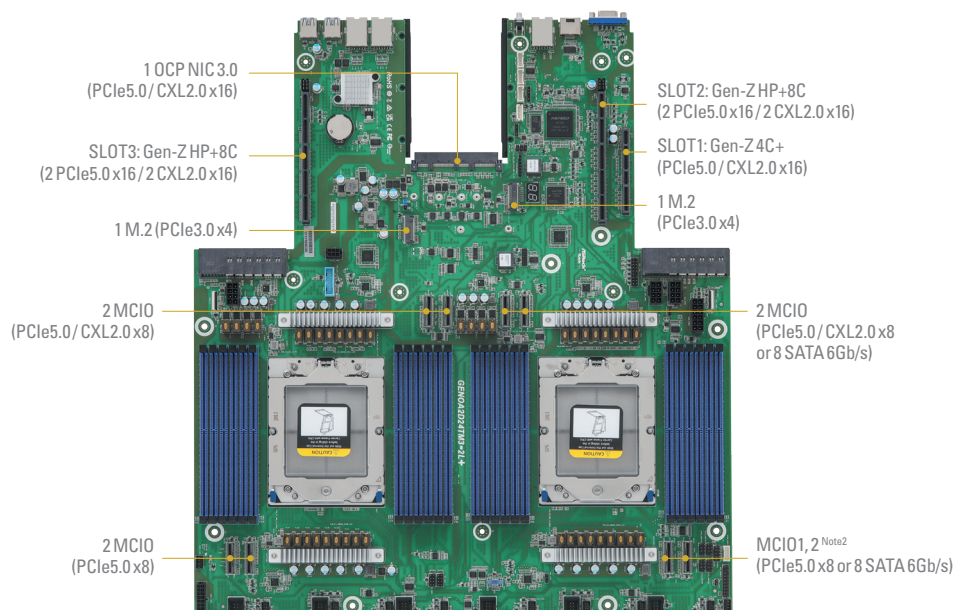
# GENOA2D24TM3-2L+



OCP NIC 3.0



PCI-E 5.0



## Application

- Software-defined application
- E-commerce
- HCI



## GENOA2D24TM3-2L+

<b>Form Factor</b>		Proprietary T-shape (17.0149" x 18.8607")
<b>Processor System</b>	CPU FCH	1+1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors System on chip
<b>Memory</b>	Capacity	12+12 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
<b>Expansion</b>	PCIe slot  Others	SLOT3: Gen-Z HP+8C (2 PCIe 5.0 x16 / 2 CXL 2.0 x16) <sup>Note1</sup> [CPU1] SLOT2: Gen-Z HP+8C (2 PCIe 5.0 x16 / 2 CXL 2.0 x16) <sup>Note1</sup> [CPU0] SLOT1: Gen-Z 4C+ (PCIe 5.0 / CXL 2.0 x16) <sup>Note1</sup> [CPU0] MCIO1, 2 (PCIe 5.0 x8 or 8 SATA 6Gb/s) <sup>Note2</sup> [CPU0] 2 MCIO (PCIe 5.0 / CXL 2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU0] 2 MCIO (PCIe 5.0 / CXL 2.0 x8) <sup>Note1</sup> [CPU1] 2 MCIO (PCIe 5.0 x8) [CPU1]
<b>Storage</b>	M.2  SATA port	1 M-key (PCIe 3.0 x4), supports 2280/2260/2242/2230 form factor [CPU0] 1 M-key (PCIe 3.0 x4), supports 2280/2242 form factor [CPU1] Up to 32 SATA 6 Gb/s: 4 MCIO
<b>Network</b>	RJ45 OCP NIC	2 RJ45 (1GbE) by Intel® i350 1 OCP NIC 3.0 (PCIe 5.0 / CXL 2.0 x16) <sup>Note1</sup> [CPU1]
<b>Management</b>	BMC Dedicated IPMI	ASPEED AST2600 1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type-A, 1 via 26-pin header, 1 via 19-pin header 1 RJ45 (COM) 1 DB15 (VGA)
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

Note2: MCIO1 and MCIO2 support PCIe only while installing 2 processors

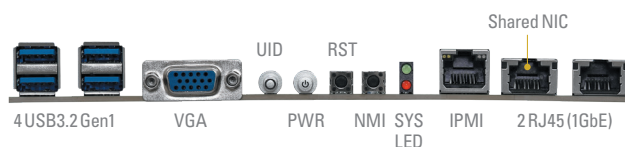
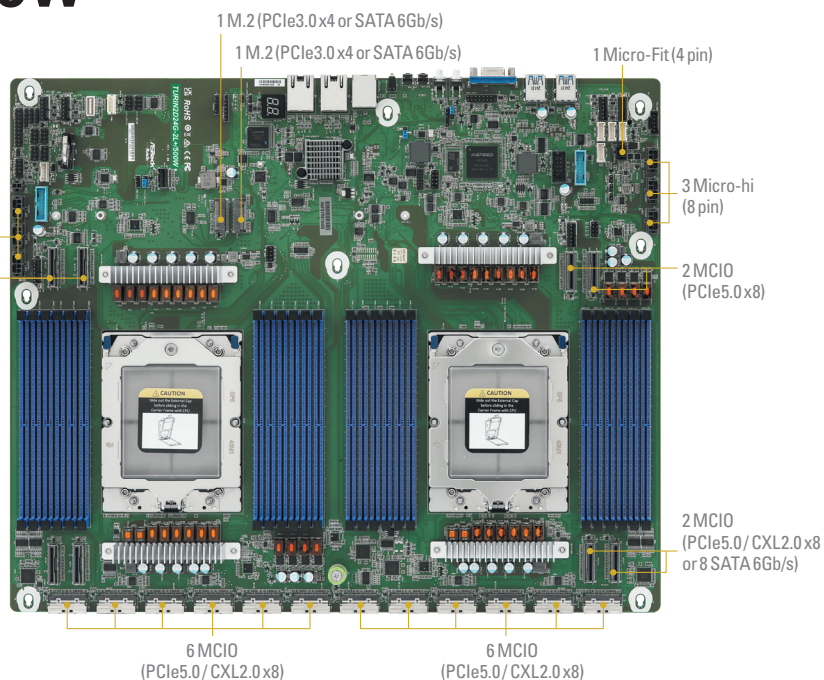
# TURIN2D24G-2L+/500W



PCI-E5.0



6400MHz



## Application

- All-flash Storage Server
- GPGPU Computing
- High-end Network Appliance

## TURIN2D24G-2L+/500W

<b>Form Factor</b>		Proprietary (16.93"x 13.78")
<b>Processor System</b>	CPU	1+1 Socket SP5 (SM-LGA-6096); AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
	TDP	Up to 500W
<b>Memory</b>	Capacity	12+12 DDR5 DIMM Slots (1DPC); Supports: RDIMM up to 128GB each, max. 6400MHz RDIMM-3DS up to 512GB each, max. 6400MHz
<b>Expansion</b>	Others	6 MCIO (PCIe5.0/CXL2.0 x8) <sup>Note1</sup> [CPU0]
		2 MCIO (PCIe5.0/CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU0]
		2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) [CPU0] <sup>Note2</sup>
		6 MCIO (PCIe5.0/CXL2.0 x8) <sup>Note1</sup> [CPU1]
		2 MCIO (PCIe5.0/CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU1]
		2 MCIO (PCIe5.0 x8) [CPU1]
<b>Storage</b>	M.2	M2_1 (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] M2_2 (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU1]
	SATA port	32 SATA 6Gb/s: 4 MCIO 2 SATA 6Gb/s by ASM1061R: 2 M.2
<b>Network</b>	RJ45	2 RJ45 (1GbE) by Intel® i350
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	8 USB3.2 Gen1 ports: 4 rear Type-A, 4 via 19-pin headers
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

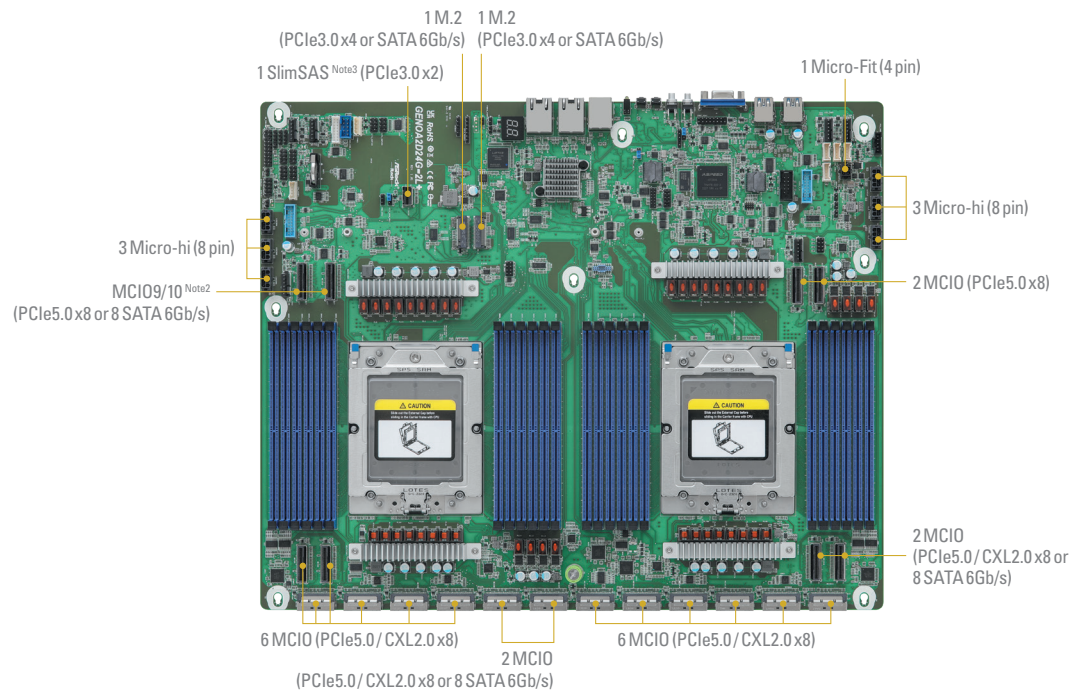
Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

Note2: MCIO9, 10 support PCIe only while installing 2 processors

# GENOA2D24G-2L+

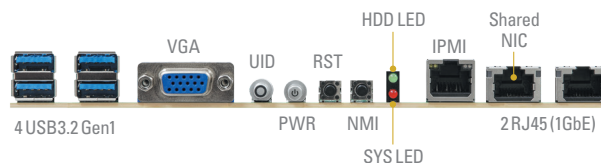


PCI-E5.0



## Application

- All-flash Storage Server
- GPGPU Computing
- High-end Network Appliance



## GENOA2D24G-2L+

<b>Form Factor</b>		Proprietary (16.93" x 13.78")
<b>Processor System</b>	CPU	1+1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	12+12 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
	Others	6 MCIO (PCIe5.0/CXL2.0 x8) <sup>Note1</sup> [CPU0] 2 MCIO (PCIe5.0/CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU0] 2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) [CPU0] <sup>Note2</sup> 6 MCIO (PCIe5.0/CXL2.0 x8) <sup>Note1</sup> [CPU1] 2 MCIO (PCIe5.0/CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU1] 2 MCIO (PCIe5.0 x8) [CPU1] 1 SlimSAS (PCIe3.0 x2) [CPU0] <sup>Note3</sup>
<b>Storage</b>	M.2	M2_1 (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] M2_2 (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU1]
	SATA port	32 SATA 6 Gb/s: 4 MCIO 2 SATA 6Gb/s by ASM1061: 2 M.2
<b>Network</b>	RJ45	2 RJ45 (1GbE) by Intel® i350
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	8 USB3.2 Gen1 ports: 4 rear Type-A, 4 via 19-pin headers
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

Note2: MCIO9, 10 support PCIe only while installing 2 processors

Note3: SlimSAS (by jumper setting):

PCIe3.0 x2 when M2\_1 supports only PCIe3.0 x2 or SATA 6Gb/s

No function when M2\_1 supports PCIe3.0 x4 or SATA 6Gb/s

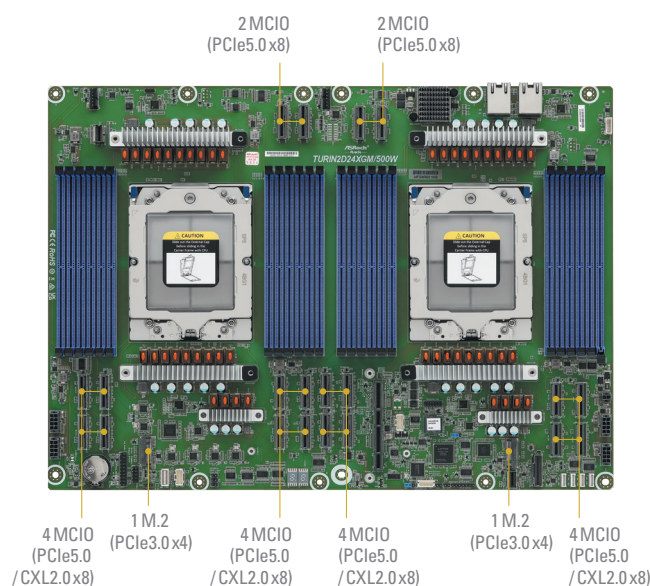
# TURIN2D24XGM/500W



PCI-E5.0



6400MHz



Shared NIC



2 RJ45 (1GbE)

## Application

- GPGPU Computing
- All-flash Storage Server
- High-end Network Appliance

## TURIN2D24XGM/500W

<b>Form Factor</b>		MGX (424.5 x 305.59mm)
<b>Processor System</b>	CPU	1+1 Socket SP5 (SM-LGA-6096) AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
	TDP	Up to 500W
<b>Memory</b>	Capacity	12+12 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM: up to 128GB (2Rx4), max. 6400MHz RDIMM-3DS: up to 512GB (2Rx4), max. 6400MHz
	Others	8 MCIO (PCIe5.0 / CXL2.0 x8) [CPU0] 2 MCIO (PCIe5.0 x8) [CPU0] 8 MCIO (PCIe5.0 / CXL2.0 x8) [CPU1] 2 MCIO (PCIe5.0 x8) [CPU1]
<b>Storage</b>	M.2	1 M-key (PCIe3.0 x4), supports 2280 form factor [CPU0] 1 M-key (PCIe3.0 x4), supports 2280 form factor [CPU1]
<b>Network</b>	RJ45	2 RJ45 (1GbE) by Intel® i350
<b>Management</b>	BMC	ASPEED AST2600 on DC-SCM 2.0 module
	Dedicated IPMI	1 RJ45 on 4UMGX_IOB
<b>I/O</b>	USB	2 USB3.2 Gen1 ports: 1 on board, 1 via 4UMGX_IOB
	Video	1 Mini-DisplayPort (VGA) on 4UMGX_IOB
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules



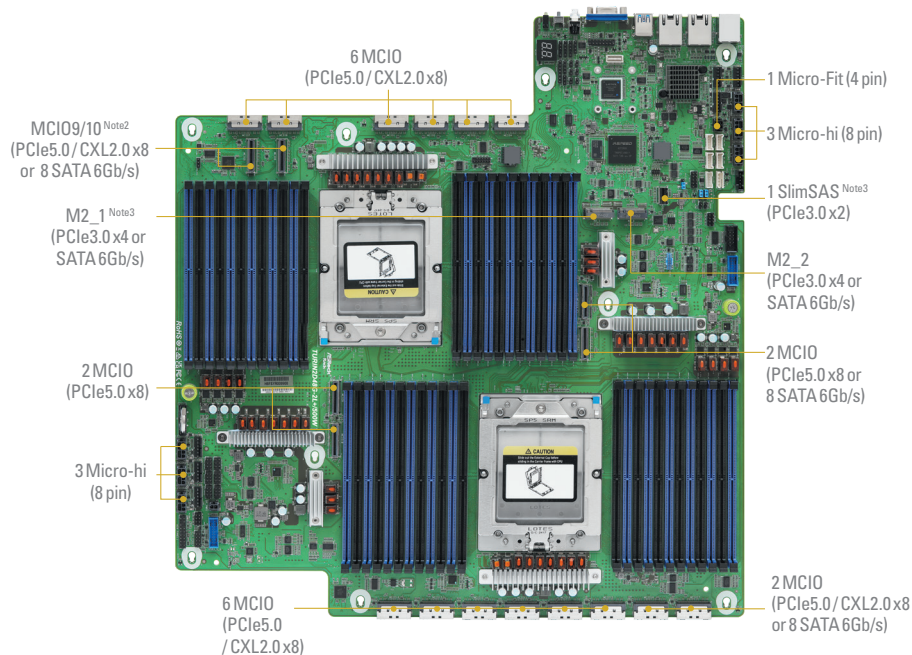
# TURIN2D48G-2L+/500W



PCI-E5.0

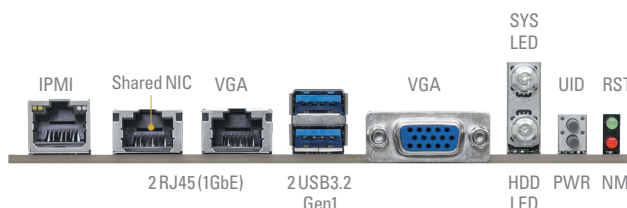


6400MHz



## Application

- Software-defined Storage
- E-commerce
- HCI



## TURIN2D48G-2L+/500W

<b>Form Factor</b>		Proprietary (18"x 16.9")
<b>Processor System</b>	CPU	1+1 Socket SP5 (SM-LGA-6096); AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
	TDP	Up to 500W
<b>Memory</b>	Capacity	24+24 DDR5 DIMM Slots (2DPC); Supports: RDIMM up to 128GB each, max. 6400MHz (1DPC); max. 6400MHz (2DPC) RDIMM-3DS up to 512GB each, max. 6400MHz (1DPC); max. 6400MHz (2DPC)
	Others	6 MCIO (PCIe5.0 / CXL2.0 x8) <sup>Note1</sup> [CPU0] 2 MCIO (PCIe5.0 / CXL2.0 x8 or 8 SATA 6Gb/s) [CPU0] <sup>Note2</sup> 2 MCIO (PCIe5.0 or 8 SATA 6Gb/s) [CPU0] 6 MCIO (PCIe5.0 / CXL2.0 x8) <sup>Note1</sup> [CPU1] 2 MCIO (PCIe5.0 / CXL2.0 x8 or 8 SATA 6Gb/s) <sup>Note1</sup> [CPU1] 2 MCIO (PCIe5.0 x8) [CPU1] 1 SlimSAS (PCIe3.0 x2) [CPU0] <sup>Note3</sup>
<b>Storage</b>	M.2	2 M.2 (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0]
	SATA port	32 SATA 6Gb/s: 4 MCIO 2 SATA 6Gb/s by ASM1061R: 2 M.2
<b>Network</b>	RJ45	2 RJ45 (1GbE) by Intel® i350
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	6 USB3.2 Gen1 ports: 2 rear Type-A, 4 via 19-pin headers
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Supports CXL1.1 while installing AMD EPYC™ 9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

Note2: MCIO9, 10 support PCIe only while installing 2 processors

Note3: SlimSAS (by jumper setting):

- PCIe3.0 x2 when M2\_1 supports only PCIe3.0 x2 or SATA 6Gb/s
- No function when M2\_1 supports PCIe3.0 x4 or SATA 6Gb/s

# GENOA2D16NQM3-2Q



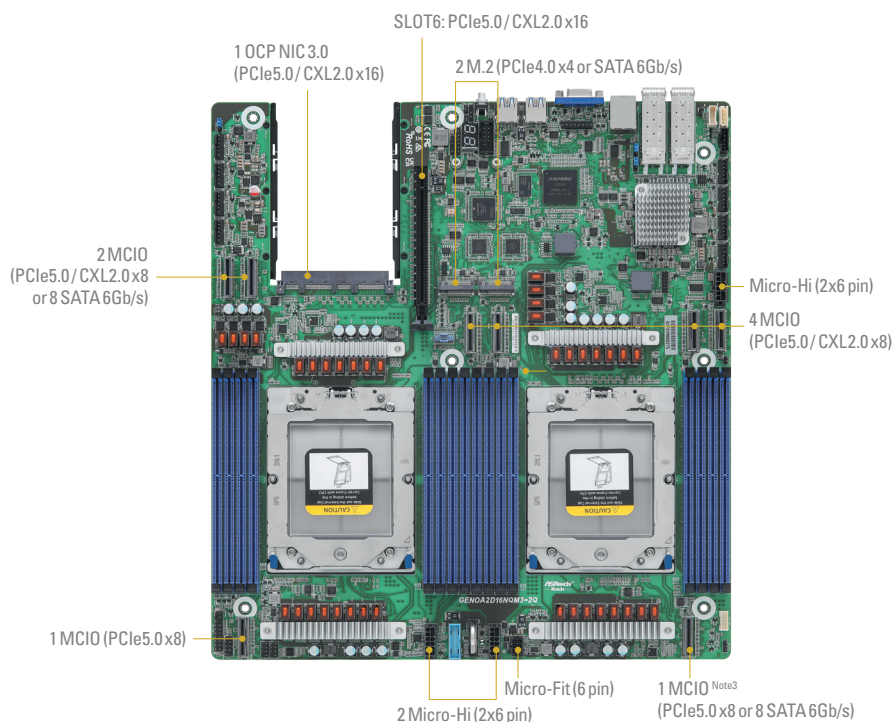
PCI-E5.0



OCP NIC 3.0



SFP28



## Application

- Software-defined application
- HCI



## GENOA2D16NQM3-2Q

<b>Form Factor</b>		EEB (12.82" X 14") <sup>Note1</sup>
<b>Processor System</b>	CPU	1+1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors
	FCH	System on chip
<b>Memory</b>	Capacity	8+8 DDR5 DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 128GB, max. 4800MHz; 3DS RDIMM: up to 512GB, max. 4800MHz
<b>Expansion</b>	PCIe slot	SLOT6: PCIe5.0/CXL2.0x16 <sup>Note2</sup> [CPU1]
	Others	4 MCIO (PCIe5.0/CXL2.0x8) <sup>Note2</sup> [CPU0]
		1 MCIO (PCIe5.0x8 or 8 SATA 6Gb/s) [CPU0] <sup>Note3</sup>
		2 MCIO (PCIe5.0/CXL2.0x8 or 8 SATA 6Gb/s) <sup>Note2</sup> [CPU1]
		1 MCIO (PCIe5.0x8) [CPU1]
<b>Storage</b>	M.2	2 M-key (PCIe4.0x4 or SATA 6Gb/s), supports 2280 form factor [CPU0]
	SATA port	Up to 18 SATA 6 Gb/s: 2 MCIO, 2 M.2
<b>Network</b>	SFP28	2 SFP28 (25GbE) by Broadcom BCM57414
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0/CXL2.0x16) <sup>Note2</sup> [CPU1]
<b>Management</b>	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
<b>I/O</b>	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header [CPU1]
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
<b>Security</b>	TPM	Supports 13-pin (SPI) TPM modules

Note1: Extend 10.1mm left and 10.7mm right

Note2: Supports CXL1.1 while installing AMD EPYC™ 9005/9004 (with AMD 3D V-Cache™ Technology) and 97x4 series processors

Note3: MCIO from CPU0 support PCIe only while installing 2 processors





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