

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



Server Platform Naming Rule

GENOA2D16NQM3-2Q

Character	Representation	Options
N	CPU Type	GENOA = AMD EPYC™ 9004 series processors
N+1	Number of CPU Supported	2 = DualNA = Single
	Number of DIMM Supported	 D8 = 8 DIMM D12 = 12 DIMM D16 = 16 DIMM D24 = 24 DIMM
Others	Form Factor	 H = Half-width UD = Deep Micro-ATX (10.4"x10.5") T = T-shape
	Feature	 N = Non-shading side-by-side CPU G = For GPU server Q = OCP slot not in standard I/O area, multi-SlimSAS to the front M3 = OCP NIC 3.0 slot 2Q = Dual 25GbE SFP28 by Broadcom BCM57414 2T = Dual 10GbE RJ45 by Intel X710 2T/X550 = Dual 10GbE RJ45 by Intel X550 2T/BCM = Dual 10GbE RJ45 by Broadcom BCM57416 2L = Dual 1GbE RJ45 by Intel i210 2L+ = Dual 1GbE RJ45 by Intel i350

1U4L4E-GENOA/2T

Character	Representation	Options
1 st + 2 nd	System Height	 1U = 1U chassis 2U = 2U chassis 4U = 4U chassis
Others	Drive Bay	 L = 3.5" HDD Bay S = 2.5" HDD/SSD Bay E = U.2 Bay E1S = E1.S Bay
O.Hers	Feature	 G = Dual-slot cards supported X = NVIDIA HGX platform intergrated N = Number of nodes F = Front I/O

1U4LW-B650/2L2T 1U4LW-B650

General Purpose Server Equipped with Dual 10GbE Powered by AMD Ryzen 7000 Series Processors



		1U4LW-B650/2L2T	1U4LW-B650		
CPU	Socket	1 Socket AM5 (LGA1718); Supports AMI	D Ryzen 7000 series processors		
	TDP	Up to 105W			
DIMM	Slot	4 DDR5 288-pin (2DPC)	4 DDR5 288-pin (2DPC)		
System Physical	Form Factor	1U Rackmount			
Status	Chassis Dimension	533.4 x 482.6 x 44.4 mm (21" x 19" x 1.75")			
Front Panel	Buttons	Power w/ LED, UID w/LED, System reset			
	LEDs	LANs, HDD activity, System health			
	1/0	2 Type-A (USB3.2 Gen1)			
Rear IO	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416	2 RJ45 (1GbE) by Intel® i210		
		2 RJ45 (1GbE) by Intel® i210	1 dedicated IPMI		
		1 dedicated IPMI			
	USB	4 Type-A (USB3.2 Gen1)			
	Others	1 UID w/ LED, 1 DB15 (VGA), 1 DB9 (COM), 1 DisplayPort, 1 HDMI			
Expansion Slots	Rear	1 FH PCIe4.0 x16 via RB1UX16_G4 (Up to	75W)		
Drive Bay/	External	4 Hot-swap 3.5" SATA drive bays			
Storage	Internal	M2_1 (PCle5.0 x4), supports 2280/	M2_1 (PCle5.0 x4), supports 2280/2242		
		2242 form factor [CPU]	form factor [CPU] M2_2 (PCIe4.0 x4), supports 2280/2242 form factor [FCH]		
Power Supply	Module	1,80-PLUS Platinum, 400W PSU			
System Cooling	Fan	5 PWM Hot-swap 40x28 mm fans			
Management		ASPEED BMC AST2600			
Security		TPM by optional accessory			





1U2S-B650

1U Ryzen 7000 Series General Purpose Server For Small and Medium-sized Business



CPU	Socket	1 Socket AM5 (LGA1718); Supports AMD Ryzen 7000 series processors	
	TDP	Up to 105W	
DIMM	Slot	4 DDR5 288-pin (2DPC)	
System Physical	Form Factor	1U Rackmount	
Status	Chassis Dimension	393.2 x 430 x 43.5 mm (15.5" x 16.93" x 1.71")	
Front Panel	Buttons	Power, System Reset	
	LEDs	Power, HDD Activity, LANs, System Event	
	1/0	2 Type-A (USB3.2 Gen1)	
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i210	
		1 dedicated IPMI	
	USB	4 Type-A (USB3.2 Gen1)	
	Others	1 UID button w/ LED, 1 DB15 (VGA), 1 DB9 (COM), 1 DisplayPort, 1 HDMI	
Expansion Slots	Rear	1 FHHL PCIe4.0 x16 via RB1UX16_G4 (Up to 75W)	
Drive Bay/	External	2 hot-swap 2.5" SATA drive bays	
Storage	Internal	1 fixed 3.5" SATA drive bay or 1 Slim ODD	
		M2_1 (PCle5.0 x4), supports 2280/2242 form factor [CPU]	
		M2_2 (PCle4.0 x4), supports 2280/2242 form factor [FCH]	
Power Supply	Module	1,80-PLUS Gold, 315W PSU	
System Cooling	Fan	3 PWM Hot-swap 40x56 mm fans	
		1 PWM Hot-swap 40x28 mm fans	
Management		ASPEED BMC AST2600	
Security		TPM by optional accessory	





B650D4U-2L2T/BCM B650D4U

Ryzen 7000 Series General Purpose Server Board Equipped with Greater Dual 10GbE Networking



		B650D4U-2L2T/BCM	B650D4U	
Form Factor		Micro-ATX (9.6" x 9.6")		
Processor System CPU		1 Socket AM5 (LGA1718); Supports AMI	D Ryzen 7000 series Processors	
	FCH	AMD B650E chipset		
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 E	CC/non-ECC UDIMM, max. 5200MHz	
Expansion	PCIe slot	SLOT7: PCle5.0 x4 [CPU]		
		SLOT6: PCle5.0 x16 [CPU]		
		SLOT4: PCIe4.0 x1 [FCH]		
	Others	OCuLink1 (PCle4.0 x4) Note1 [CPU]		
		OCuLink2 (PCIe3.0 x4 or 4 SATA 6Gb/s) N	lote2 [FCH]	
Storage	M.2	M2_1 Note1 (PCIe5.0 x4),	M2_1 Note1 (PCle5.0 x4),	
		supports 2280/2242 form factor [CPU]	supports 2280/2242 form factor [CPU]	
			M2_2 Note3 (PCIe4.0 x4),	
			supports 2280/2242 form factor [FCH]	
	SATA port	4 SATA 6Gb/s: 4 SATA 7-pin or 1 OCuLink Note2		
Network	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416	2 RJ45 (1GbE) by Intel® i210	
		2 RJ45 (1GbE) by Intel® i210		
Management	BMC	ASPEED AST2600		
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F		
1/0	USB	6 USB3.2 Gen1 ports: 4 rear Type-A, 2 vi	a 19-pin header	
		2 USB2.0 ports: 2 via 9-pin header		
	COM port	1 DB9 (COM)		
	Video	1 DB15 (VGA), 1 (15-pin) header, 1 Displa	yPort, 1 HDMI	
Security	TPM	Supports 13-pin (SPI) TPM modules		





Note1: M2_1 share lanes with OCuLink1, OCuLink1 support possible by depopulating M2_1 and other BOM change Note2: 4 SATA 7-pin share lanes with OCuLink2, OCuLink2 support possible by depopulating 4 SATA 7-pin and other BOM change Note3: M2_2 only available on B650D4U SKU

AM5D4ID-2T/BCM AM5D4ID/BCM

Ryzen 7000 Series Compact Motherboard For Small Form Factor Applications



		AM5D4ID-2T/BCM	AM5D4ID/BCM	
Power Source		Support ATX PSU and 12V DC-in		
Form Factor		Deep mini-ITX (6.7" x 8.2")		
Processor System CPU		1 Socket AM5 (LGA1718); Supports AM	D Ryzen 7000 series Processors	
	Chipset	KNOLL3 X300		
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 E	CC/non-ECC UDIMM, max. 5200MHz	
Expansion PCIe slot		SLOT7: PCle5.0 x16 [CPU]		
	Others	1 OCuLink (PCIe4.0 x2) [CPU]		
Storage	M.2	1 M-key (PCIe5.0 x4), supports 2280 for	m factor [CPU]	
Network	RJ45	2 RJ45 (10GbE) by BCM57416	2 RJ45 (1GbE) by BCM5720L	
Management	BMC	ASPEED AST2600		
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F		
1/0	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 HDMI		
Security	TPM	Supports 13-pin (SPI) TPM modules		





General Purpose Server Equipped with 2 NVMe Drive Bays



CPU	Socket	1 Socket AM4 (PGA1331) for AMD Ryzen™ 5000, 4000G, 3000G, 3000 Series Deskto
		Processors
DIMM	Slot	4 DDR4 288-pin (2DPC)
System Physical	Form Factor	1U Rackmount
Status	Chassis Dimension	393.2 x 430 x 43.5 mm (15.5" x 16.93" x 1.71")
Front Panel	Buttons	Power, System Reset
	LEDs	Power, HDD Activity, LAN 1/2, System Event
	1/0	2 USB3.0 ports
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i210
		1 dedicated IPMI
	USB	2 USB3.2 Gen2 ports
	Others	1 DB15 (VGA), 1 DB9 (COM), HDMI
Expansion Slots	Rear	N/A
Drive Bay/	External	2 x 2.5" SATA/NVMe (PCIe4.0 Note1 x4) drive bays
Storage	Internal	1 fixed 3.5" SATA drive bay or 1 Slim ODD (optional)
		1 M-key (PCIe4.0 Note1 x4 or SATA 6Gb/s); support 22110/2280/2260/2242 form
		factor [CPU]
		1 M-key (PCIe4.0 Note1 x4 or SATA 6Gb/s); support 2280/2260/2242 form factor [FCH]
Power Supply	Module	1 Gold 315W PSU
System Cooling	Fan	4 PWM Hot-Swap 40x28 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory





Note1: Supports PCle3.0 when using AMD Ryzen 4000G and 3000G Series Processors with Radeon Graphics

1U2-X570/2T |

Ultra Compact 1U Server Supporting up to 4 Drives Bays



CPU Socket		1 Socket AM4 (PGA1331) for AMD Ryzen™ 5000, 4000G, 3000G, 3000 Series Deskto
		Processors
DIMM	Slot	4 DDR4 288-pin (2DPC)
System Physical	Form Factor	1U Rackmount
Status	Chassis Dimension	250mm x 430mm x 43.5mm (9.84" x 16.93" x 1.71")
Front Panel	Buttons	Power switch, System Reset
	LEDs	Power status, HDD, LAN activity LEDs
	1/0	1 DB15 (VGA), 2 Type-A (USB3.2 Gen1), 2 Type-A (USB3.2 Gen2),
		2 RJ45 (10GbE) by Intel® X550-AT2, 1 UID w/ LED, 1 dedicated IPMI
Expansion Slots	Rear	1 FH PCle4.0 x16 Note1
Drive Bay/	Internal	2 fixed 3.5" SATA drive bays
Storage		1 fixed 2.5" SATA drive bay
		1 fixed 2.5" NVMe (PCIe4.0 Note2 x4) drive bay
		1 M-key (PCIe4.0 Note2 x4 or SATA 6Gb/s); support 2280 form factor [CPU]
Power Supply	Module	1 Bronze 265W PSU
System Cooling	Fan	3 PWM Easy-swap 40x28 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

Note1: Supports PCIe3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics

Note2: Supports PCle3.0 when using AMD Ryzen™ 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics





1U2LW-X570/2L2T 1U2LW-X570

1U 2-Bay Barebone for Small and Medium-sized Business



		1U2LW-X570/2L2T	1U2LW-X570	
CPU	Socket	1 Socket AM4 (PGA1331) for AMD Ryze	n™ 5000, 4000G, 3000G, 3000 Series Desktop	
		Processors		
DIMM	Slot	4 DDR4 288-pin (2DPC)		
System Physical	Form Factor	1U Rackmount		
Status	Chassis Dimension	394 x 482.6 x 44.4 mm (15.5" x 19" x 1.75	")	
Front Panel	Buttons	Power Switch, System Reset		
	LEDs	Power Status, HDD, LAN Activity LEDs		
	1/0	2 Type-A (USB 3.2 Gen1)		
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2	2 RJ45 (1GbE) by Intel® i210	
		2 RJ45 (1GbE) by Intel® i210	1 dedicated IPMI	
		1 dedicated IPMI		
	USB	2 Type-A (USB3.2 Gen2)		
	Others	1 UID w/ LED, 1 DB15 (VGA), 1 DB9 (COM	Л)	
Expansion Slots	Rear	1 FHHL PCIe4.0 x16 Note1 via RB1UX16_G	4	
Drive Bay/	Internal	1 fixed 3.5" SATA drive bay or 1 Slim ODI	D	
Storage		1 fixed 3.5"/2.5" SATA drive bay		
		1 M-key (PCle4.0 Note2 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242 form fact		
		1 M-key (PCIe4.0 Note2 x4 or SATA 6Gb/s), supports 2280/2260/2242 form factor [FCH]		
Power Supply	Module	1 Gold 315W PSU		
System Cooling	Fan	3 PWM Hot-swap 40x28 mm fans		
Management		ASPEED BMC AST2500		
Security		TPM by optional accessory		

Note1: Supports PCle3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics
Supports PCle3.0 x16 when using AMD Ryzen 4000G Series Processors with Radeon Graphics
Note2: Supports PCle3.0 when using AMD Ryzen 4000G and 3000G Series Processors with Radeon Graphics





1U2LW-X470

1U General Purpose Server for Small and Medium-sized Business



CPU	Socket	1 Socket AM4 (PGA1331) for AMD Ryzen™ 5000, 4000G, 3000G, 3000 Series Desktop
		Processors
DIMM	Slot	4 DDR4 288-pin (2DPC)
System Physical	Form Factor	1U Rackmount
Status	Chassis Dimension	394 x 482.6 x 44.4 mm (15.5" x 19" x 1.75")
Front Panel	Buttons	Power switch, System reset
	LEDs	Power status, HDD, LAN activity LEDs
	1/0	2 USB3.2 Gen1 ports
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i210AT
		1 dedicated IPMI
	USB	2 USB3.2 Gen1 ports
	Others	1 UID w/ LED, 1 DB15 (VGA), 1 DB9 (COM)
Expansion Slots	Rear	1 FH PCle3.0 x16 Note1
Drive Bay/	Internal	1 fixed 3.5" SATA drive bay or 1 Slim ODD
Storage		1 fixed 3.5"/2.5" SATA drive bay
		1 M-key (PCle3.0 x2 or SATA 6Gb/s), supports 22110/2280/2260/2242 form factor [FCH
		1 M-key (PCle2.0 x4), supports 22110/2280/2260/2242 form factor [FCH]
Power Supply	Module	1 Gold 315W PSU
System Cooling	Fan	3 PWM Hot-swap 40x28 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

Note1: Supports PCle3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics





1U4LW-X570/2L2T RPSU

AMD Ryzen General Purpose Server Equipped with Dual 10GbE













		1U4LW-X570/2L2T RPSU	1U4LW-X570 RPSU	1U4LW-X570/2L2T	1U4LW-X570
CPU	Socket	1 Socket AM4 (PGA1331) for AMD Ryzen™ 5000, 4000G, 3000 G, 3000 Series Desktop Processors			
DIMM	Slot	4 DDR4 288-pin (2DPC)			
System Physical	Form Factor	1U Rackmount			
Status	Chassis Dimension	533.4 x 482.6 x 44.4 mm (21" x 19" x 1.7	75")		
Front Panel	Buttons	Power button w/ LED, UID w/LED, Sy	rstem reset		
	LEDs	LANs, HDD activity, System health			
	1/0	2 USB 3.2 Gen1 ports			
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2	2 RJ45 (1GbE) by Intel® i210	2 RJ45 (10GbE) by Intel® X550-AT2	2 RJ45 (1GbE) by Intel® i210
		2 RJ45 (1GbE) by Intel® i210	1 dedicated IPMI	2 RJ45 (1GbE) by Intel® i210	1 dedicated IPMI
		1 dedicated IPMI		1 dedicated IPMI	
	USB	2 USB3.2 Gen2 ports			
	Others	1 UID, 1 DB15 (VGA), 1 DB9 (COM)			
Expansion Slots	Rear	1 FH PCle4.0 x16 Note1			
Drive Bay/	External	4 Hot-swap 3.5" SATA drive bays [Front]			
Storage	Internal	3 fixed 2.5" SATA drive bays or 2 fixed	d 2.5" SATA drive bays, 1 Slim ODD		
		1 M-key (PCIe4.0 Note2 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242 form factor [CPU]			
		1 M-key (PCIe4.0 Note2 x4 or SATA 6Gb	o/s), supports 2280/2260/2242 form fact	or [FCH]	
Power Supply	Module	1+1 450W RPSU		1 Gold 400W PSU	
System Cooling	Fan	5 PWM Hot-swap 40x28 mm fans	5 PWM Hot-swap 40x28 mm fans		
Management		ASPEED BMC AST2500			
Security		TPM by optional accessory			

Note1: Supports PCle3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics. Supports PCle3.0 x16 when using AMD Ryzen 4000G Series Processors with Radeon Graphics Note2: Supports PCle3.0 when using AMD Ryzen 4000G and 3000G Series Processors with Radeon Graphics

1U4LW-X470 RPSU 1U4LW-X470

1U 4-Bay General Purpose Server for Small and Medium-sized Business













		1U4LW-X470 RPSU	1U4LW-X470	
CPU	Socket	1 Socket AM4 (PGA1331) for AMD Ryzen™ 5000, 4000G, 3000 G, 3000 Series Desktop Processors		
DIMM	Slot	4 DDR4 288-pin (2DPC)		
System Physical	Form Factor	1U Rackmount		
Status	Chassis Dimension	533.4 x 482.6 x 44.4 mm (21" x 19" x 1.75")		
Front Panel	Buttons	Power button w/ LED, UID w/LED, System reset, NMI		
	LEDs	LANs, HDD activity, System Fail activity LEDs		
	1/0	2 USB 3.2 Gen1 ports		
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i210AT		
		1 dedicated IPMI		
	USB	2 USB3.2 Gen1 ports		
	Others	1 UID w/ LED, 1 DB15 (VGA), 1 DB9 (COM)		
Expansion Slots	Rear	1 FH PCle3.0 x16 Note1		
Drive Bay/	External	4 Hot-swap 3.5" SATA drive bays [Front]		
Storage	Internal	3 fixed 2.5" SATA drive bays or 2 fixed 2.5" SATA drive bays, 1 Slim ODD		
		1 M-key (PCle3.0 x2 or SATA 6Gb/s), supports 22110/2280/2260/2242 form fa	actor [FCH]	
		1 M-key (PCle2.0 x4), supports 22110/2280/2260/2242 form factor [FCH]		
Power Supply	Module	1+1 300W RPSU	1 Gold 400W PSU	
System Cooling	Fan	5 PWM Hot-swap 40x28 mm fans		
Management		ASPEED BMC AST2500		
Security		TPM by optional accessory		

Note1: Supports PCle3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics







2 fixed 2.5" NVMe/SATA drive bays

2 RJ45 (10GbE)

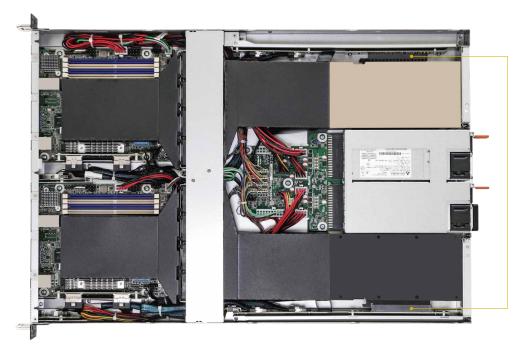




3+1 1600W CRPS

		4U18N-B550/2T	4U18N-B550			
CPU (per node)	Socket	1 AM4 (PGA 1331) for AMD Ryzen™ 5000G, 5000, 4000G, 3000 series desktop processors				
DIMM (per node)	Slot	4 DDR4 288-pin (2DPC)				
System Physical	Form Factor	4U Rackmount				
Status	Chassis Dimension	950 x 438 x 176 mm				
Front Panel	Buttons	UID , Power , RESET				
(per node)	LEDs	System Fail, LAN1/LAN2, UID, Power				
	RJ45	2 RJ45(10GbE) by Intel® X710-AT2	2 RJ45(1GbE) by Intel® i210			
		1 dedicated IPMI	1 dedicated IPMI			
	USB	2 Type-A (USB 3.2 Gen1)				
	VGA	1 DB15				
Storage (per node	e) Internal	2 fixed 2.5" NVMe (PCIe4.0 Note1 x4)/SATA drive bays (BT0)				
		1 M-key (PCIe4.0 $^{ m Note1}$ x4 or SATA 6Gb/s), supports 22110/2280 form factor [CF $^{ m Note1}$	PU]			
		1 M-key (PCle3.0 x2 or SATA 6Gb/s), supports 2280 form factor [FCH]				
Power Supply	Module	3+1 1600W CRPS				
System Cooling	Fan	5 PWM hot-swap 80x80 mm fans				
Management (per node)		ASPEED BMC AST2500				
Security (per node)		TPM by optional accessory				

Note1: Supports PCle3.0 when using AMD Ryzen 5000G and 4000G Series Processors with Radeon Graphics



1 FH dual-slot PCle4.0 x16



		1U2N2G-B550/2T	1U2N2G-B550			
CPU (per node)	Socket	1 AM4 (PGA 1331) for AMD Ryzen™ 5000G, 5000, 4000G, 3000 series deskto	pp processors			
DIMM (per node)	Slot	4 DDR4 288-pin (2DPC)				
System Physical	Form Factor	1U Rackmount				
Status	Chassis Dimension	650 x 438 x 43.5 mm (25.6" x 17.2" x 1.7")				
Front Panel	Buttons	UID , Power w/LED				
(per node)	LEDs	UID, System Fail				
	RJ45	2 RJ45(10GbE) by Intel® X710-AT2	2 RJ45(1GbE) by Intel® i210			
		1 dedicated IPMI	1 dedicated IPMI			
	USB	2 USB 3.2 Gen1 ports				
	VGA	1 DB15				
Expansion Slots (per node) Rear		1 FH dual-slot PCle4.0 Note1 x16				
Storage (per node) Internal	1 M-key (PCle4.0 Note1 x4 or SATA 6Gb/s), supports 2280 form factor [CPU]				
Power Supply	Module	1+1 Platinum 1200W CRPS				
System Cooling	Fan	8 dual-rotor 40x56 mm fans				
Management (per node)		ASPEED BMC AST2500				
Security (per node)		TPM by optional accessory				

Note1: Supports PCle3.0 when using AMD Ryzen 5000G and 4000G Series Processors with Radeon Graphics







		1U1G-X570/2L2T	1U1G-X570		
CPU	Socket	1 Socket AM4 (PGA1331) for AMD Ryzen™ 5000, 4000G, 3000G, 3000 Series Desktop Processors			
DIMM	Slot	4 DDR4 288-pin (2DPC)			
System Physical	Form Factor	1U Rackmount			
Status	Chassis Dimension	660.4 x 438.0 x 43.5 mm (26" x 17.24" x 1.71")			
Front Panel	Buttons	Reset, Power w/ LED, UID w/ LED			
	LEDs	System Fail, LAN1, LAN2			
	1/0	2 RJ45(10GbE) by Intel® X550-AT2	2 RJ45 (1GbE) by Intel® i210		
		2 RJ45 (1GbE) by Intel® i210	1 dedicated IPMI		
		1 dedicated IPMI	2 USB3.2 Gen2 ports		
		2 USB3.2 Gen2 ports	1 DB15 (VGA), 1 DB9 (COM), 1 HDMI		
		1 DB15 (VGA), 1 DB9 (COM), 1 HDMI			
Rear IO	USB	2 USB3.2 Gen1 ports			
Expansion Slots	Rear	1 FH dual-slot PCle4.0 x16 Note1			
Drive Bay/	External	2 Hot-swap 2.5" SATA drive bays			
Storage	Internal	1 M-key (PCle4.0 Note2 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242 for	m factor [CPU]		
		1 M-key (PCIe4.0 Note2 x4 or SATA 6Gb/s), supports 2280/2260/2242 form factors	or [FCH]		
Power Supply	Module	1+1 Platinum 800W CRPS			
System Cooling	Fan	6 single-rotor 40x56 mm fans			
Management		ASPEED BMC AST2500			
Security		TPM by optional accessory			

Note1: Supports PCle3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics
Supports PCle3.0 x16 when using AMD Ryzen 4000G Series Processors with Radeon Graphics
Note2: Supports PCle3.0 when using AMD Ryzen 4000G and 3000G Series Processors with Radeon Graphics

X570D4U-2L2T X570D4U

PCle4.0 Ryzen Server Motherboard with Dual 10GbE and IPMI



		X570D4U-2L2T	X570D4U	
Form Factor		Micro-ATX (9.6" x 9.6")	71070010	
Processor System	CPU	AM4 PGA 1331; Supports:		
	0.0	AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Grap		
		AMD Ryzen™ 5000 and 3000 Series Des	sktop Processors	
		AMD Ryzen™ PRO 5000, 4000 and 3000 Series Desktop Processors		
	FCH	AMD X570		
Memory	Capacity	4 DDR4 DIMM Slots (2DPC); Supports:		
		ECC Notel /UDIMMs up to 32GB each; max. 3200MHz		
Expansion	PCIe slot	SLOT6: PCIe4.0 x16 Note2, SLOT5: PCIe4.0 x1 Note3, SLOT4: PCIe4.0 x8 Note4		
Storage	M.2	1 M-key (PCle4.0 Note4 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242 form factor		
		1 M-key (PCIe4.0 Note4 x4 or SATA 6Gb/s), supports 2280/2260/2242 form factor		
	SATA port	12 SATA 6Gb/s: 7 SATA 7-pin, 1 SATA DOM, 4 SATA via optional M2-HD M.2 device		
Network	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2	2 RJ45 (1GbE) by Intel® i210	
		2 RJ45 (1GbE) by Intel® i210		
Management	вмс	ASPEED AST2500: IPMI 2.0		
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E		
1/0	USB	2 USB3.2 Gen2 ports: 2 rear Type A		
		2 USB3.2 Gen1 ports: 2 via 19-pin header		
	Video	1 DB15(VGA), 1 (15-pin) header, 1 HDMI	Note6	
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI) TPM modules		





Note1: For AMD Ryzen™ Desktop Processors with Radeon™ Graphics, ECC support is only with Processors with PRO technologies Note2: SLOT6 auto-switch to PCle4.0 x8 when SLOT4 occupied.

SLOT6 supports PCle3.0 only when installing AMD Ryzen™ 5000, 4000 G-Series Desktop Processors with Radeon™ Graphics and supports PCle3.0 x8 only when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics.

Note3: SLOT5 and M.2 supports PCle3.0 only when installing AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors

with Radeon™ Graphics

Note4: SLOT4 supports PCle3.0 only when installing AMD Ryzen™ 5000, 4000 G-Series Desktop Processors with Radeon™ Graphics, and will not function when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics

Note5: HDMI is only supported by AMD Ryzen™ with Radeon™ Graphics Processors

B550D4U-2T B550D4U

General Purpose Server Board Equipped with Greater Dual 10GbE Networking



		B550D4U-2T	B550D4U	
Form Factor		Micro-ATX (9.6" x 9.6")		
Processor System	CPU	AM4 PGA 1331; Supports:		
		AMD Ryzen™ 5000 and 4000 G-Series I	Desktop Processors with Radeon™ Graphics	
		AMD Ryzen™ 5000 and 3000 Series De	sktop Processors	
		AMD Ryzen™ PRO 5000, 4000 and 3000	Notel Series Desktop Processors	
	FCH	AMD B550		
Memory	Capacity	4 DDR4 DIMM Slots (2DPC); Supports:		
		ECC Note2 / UDIMMs up to 32GB each; max. 3200MHz		
Expansion	PCIe slot	SLOT6: PCle4.0 x16		
		SLOT4: PCle4.0 x4		
Storage	M.2	1 M-key (PCle3.0 x4 or SATA 6Gb/s),	1 M-key (PCIe3.0 x4 or SATA 6Gb/s) and	
		supports 22110/2280/2260/2242 form	1 M-key (PCIe3.0x2), supports 22110/	
		factor	2280/2260/2242 form factor	
	SATA port	6 SATA 6Gb/s: 3 SATA 7-pin, 1 SATA DO	M by AMD B550, 2 SATA 7-pin by ASM1061	
Network	RJ45	2 RJ45 (10GbE) by Intel® X710	2 RJ45 (1GbE) by Intel® i210	
Management	BMC	ASPEED AST2500: IPMI 2.0		
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E		
I/O	USB	4 USB3.2 Gen1 ports: 2 rear Type A, 2 via header		
	Video	1 DB15(VGA), 1 HDMI Note3		
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI)	TPM modules	



Note1: Not compatible with AMD Ryzen™ 3000 series processors with Radeon™ Graphics
Note2: For AMD Ryzen™ Desktop Processors with Radeon™ Graphics, ECC support is only with Processors with PRO technologies
Note3: HDMI is only supported by AMD Ryzen™ with Radeon™ Graphics Processors

Cost-efficient AMD Ryzen Network Server Solution



Form Factor		Micro-ITX (9.6" x 9.6")
Processor System	CPU	AM4 PGA 1331; Supports:
		AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphic
		AMD Ryzen™ 5000 and 3000 Series Desktop Processors
		AMD Ryzen™ PRO 5000, 4000 and 3000 Series Desktop Processors
	FCH	AMD X470
Memory	Capacity	4 DDR4 DIMM Slots (2DPC); Supports:
		ECC Note1 / UDIMMs up to 32GB each; max. 2666MHz
Expansion	PCIe slot	SLOT6: PCIe3.0 x16 Note2 [CPU]
		SLOT5: PCIe x8 (PCIe3.0 x4) [CPU]
		SLOT4: PCIe x16 (PCIe3.0 x8) Note2 [CPU]
Storage	M.2	1 M-key (PCle3.0 x2 or SATA 6Gb/s), supports 22110/2280/2260/2242 form factor [FCH]
		1 M-key (PCle2.0 x4), supports 22110/2280/2260/2242 form factor [FCH]
	SATA port	8 SATA 6Gb/s: 5 SATA 7-pin, 1 SATA DOM by AMD X470, 2 SATA 7-pin by ASM1061
Network	RJ45	2 RJ45 (1GbE) by Intel® i210
Management	вмс	ASPEED AST2500: IPMI 2.0
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E
I/O	USB	4 USB3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header
	Video	1 DB15 (VGA)
Security	TPM	Supports 17-pin (LPC) TPM modules





Note1: For AMD Ryzen™ Desktop Processors with Radeon™ Graphics, ECC support is only with Processors with PRO technologies.

Note2: SL0T6 will auto-switch to PCle3.0 x8 when SL0T4 is occupied, and SL0T4 will not function when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics

X470D4U2-2T |

AMD Ryzen Network Server with 10 Gb Ethernet Connectivity



Form Factor		Micro-ITX (9.6" x 9.6")
Processor System	CPU	AM4 PGA 1331; Supports:
		AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graph
		AMD Ryzen™ 5000 and 3000 Series Desktop Processors
		AMD Ryzen™ PRO 5000, 4000 and 3000 Series Desktop Processors
	FCH	AMD X470
Memory	Capacity	4 DDR4 DIMM Slots (2DPC); Supports:
		ECC Note1 / UDIMMs up to 32GB each; max. 3200MHz
Expansion	PCIe slot	SLOT6: PCle3.0 x16 Note2 [CPU]
		SLOT5: PCle2.0 x1 [FCH]
		SLOT4: PCIe x16 (PCIe3.0 x8) Note2 [CPU]
Storage	M.2	1 M-key (PCle3.0 x2 or SATA 6Gb/s), supports 22110/2280/2260/2242 form factor [FCH]
		1 M-key (PCIe2.0 x4), supports 22110/2280/2260/2242 form factor [FCH]
	SATA port	6 SATA 6Gb/s: 5 SATA 7-pin, 1 SATA DOM
Network	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2
Management	вмс	ASPEED AST2500: IPMI 2.0
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E
1/0	USB	4 USB3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header
	Video	1 DB15 (VGA)
Security	TPM	Supports 17-pin (LPC) TPM modules







Ultra Compact Server Board Equipped with Dual 10GbE and IPMI



Power source		Supports ATX PSU or 12V DC-in
Form Factor		mini-ITX (6.7" x 6.7")
Processor System	CPU	AM4 PGA 1331; Supports:
		AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphi
		AMD Ryzen™ 5000 and 3000 Series Desktop Processors
		AMD Ryzen™ PRO 5000, 4000 and 3000 Series Desktop Processors
	FCH	AMD X570
Memory	Capacity	4 DDR4 DIMM Slots (2DPC); Supports:
		ECC Note1 /SODIMMs up to 32GB each; max. 2933MHz
Expansion	PCIe slot	SLOT7: PCIe4.0 x16 Note2
	Others	2 OCuLink Note3 (PCIe4.0 x4 or 4 SATA 6Gb/s)
Storage	M.2	1 M-key Note3 (PCle4.0 x4 or SATA 6Gb/s), supports 2280 form factor
	SATA port	8 SATA 6Gb/s: 2 OCuLink
Network	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2
Management	BMC	ASPEED AST2500: IPMI 2.0
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E
I/O	USB	2 USB3.2 Gen2 ports: 2 rear Type A
		2 USB3.2 Gen1 ports: 2 via 19-pin header
	Video	1 DB15(VGA)
Security	TPM	Supports 13-pin (SPI) TPM modules





Note1: For AMD Ryzen™ Desktop Processors with Radeon™ Graphics, ECC support is only with Processors with PRO technologies.

Note2: SLOT7 supports PCle3.0 only when installing AMD Ryzen™ 5000, 4000 G-Series Desktop Processors with Radeon™ Graphics, and support PCle3.0 x8 only when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics

Note3: OCuLink and M.2 supports PCle3.0 only when installing AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics

B550D4ID-2L2T **B550D4ID**

Compact Motherboard for **Small Form Factor Applications**



		B550D4ID-2L2T	B550D4ID	
Power source		Supports ATX PSU or 12V DC-in		
Form Factor		Deep mini-ITX (6.7" x 8.2")		
Processor System	CPU	AM4 PGA 1331; Supports:		
		AMD Ryzen™ 5000 and 4000 G-Series De	sktop Processors with Radeon™ Graphics	
		AMD Ryzen™ 5000 and 3000 Series Desk	top Processors	
		AMD Ryzen™ PRO 5000, 4000 and 3000 No	otel Series Desktop Processors	
	FCH	AMD B550		
Memory	Capacity	4 DDR4 DIMM Slots (2DPC); Supports:		
		ECC Note2 / UDIMMs up to 32GB each; max. 3200MHz		
Expansion	PCIe slot	SLOT7: PCle4.0 x16		
Storage	M.2	1 M-key (PCIe4.0 Note3 x4 or SATA 6Gb/s), supports 22110 (BTO) Note4/2280 form factor		
		1 M-key (PCle3.0 x2 or SATA 6Gb/s), supports 2280 form factor (BTO) Note5		
	SATA port	4 SATA 6Gb/s: 1 OCuLink		
Network	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2	2 RJ45 (1GbE) by Intel® i210	
		2 RJ45 (1GbE) by Intel® i210		
Management	BMC	ASPEED AST2500: IPMI 2.0		
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E		
I/O	USB	4 USB3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header		
	Video	1 DB15(VGA), 1 HDMI Note6		
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI) TP	M modules	





Note1: Not compatible with AMD Ryzen™ 3000 series processors with Radeon™ Graphics
Note2: For AMD Ryzen™ Desktop Processors with Radeon™ Graphics, ECC support is only with Processors with PRO technologies
Note3: Supports PCle3.0 when installing AMD Ryzen™ 5000 and 4000 G-Series Desktop Processors with Radeon™ Graphics

Note4: M2_1 22110 form factor support is possible by depopulating BMC_SMB and IPMB header and other BOM change Note5: M2_2 support is possible by depopulating BMC_SMB and IPMB header and other BOM change

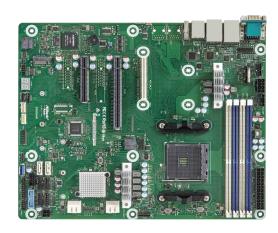
Note6: HDMI is only supported by AMD Ryzen™ with Radeon™ Graphics Processors

B550D4M

Ryzen Server Board with Scalable Ethernet Design



Form Factor		ATX (12" x 9.6")
Processor System	CPU	AM4 PGA 1331; Supports:
		AMD Ryzen™ 5000 and 4000 G-Series Desktop Processors with Radeon™ Graphics
		AMD Ryzen™ 5000 and 3000 Series Desktop Processors
		AMD Ryzen™ PRO 5000, 4000 and 3000 Note1 Series Desktop Processors
	FCH	AMD B550
Memory	Capacity	4 DDR4 DIMM Slots (2DPC); Supports:
		ECC Note2/UDIMMs up to 32GB each; max. 3200MHz
Expansion	PCIe slot	SLOT6: PCIe x16 (PCIe4.0 x8) [CPU]
		SLOT4: PCIe x8 (PCIe3.0 x4) [CPU]
Storage	M.2	1 M-key (PCIe3.0 x4 or SATA 6Gb/s); support 22110/2280/2242 form factor [FCH]
	SATA port	7 SATA 6Gb/s: 4 SATA 7-pin, 1 M.2 by AMD B550, 2 SATA 7-pin by ASM1061
Network	RJ45	2 RJ45 (1GbE) by Intel® i210
	OCP	1 OCP 2.0 connector A (PCle3.0 x8)
Management	BMC	ASPEED AST2500: IPMI 2.0
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E
1/0	USB	2 USB3.2 Gen2 ports: 2 rear Type-A
		5 USB3.2 Gen1 ports : 2 rear Type-A, 2 via 19-pin header, 1 via vertical Type-A
		2 USB 2.0 ports : 2 via 9-pin header
	Video	1 DB15(VGA), 1 HDMI Note3
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI) TPM modules





Note1: Not compatible with AMD Ryzen™ PRO 3000 Series Desktop Processors with Radeon™ Graphics Note2: For AMD Ryzen™ Desktop Processors with Radeon™ Graphics, ECC support is only with Processors with PRO technologies Note3: HDMI is only supported by AMD Ryzen™ with Radeon™ Graphics Processors

B550D4-4L

Ryzen Server Board with Quad 1GbE Network



Form Factor		ATX (12" x 9.6")
Processor System	CPU	AM4 PGA 1331; Supports:
		AMD Ryzen™ 5000 and 4000 G-Series Desktop Processors with Radeon™ Graphics
		AMD Ryzen™ 5000 and 3000 Series Desktop Processors
		AMD Ryzen™ PRO 5000, 4000 and 3000 Note1 Series Desktop Processors
	FCH	AMD B550
Memory	Capacity	4 DDR4 DIMM Slots (2DPC); Supports:
		ECC Note2 / UDIMMs up to 32GB each; max. 3200MHz
Expansion	PCIe slot	SLOT6: PCle4.0 x16
		SLOT4: PCle4.0 x4
Storage	M.2	1 M-key (PCle3.0 x4 or SATA 6Gb/s); support 22110/2280/2242 form factor
	SATA port	7 SATA 6Gb/s: 4 SATA 7-pin, 1 M.2 by AMD B550, 2 SATA 7-pin by ASM1061
Network	RJ45	4 RJ45 (1GbE) by Intel® i210
Management	ВМС	ASPEED AST2500: IPMI 2.0
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E
1/0	USB	2 USB3.2 Gen2 ports: 2 rear Type-A,
		5 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header, 1 vertical Type-A
		2 USB2.0 ports: 2 via 9-pin header
	Video	1 DB15(VGA), 1 HDMI Note3
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI) TPM modules





Note1: Not compatible with AMD Ryzen™ 3000 series processors with Radeon™ Graphics
Note2: For AMD Ryzen™ Desktop Processors with Radeon™ Graphics, ECC support is only with Processors with PRO technologies
Note3: HDMI is only supported by AMD Ryzen™ with Radeon™ Graphics Processors



1U4L4E-GENOA/2T









1U/2U High Density Storage

10Gbase-T

Storage



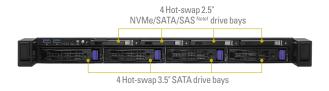


PCI-E5.0

Application

- · Hybrid-storage Server
- · Cloud Computing
- · Enterprise Server







1U4L4E-GENOA/2T

CPU	Socket	1 Socket SP5 (LGA 6096); Supports AMD EPYC 9004 Processors
	TDP	Up to 300W
DIMM	Slot	8 DDR5 288-pin (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
	LEDs	HDD Activity, LAN 1/2, System Event
	1/0	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 PCle5.0 x16 via RB1UX16R_G5 (Up to 75W)
Drive Bay/ Storage	External	4 hot-swap 2.5" NVMe (PCIe5.0 x4)/SATA/SAS Note1 drive bays
		4 hot-swap 3.5" SATA drive bays
	Internal	2 M-key (PCle4.0 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



1U4L-GENOA/2T









1U/2U High Density Storage

10Gbase-T

Storage



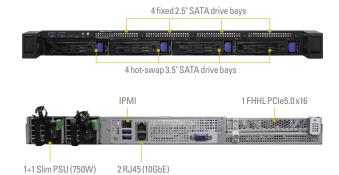


PCI-E5.0

Application

- Enterprise Server
- · General Purpose Server
- · Web Hosting





1U4L-GENOA/2T

CPU	Socket	1 Socket SP5 (LGA 6096); Supports AMD EPYC 9004 Processors
	TDP	Up to 300W
DIMM	Slot	8 DDR5 288-pin (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
	LEDs	HDD Activity, LAN 1/2, System Event
	1/0	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 3.5" SATA drive bays
	Internal	4 fixed 2.5" SATA drive bays
		2 M-key (PCIe4.0 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



1U8S4E-GENOA/2T









1U/2U High Density Storage

10Gbase-T

Storage



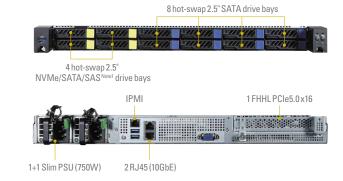


PCI-E5.0

Application

- · Hybrid-storage Server
- $\cdot \, \mathsf{Enterprise} \, \mathsf{Server}$





1U8S4E-GENOA/2T

CPU	Socket	1 Socket SP5 (LGA 6096); Supports AMD EPYC 9004 Processors
	TDP	Up to 300W
DIMM	Slot	8 DDR5 288-pin (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
	LEDs	HDD Activity, LAN 1/2, System Event
	1/0	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 PCle5.0 x16 via RB1UX16R_G5 (Up to 75W)
Drive Bay/ Storage	External	4 hot-swap 2.5" NVMe (PCIe5.0 x4)/SATA/SAS Note1 drive bays
		8 hot-swap 2.5" SATA drive bays
	Internal	2 M-key (PCle4.0 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



1U12E-GENOA/2L2T









1U/2U High Density Storage

10Gbase-T

Storage







PCI-E5.0

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 (LGA 6096); Supports AMD EPYC 9004 Processors
	TDP	Up to 300W
DIMM	Slot	24 DDR5 288-pin (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
	1/0	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 PCle5.0 x16
		1 OCP NIC 3.0 (PCIe5.0 x16)
Drive Bay/ Storage	External	12 Hot-swap 2.5" NVMe (PCIe5.0 x4)/SATA/SAS Note1 drive bays
	Internal	2 M-key (PCle5.0 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



1U12E-GENOA2









1U/2U High Density Storage

OCP NIC 3.0

Storage





4800

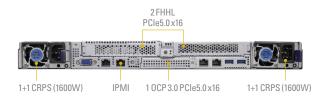
PCI-E5.0

Application

- · All-flash Storage Server
- · Database Processing
- $\cdot \, \text{Virtualization}$
- E-commerce







1U12E-GENOA2

Socket	1+1 Socket SP5 (LGA 6096); Supports AMD EPYC 9004 Processors
	Up to 280W
	<u> </u>
Slot	12+12 DDR5 288-pin (2DPC)
Form Factor	1U Rackmount
Chassis Dimension	760 x 438 x 43.5 mm
Buttons	Power button w/ LED, ID button w/ LED, System reset, NMI
LEDs	HDD Activity, LAN 1/2, System fault
1/0	1 Type-A (USB3.2 Gen1)
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
Rear	3 HHHL PCIe5.0 x16 Note1 [CPU0] [CPU1]
	1 OCP3.0 PCIe5.0 x16 [CPU0]
External	12 Hot-swap 2.5" NVMe (PCle5.0 x4)/SATA Note1/SAS Note2 drive bays
Internal	2 M-key (PCIe3.0 x4); support 2280/2260/2242/2230 form factor [CPU0, CPU1]
Module	1+1, 80-PLUS Platinum, 1600W CRPS
Fan	8 Easy-swap 40x56 mm fans
	ASPEED BMC AST2600
	TPM by optional accessory
	Chassis Dimension Buttons LEDs I/O RJ45 USB Others Rear External Internal Module



2U12L8E-GENOA2





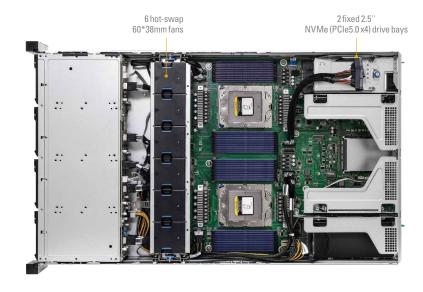


Storage

4800



PCI-E5.0

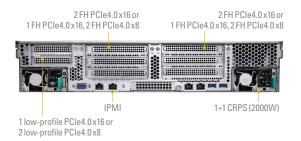


12 hot-swap 3.5"/2.5" drive bays



Application

- · Software-defined Storage
- $\cdot \, \mathsf{Data} \, \mathsf{Analytics}$



2U12L8E-GENOA2

CPU	Socket	1+1 Socket SP5 (LGA 6096); Supports AMD EPYC 9004 Processors
	TDP	Up to 320W
DIMM	Slot	12+12 DDR5 288-pin (1DPC)
System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	770.0 X 438.0 X 86.4 mm
Front Panel	Buttons	Power, UID, Reset
	LEDs	Power Status, LAN Activity, HDD Activity, System status
	1/0	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 FH PCle4.0 x16 or 1 FH PCle4.0 x16, 2 FH PCle4.0 x8 [CPU0], 2 FH PCle4.0 x16 or 1 FH PCle4.0 x16, 2 FH PCle4.0 x8 [CPU1]
		1 low-profile PCle4.0 x16 or 2 low-profile PCle4.0 x8 [CPU1], 1 OCP NIC 3.0 (PCle5.0 x16) [CPU1]
Drive Bay/ Storage	External	12 hot-swap 3.5"/2.5" drive bays
		supports 4 SATA HDD/SSD and 8 NVMe (PCIe4.0 x4)/SATA SSD Note1
	Internal	2 fixed 2.5" NVMe (PCle5.0 x4) drive bays
		1 M-key (PCle3.0 x4), supports 2280/2260/2242/2230 form factor [CPU0]; 1 M-key (PCle3.0 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



2 fixed 2.5"

NVMe (PCIe5.0 x4) drive bays

2U24E-GENOA2









1U/2U High Density Storage

OCP NIC 3.0

Storage





4800

PCI-E5.0



6 hot-swap

60*38mm fans



Application

- · All-flash Storage Server
- · Data Processing
- $\cdot \text{Virtualization}$
- · Cloud Computing
- · High-end Enterprise Server
- · Hyperconverged Storage

1 FH PCle4.0 x16 or 2 FH PCle4.0 x8 1 FH PCle4.0 x16 or 2 FH PCle4.0 x8

1+1 CRPS (2700VV)

1 OCP NIC 3.0

1+1 CRPS (2700W)

1 low-profile PCle4.0 x8

IPMI

2U24E-GENOA2

CPU	Socket	1+1 Socket SP5 (LGA 6096) AMD EPYC 9004 Processors
	TDP	Up to 300W
DIMM	Slot	12+12 DDR5 288-pin (1DPC)
System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	770.0 X 438.0 X 86.4 mm
Front Panel	Buttons	Power, UID, Reset
	LEDs	Power Status, LAN Activity, HDD Activity, System status
	1/0	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	1 FH PCle4.0 x16 or 2 FH PCle4.0 x8 [CPU0], 1 FH PCle4.0 x16 or 2 FH PCle4.0 x8 [CPU1]
		1 low-profile PCIe4.0 x8 [CPU1], 1 OCP NIC 3.0 (PCIe5.0 x16) [CPU1]
Drive Bay/ Storage	External	24 hot-swap 2.5" NVMe (PCle4.0 x4) drive bays
	Internal	2 fixed 2.5" NVMe (PCIe5.0 x4) drive bays
		1M-key(PCle 3.0x4), supports2280/2260/2242/2230formfactor[CPU0]; 1M-key(PCle 3.0x4), supports2280/2242formfactor[CPU1]
Power Supply	Module	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



GENOAD8UD-2T/X550





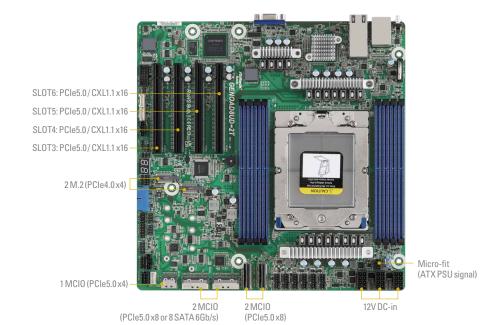


10Gbase-T

4800



PCI-E5.0



Application

- $\cdot \, \mathsf{Compact} \, \mathsf{Storage} \, \mathsf{Server}$
- · Enterprise NAS
- · Compact GPU Tower



GENOAD8UD-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 9004 Processors
	FCH	System on chip
Memory	Capacity	8 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 64GB (2R), max. 4800MHz; 3DS RDIMM: up to 512GB (2S8RX4), max. 4800MHz
Expansion	PCIe slot	SLOT6: PCle5.0 / CXL1.1 x16
		SLOT5: PCle5.0 / CXL1.1 x16
		SLOT4: PCle5.0 / CXL1.1 x16
		SLOT3: PCIe5.0 / CXL1.1 x16
	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 (PCIe4.0 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 Note1
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
1/0	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







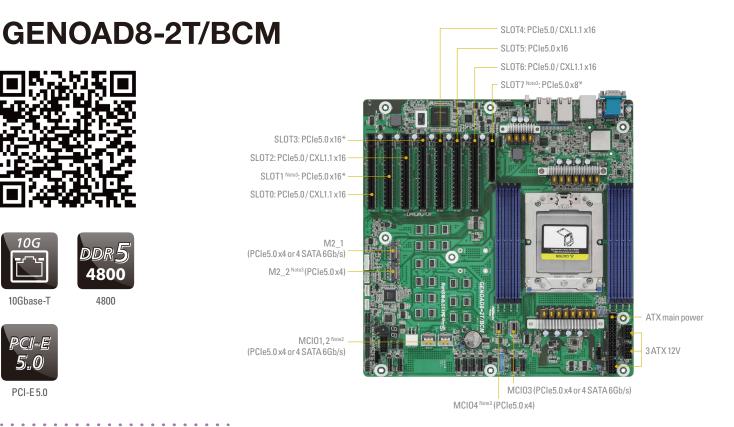


10Gbase-T

4800



PCI-E5.0



Application

- · Mainstream Server/Workstation
- · Web Hosting



GENOAD8-2T/BCM

Form Factor		EEB (12.63" x 13") Note1
Processor System	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC 9004 Processors
	FCH	System on chip
Memory	Capacity	8 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS, max. 4800MHz
Expansion	PCIe slot	SLOT7 Note2: PCIe5.0 x8
		SLOT6, 4, 2, 0: PCle5.0 / CXL1.1 x16
		SLOT5, 3: PCle5.0 x16
		SLOT1 Note3: PCIe5.0 x16
	Others	MCI01, 2 Note2 (PCIe5.0 x4 or 4 SATA 6Gb/s)
		MCI03 (PCIe5.0 x4 or 4 SATA 6Gb/s)
		MCI04 Note3 (PCIe5.0 x4)
Storage	M.2	M2_1 (PCle5.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor, M2_2 Note3 (PCle5.0 x4), supports 22110/2280 form factor
	SATA port	13 SATA 6Gb/s: 3 MCIO, 1 M.2
Network	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
1/0	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)
Security	TPM	Supports 13-pin (SPI) TPM modules

Note1: Extend 10.1mm left and 6mm right

Note2: SLOT7 share lanes with MCIO1 and MCIO2. When SLOT7 occupied, MCIO1 will not function and MCIO2 can be enabled by jumper setting. When selecting MCIO2, SLOT7 will switch to PCIex4. Note3: SLOT1 shared lanes with MClO4 and M2_2. SLOT1 auto-switch to PCle5.0 x8 when either MClO4 or M2_2 populated.



GENOAD8QM3-2T/BCM







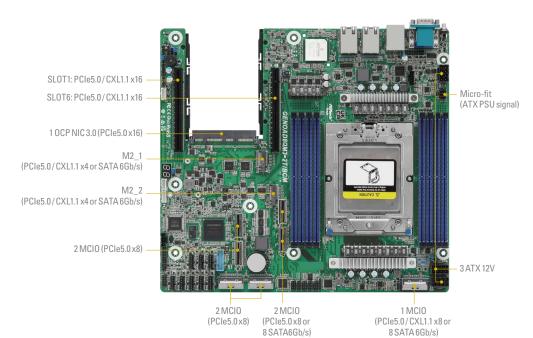
Storage

5.0 PCI-E5.0

PCI-E

OCP NIC 3.0

OCP NIC 3.0



Application

- · NVMe Storage Server
- · Web Hosting
- · General Purpose Server



GENOAD80M3-2T/BCM

Form Factor		CEB (12" x 11")
Processor System	CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC 9004 Processors
	FCH	System on chip
Memory	Capacity	8 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 64GB (2R), max. 4800MHz; 3DS RDIMM: up to 512GB (2S8RX4), max. 4800MH
Expansion	PCIe slot	SLOT6: PCle5.0 / CXL1.1 x16
		SLOT1: PCIe5.0/CXL1.1 x16
	Others	1 MCIO (PCIe5.0 / CXL1.1 x8 or 8 SATA 6Gb/s)
		2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s)
		4 MCIO (PCIe5.0 x8)
Storage	M.2	M2_1 (PCIe5.0 / CXL1.1 x4 or SATA 6Gb/s), supports 2280 form factor
		M2_2 (PCIe5.0 / CXL1.1 x4 or SATA 6Gb/s), supports 22110/2280 form factor
	SATA port	26 SATA 6Gb/s: 3 MCIO, 2 M.2
Network	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0 x16)
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
1/0	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
Security	TPM	Supports 13-pin (SPI) TPM modules



GENOAD8HM3





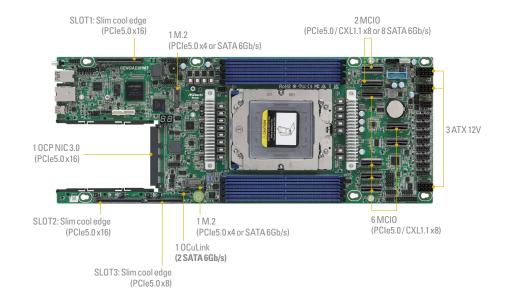


OCP NIC 3.0

PCI-E5.0



4800



Application

- · Multi-node Server
- · Edge Server

2 USB3.2 Gen1 IPMI



GENOAD8HM3

	Half-Width (6.6" x 17")
CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC 9004 Processors
FCH	System on chip
Capacity	8 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 64GB (2R), max. 4800MHz; 3DS RDIMM: up to 512GB (2S8RX4), max. 4800MHz
PCIe slot	SLOT3: Slim cool edge (PCle5.0 x8)
	SLOT2: Slim cool edge (PCle5.0 x16)
	SLOT1: Slim cool edge (PCle5.0 x16)
Others	2 MCIO (PCIe5.0 / CXL1.1 x8 or 8 SATA 6Gb/s)
	6 MCIO (PCIe5.0 / CXL1.1 x8)
	1 OCuLink (2 SATA 6Gb/s)
M.2	2 M-key (PCIe5.0 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
OCP NIC	1 OCP NIC 3.0 (PCIe5.0 x16)
BMC	ASPEED AST2600
Dedicated IPMI	1 RJ45 via Realtek RTL8211F
USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
COM port	1 (9-pin) header
Video	1 mini DispalyPort (VGA), 1 (15-pin) header
TPM	Supports 13-pin (SPI) TPM modules
	FCH Capacity PCIe slot Others M.2 SATA port OCP NIC BMC Dedicated IPMI USB COM port Video



GENOAD24QM3-2L2T/BCM



1 OCP NIC 3.0 (PCle5.0 x16)









4800

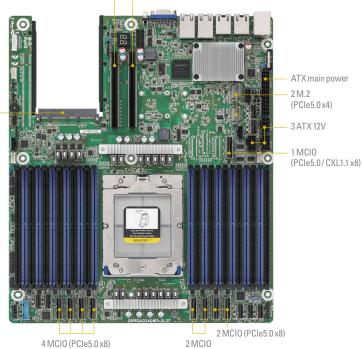
10Gbase-T





OCP NIC 3.0

PCI-E5.0

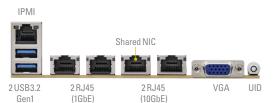


(PCle5.0 x8 or 8 SATA 6Gb/s)

SLOT7: PCle5.0/ CXL1.1 x16

Application

- ·CSP
- · All-flash Storage Server
- · Cloud Computing



GENOAD24QM3-2L2T/BCM

	EEB (12" x 14")
CPU	1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC 9004 Processors
FCH	System on chip
Capacity	24 DDR5288-pin DIMM Slots (2DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 64GB (2R), max. 4800MHz; 3DS RDIMM: up to 512GB (2S8RX4), max. 4800MHz
PCIe slot	SLOT7: PCIe5.0/CXL1.1 x16
	SLOT6: PCIe5.0/CXL1.1 x16
Others	1 MCI0 (PCle5.0 / CXL1.1 x8)
	6 MCIO (PCIe5.0 x8)
	2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s)
M.2	2 M-key (PCIe5.0 x4 / CXL1.1 x4), supports 22110/2280/2260 form factor
SATA port	16 SATA 6 Gb/s: 2 MCIO
RJ45	2 RJ45 (10GbE) by Broadcom BCM57416 Note1
	2 RJ45 (1GbE) by Intel® i210
OCP NIC	1 OCP NIC 3.0 (PCIe5.0 / CXL1.1 x16)
BMC	ASPEED AST2600
Dedicated IPMI	1 RJ45 via Realtek RTL8211F-CG
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)
TPM	Supports 13-pin (SPI) TPM modules
	FCH Capacity PCIe slot Others M.2 SATA port RJ45 OCP NIC BMC Dedicated IPMI USB COM port Video



GENOA2D16NQM3-2Q







4800

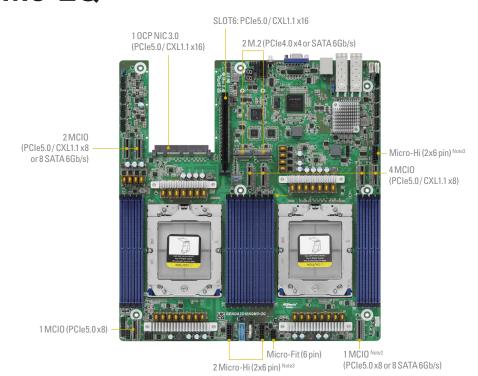
OCP NIC 3.0





25Gbase-T

PCI-E5.0



Application

- · Software-defined application
- ·HCI



GENOA2D16NQM3-2Q

Form Factor		EEB (12.82" X 14") Note1
Processor System	CPU	1+1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC 9004 Processors
	FCH	System on chip
Memory	Capacity	8+8 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 64GB (2R), max. 4800MHz
		3DS RDIMM: up to 512GB (2S8RX4), max. 4800MHz
Expansion	PCIe slot	SLOT6: PCle5.0 / CXL1.1 x16 [CPU1]
	Others	4 MCIO (PCIe5.0 / CXL1.1 x8) [CPU0]
		1 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) [CPU0] Note2
		2 MCIO (PCIe5.0 / CXL1.1 x8 or 8 SATA 6Gb/s) [CPU1]
		1 MCIO (PCIe5.0 x8) [CPU1]
Storage	M.2	2 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280 form factor [CPU0]
	SATA port	Up to 18 SATA 6 Gb/s: 2 MCIO, 2 M.2
Network	SFP28	2 SFP28 (25GbE) by Broadcom BCM57414
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0 / CXL1.1 x16) [CPU1]
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
1/0	USB	2 USB3.2 Gen1 ports: 2 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
Security	TPM	Supports 13-pin (SPI) TPM modules

Note1: Extend 10.1mm left and 10.7mm right

Note2: MCIO from CPU0 support PCle only while installing 2 processors



GENOA2D24TM3-2L+





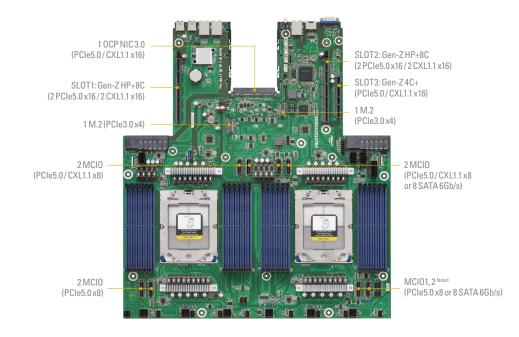


OCP NIC 3.0

PCI-E5.0



4800



Application

- $\cdot \, \mathsf{Software}\text{-}\mathsf{defined} \, \mathsf{application} \,$
- E-commerce
- ·HCI





GENOA2D24TM3-2L+

Form Factor		Proprietary T-shape (17.0149" x 18.8607")
Processor System	CPU	1+1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC 9004 Processors
	FCH	System on chip
Memory	Capacity	12+12 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM, RDIMM-3DS RDIMM: up to 64GB (2R), max. 4800MHz
		3DS RDIMM: up to 512GB (2S8RX4), max. 4800MHz
Expansion	PCIe slot	SLOT1: Gen-Z HP+8C (2 PCIe5.0 x16 / 2 CXL1.1 x16) [CPU1]
		SLOT2: Gen-Z HP+8C (2 PCle5.0 x16/2 CXL1.1 x16) [CPU0]
		SLOT3: Gen-Z 4C+ (PCle5.0 / CXL1.1 x16) [CPU0]
	Others	MCIO1, 2 (PCIe5.0 x8 or 8 SATA 6Gb/s) [CPU0] Note1
		2 MCIO (PCIe5.0 / CXL1.1 x8 or 8 SATA 6Gb/s) [CPU0]
		2 MCIO (PCIe5.0 / CXL1.1 x8) [CPU1]
		2 MCIO (PCIe5.0 x8) [CPU1]
Storage	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
Network	RJ45	2 RJ45 (1GbE) by Intel® i350
	OCP NIC	1 OCP NIC 3.0 (PCIe5.0 / CXL1.1 x16) [CPU1]
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
1/0	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 1 via 26-pin header, 1 via vertical Type-A
	COM port	1 (9-pin) header, 1 RJ45 (COM)
	Video	1 DB15 (VGA)
Security	TPM	Supports 13-pin (SPI) TPM modules



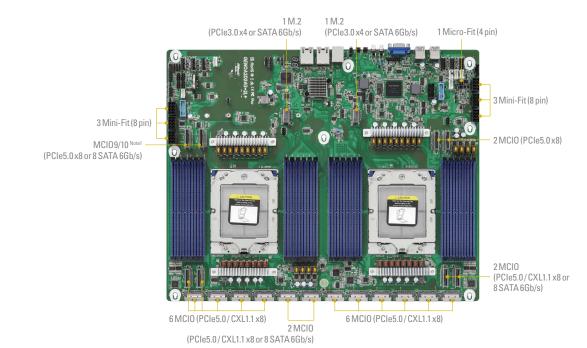
GENOA2D24G-2L+







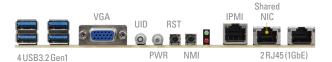
4800 PCI-E 5.0



- · All-flash Storage Server
- · GPGPU Computing

Application

· High-end Network Appliance



GENOA2D24G-2L+

Form Factor		Proprietary (16.93"x 13.78")
Processor System	CPU	1+1 Socket SP5 (SM-LGA-6096); Supports AMD EPYC 9004 Processors
	FCH	System on chip
Memory	Capacity	12+12 DDR5 288-pin DIMM Slots (1DPC); Supports RDIMM, LRDIMM, RDIMM-3DS RDIMM: up to 64GB (2R), max. 4800MHz
		3DS RDIMM: up to 512GB (2S8RX4), max. 4800MHz
Expansion	Others	6 MCIO (PCIe5.0 / CXL1.1 x8) [CPU0]
		2 MCIO (PCIe5.0 / CXL1.1 x8 or 8 SATA 6Gb/s) [CPU0]
		2 MCIO (PCIe5.0 x8 or 8 SATA 6Gb/s) [CPU0] Note1
		6 MCIO (PCIe5.0 / CXL1.1 x8) [CPU1]
		2 MCIO (PCIe5.0 / CXL1.1 x8 or 8 SATA 6Gb/s) [CPU1]
		2 MCIO (PCIe5.0 x8) [CPU1]
Storage	M.2	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]
	SATA port	32 SATA 6 Gb/s: 4 MCIO
		2 SATA 6Gb/s by ASM1061: 2 M.2
Network	RJ45	2 RJ45 (1GbE) by Intel® i350
Management	BMC	ASPEED AST2600
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F
1/0	USB	8 USB3.2 Gen1 ports: 4 rear Type-A, 4 via 19-pin header
	COM port	1 (9-pin) header
	Video	1 DB15 (VGA), 1 (15-pin) header
Security	TPM	Supports 13-pin (SPI) TPM modules



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