Intel® Xeon® E-2400/2300 Processors
Essential performance, Business-ready

Server Motherboards
General Purpose/ GPU/ Multi-node Barebones

intel® XEON®

Server Platform Naming Rule

EC266D4U-2L2T

Character	Representation	Options
N	Chipset	• C266 = Intel C266 chipset • C262 = Intel C262 chipset • C256 = Intel C256 chipset • C252 = Intel C252 chipset • Z690 = Intel Z690 chipset • W680 = Intel W680 chipset
N+1	Number of CPU Supported	• NA = Single
Others	Number of DIMM Supported	• D4 = 4 DIMMs • D2 = 2 DIMMs
	Form Factor	• NA = ATX • U = Micro-ATX • ID = Deep mini-TIX (6.7" x 8.2") • I = mini-ITX
	Feature	• 2Q = Dual 25GbE SFP28 by Intel E810-XXVAM2 • 2T = Dual 10GbE RJ45 by Intel X710 or Intel X550 • 2T/X550 = Dual 10GbE RJ45 by Intel X550 • 2T/BCM = Dual 10GbE RJ45 by Broadcom BCM57416 • 2T/AQC = Dual 10GbE RJ45 by Marvell AQC113 • 4L = Quad 1GbE RJ45 by Intel i210 • 2L = Dual 1GbE RJ45 by Intel i210

1U4LW-C262/2L2T

Character	Representation	Options
1st ~ 2nd	System Height	• 1U = 1U chassis • 4U = 4U chassis
Others	Drive Bay	• LW = 3.5'' SATA Drive Bay • E = NVMe Drive Bay
	Feature	• G = Dual-slot cards supported • N = Number of nodes

Content

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.

Barebones Series

Leveraging the Versatile Portfolio, ASRock Rack Barebones Series provide the solutions for Cloud, AI, Deep Learning and 5G with high density and multi-node of computing, storage and networking with lower TCO and greater efficiency.

OPEN 19

The Open19 project is an industry specification that defines a cross-industry common server form factor; with the open standard technology and wide levels of adoption, the Open19 creates more flexible and economic for data center and edge solutions as well as the operators of all sizes.

Server Motherboards

With the best performance, product lifetime, and optimized resource utilization, ASRock Rack Server Motherboards are famous and popular among industry investment, especially for the flexibility and versatility.

Workstation Motherboards

Featuring reliable, quiet, and power-efficient, these workstations are best tools for the content creators.

1U4LW-C262/2L2T RPSU

General Purpose Server for Small and Medium-sized Business Powered by Intel® Xeon® E-2400

1U4LW-C262/2L2T

2 fixed 2.5" NVMe (PCIe4.0 x4) drive bay

2 fixed 2.5" NVMe (PCIe4.0 x4) drive bay

4 Hot-swap 3.5" SATA drive bays

4 Hot-swap 3.5" SATA drive bays

IPMI   1 FHHL PCIe5.0 x16

IPMI   1 FHHL PCIe5.0 x16
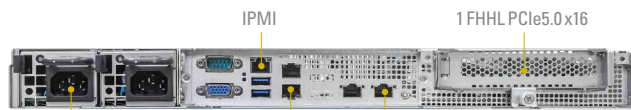
1+1 RPSU (450W)   2 RJ45 (1GbE) 2 RJ45 (10GbE)

1 PSU (400W)   2 RJ45 (1GbE) 2 RJ45 (10GbE)

		1U4LW-C262/2L2T RPSU	1U4LW-C262/2L2T
CPU	Socket	1 Socket V1 (LGA1700); Supports Intel® Xeon® E-2400 series and Intel® Pentium® Gold G7400/G7400T processors	
DIMM	Slot	4 DDR5 288-pin (2DPC)	
System Physical Status	Form Factor	1U Rackmount	
	Chassis Dimension	533.4 x 482.6 x 44.4 mm (21" x 19" x 1.75")	
Front Panel	Buttons	Power Switch, ID Switch, System reset, NMI	
	LEDs	Power status, HDD, LANs, System Fail activity LEDs	
	I/O	2 Type-A (USB3.2 Gen1)	
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X710	
		2 RJ45 (1GbE) by Intel® i210	
		1 dedicated IPMI	
	USB	2 Type-A (USB3.2 Gen1)	
	Others	1 UID button w/ LED, 1 DB15 (VGA), 1 DB9 (COM)	
Expansion Slots	Rear	1 FHHL PCIe5.0 x16 via RB1UX16R_G5	
Drive Bay/ Storage	External	4 Hot-swap 3.5" SATA drive bays	
	Internal	2 fixed 2.5" NVMe (PCIe4.0 x4) drive bay	
		1 M-key (PCIe4.0 x4); support 2280/2260/2242/2230 form factor [PCH]	
Power Supply	Module	1+1, 80-PLUS Platinum, 450W RPSU	1, 80-PLUS Gold, 400W PSU
System Cooling	Fan	5 PWM Easy-swap 40x28 mm fans	
Management		ASPEED BMC AST2600	
Security		TPM by optional accessory	

1U4LW-C252

General Purpose Server for Small and Medium-sized
Business Powered by Intel® Xeon® E-2300
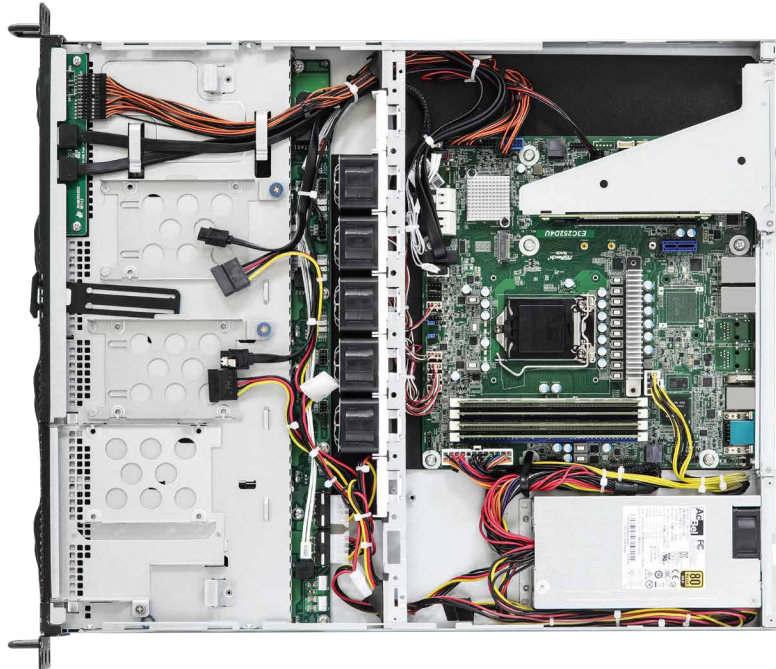
4 Hot-swap 3.5'' SATA drive bays

1 PSU (400W)

1U4LW-C252

System	Form Factor	1U Rackmount
Physical Status	Chassis Dimension	533.4 x 482.6 x 44.4 mm (21'' x 19'' x 1.75'')
CPU	Socket	1 Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors
DIMM	Slot	4 DDR4 288-pin (2DPC)
Front Panel	Buttons	Power Switch, ID Switch, System reset, NMI
	LEDs	PWR, UID, HDD Activity, LAN 3/4, System Event
	I/O	2 USB3.0 ports
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i210
		1 dedicated IPMI via AST2500
	USB	4 USB3.2 Gen1 (5Gbps)
	Others	1UID w/ LED, 1 DB15 (VGA), 1 HDMI, 1 DB9 (COM)
Expansion Slots	Rear	1 PCIe4.0 x16 for full height card
Drive Bay/	External	4 Hot-swap 3.5'' SATA drive bays
Storage	Internal	2 fixed 2.5'' SATA drive bays or 1 fixed 2.5'' SATA drive bay, 1 Slim ODD
		1 M.2 [Note1] (PCIe3.0 x2 or SATA 6Gb/s); support 22110/2280/2260 form factor
Power Supply	Module	Single Gold 400W PSU
System Cooling	Fan	5 PWM Simple-Swap 40 x 28 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

Note1: SATA0 will be disabled when M2_1 populated with SATA device

1U2E-C252

Compact Server Supporting 2x NVMe Drives
Powered by Intel® Xeon® E-2300
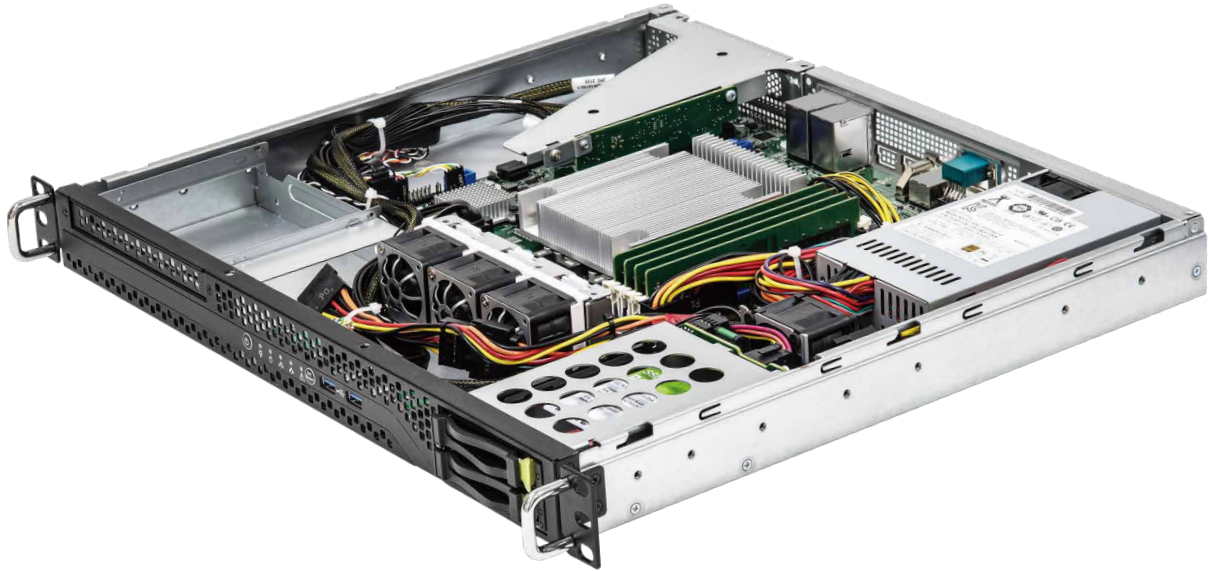
2 Hot-swap 2.5'' NVMe or SATA drive bays

1 PSU (315W)

1U2E-C252

System	Form Factor	1U Rackmount
Physical Status	Chassis Dimension	393.2 x 430 x 43.5 mm (15.5'' x 16.93'' x 1.71'')
CPU	Socket	1 Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors
DIMM	Slot	4 DDR4 288-pin (2DPC)
Front Panel	Buttons	Power, System Reset
	LEDs	PWR, HDD Activity, LAN 1/2, System Event
	I/O	2 USB3.0 ports
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i210
		1 dedicated IPMI via AST2500
	USB	4 USB3.2 Gen1 (5Gbps)
	Others	1UID w/ LED, 1 DB15 (VGA), 1 HDMI, 1 DB9 (COM)
Drive Bay/	External	2 Hot-swap 2.5" NVMe or 2.5'' SATA drive bays
Storage	Internal	1 fixed 3.5'' SATA drive bay or 1 Slim ODD (optional)
		1 M.2 Note1 (PCIe3.0 x2 or SATA 6Gb/s); support 22110/2280/2260 form factor
Power Supply	Module	Single Gold 315W PSU
System Cooling	Fan	4 PWM Simple-Swap 40 x 28 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

Note1: SATA0 will be disabled when M2_1 populated with SATA device

1U1G-C256/2L2T

1U Short-depth GPU Server
for Edge Deployment

IPMI   2 RJ45 (1GbE)

2 RJ45 (10GbE)

1 FH dual-slot
PCIe4.0 x16   2 SFF 2.5'' (SATA 6Gb/s)   1+1 CRPS (800W)
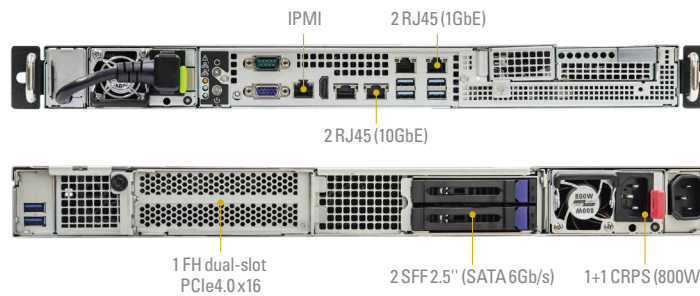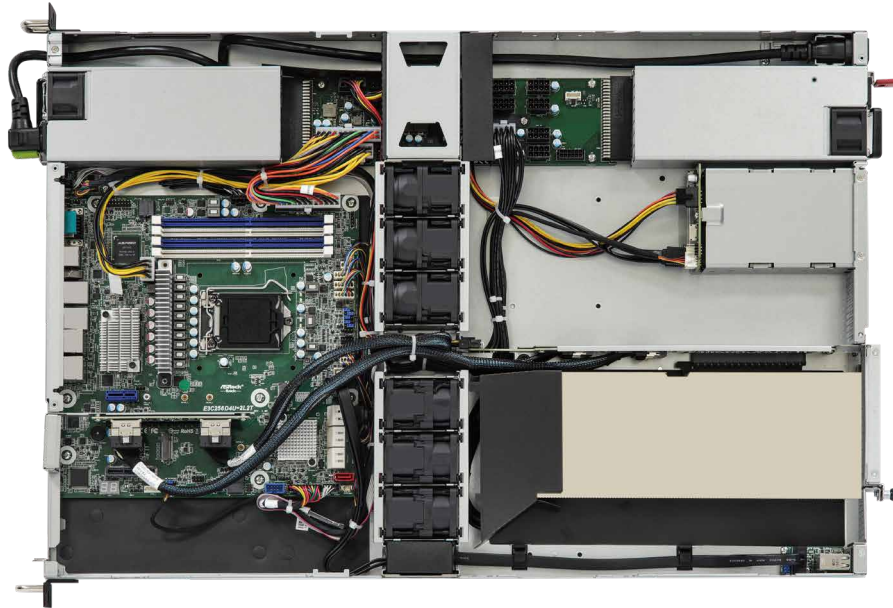
1U1G-C256/2L2T

System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	438.0x 660.4x 43.5 mm (without ear)
CPU	Socket	1 Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors
DIMM	Slot	4 DDR4 288-pin (2DPC)
Front Panel	Buttons	Reset, Power w/ LED, UID w/ LED
	LEDs	System Fail, LAN1, LAN2
	I/O	2 RJ45(10GbE) by Intel X710-AT2, 2 RJ45 (1GbE) by i210,
		2 Type-A (USB3.2 Gen1), 1 DB15 (VGA), 1 DB9 (COM),
		1 HDMI, 1 dedicated IPMI
Rear IO	USB	2 Type-A (USB3.2 Gen1)
Expansion Slots	Rear	1 FH dual-slot PCIe4.0 x16
Drive Bay/ Storage	External	2 SFF 2.5'' (SATA 6Gb/s)
	Internal	1 M-key Note (PCIe3.0 x4 or SATA 6Gb/s); support 22110/2280/2260 form factor [PCH]
		1 M-key (PCIe3.0 x4); support 2280/2260 form factor [PCH]
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: SATA0 will be disabled when M2_1 populated with SATA device

1U1G-W680/2L2T

1U Short-depth GPU Server with 4 External Hot-swap 2.5" drives

IPMI

1 CRPS (800W)   2 RJ45 (1GbE)   2 RJ45 (10GbE)

1 FHFL dual-slot PCIe4.0 x16   1 CRPS (800W)

2 USB2.0
2 USB3.2 Gen1   4 Hot-swap 2.5" SATA drive bays
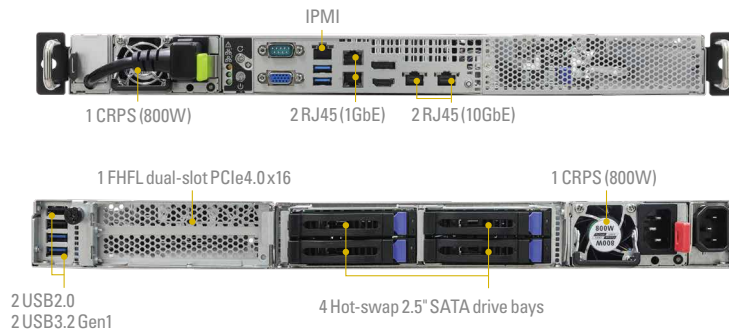
1U1G-W680/2L2T

CPU	Socket	1 Socket LGA 1700; Supports Intel® Core™ 14th Gen, 13th & 12th Gen Intel® Core™ series processors
DIMM	Slot	4 DDR5 288-pin (2DPC)
System Physical	Form Factor	1U Rackmount
Status	Chassis Dimension	650.0 x 438.0 x 43.5 mm (25.60'' x 17.24'' x 1.71'')
Front Panel	Buttons	Power button w/ LED, UID button w/ LED, System Reset
	LEDs	System Fault, LAN1/LAN2 Activity
	I/O	1 DB15 (VGA), 1 HDMI, 1 DisplayPort
		1 DB9 (COM)
		2 USB Type-A (USB3.2 Gen1)
		2 RJ45(10GbE), 2 RJ45(1GbE), 1 dedicated IPMI
Rear IO	USB	2 Type-A (USB3.2 Gen1), 2 Type-A (USB2.0)
Expansion Slots	Rear	1 FHFL dual-slot PCIe4.0 x16 via 1U2G-RB1U2SL-G4/1U1GX570 and 1U4G_SL2P_R_RDV
Drive Bay/	External	4 Hot-swap 2.5" SATA 6Gb/s drive bays
Storage	Internal	1 M-key (PCIe3.0 x4), support 2280/2260/2242/2230 form factor [PCH]
Power Supply	Module	1+1, 80-PLUS Platinum, 800W CRPS
System Cooling	Fan	5 PWM single-rotor 40x56 mm fans
		1 PWM dual-rotor 40x56 mm fans
Management		ASPEED BMC AST2600
Security		SPI TPM by optional accessory

1U2N2G-C252/2T

Density-optimized 1U 2 Node
GPU Server

FH dual-slot PCIe4.0 x16

IPMI IPMI

2 RJ45 (10GbE)   2 RJ45 (10GbE)

1+1 Platinum 1200W CRPS
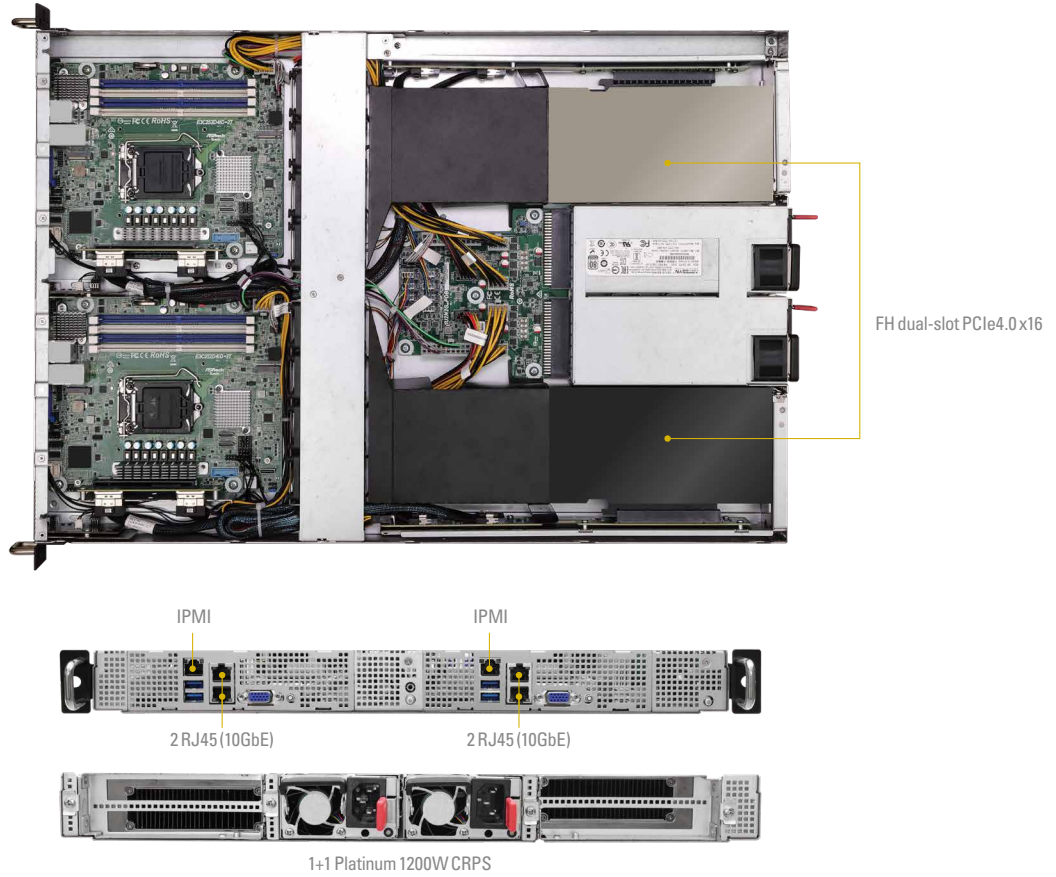
1U2N2G-C252/2T

System	Form Factor	1U Rackmount
Physical Status	Chassis Dimension	650 x 438 x 43.5 mm (25.6'' x 17.2'' x 1.7'')
CPU (per node)	Socket	Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors
DIMM (per node)	Slot	4 DDR4 288-pin (2DPC)
Front Panel	Buttons	UID w/LED, Power w/LED
(per node)	LEDs	System Fail
	RJ45	2 RJ45(10GbE) by Intel X710-AT2
		1 dedicated IPMI
	USB	2 USB 3.2 Gen1 ports
	VGA	1 DB15
Expansion Slots	Rear	1 FH dual-slot PCIe4.0[Note1] x16
(per node)		
Storage (per node)	Internal	1 M-key[Note2] (PCIe4.0 x4); supports 2280 form factor [CPU]
		1 M-key (PCIe3.0 x4); supports 2280 form factor [PCH]
Power Supply	Module	1+1 Platinum 1200W CRPS
System Cooling	Fan	8 dual-rotor 40x56 mm fans
Management		ASPEED BMC AST2500
(per node)		
Security (per node)		TPM by optional accessory

Note1: Supports PCIe3.0 only when installing 10th Gen Intel® Pentium® Series Processors
Note2: Supports PCIe3.0 only when installing 10th Gen Intel® Pentium® Series Processors

4U18N-C252/2T

4U Highest-density Multi-node Server

4U18N-C252

2 fixed 2.5" NVMe/SATA drive bays

2 RJ45 (10GbE) IPMI

3+1 1600W CRPS

		4U18N-C252/2T	4U18N-C252
System	Form Factor	4U Rackmount	
Physical Status	Chassis Dimension	950 x 438 mm x 176 mm	
CPU (per node)	Socket	1 Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors	
DIMM (per node)	Slot	4 DDR4 288-pin (2DPC)	
Front I/O (per node)	Buttons	UID w/LED, Power, Reset	
	LEDs	System Fail, LAN1/LAN2, Power	
	RJ45	2 RJ45(10GbE) by Intel® X710-AT2	2 RJ45(1GbE) by Intel® I210
		1 dedicated IPMI	
	USB	2 Type-A (USB 3.2 Gen1)	
	VGA	1 DB15	
Storage (per node)	Internal	2 fixed 2.5" NVMe (PCIe4.0[Note1] x4) / SATA drive bays (BTO)	
		1 M-key[Note2] (PCIe4.0 x4); supports 2280 form factor [CPU]	
		1 M-key (PCIe3.0 x4); supports 2280 form factor [PCH]	
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 PCIe3.0 only when installing 10th Gen Intel® Pentium® Series Processors
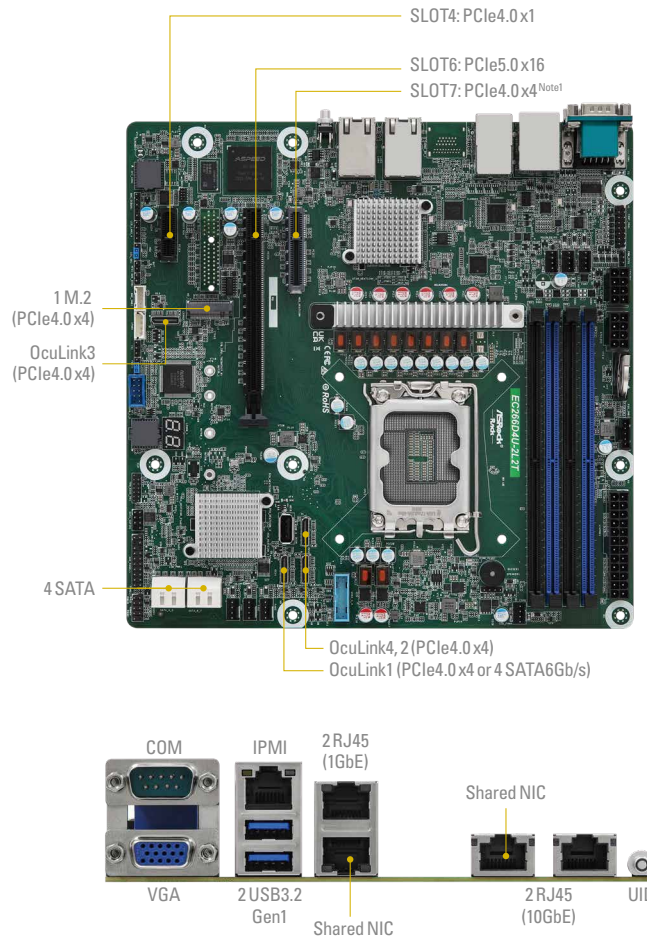Note2: M.2 from CPU will not function when installing 10th Gen Intel® Pentium® Series Processors

EC266D4U-2L2T

General-Purpose Server with
Greater Dual 10GbE Networking

EC262D4U-2L2T

SLOT4: PCIe4.0 x1
SLOT6: PCIe5.0 x16
SLOT7: PCIe4.0 x4 Note1

1 M.2
(PCIe4.0 x4)

OcuLink3
(PCIe4.0 x4)

4 SATA

OcuLink4, 2 (PCIe4.0 x4)
OcuLink1 (PCIe4.0 x4 or 4 SATA6Gb/s)

COM   IPMI   2 RJ45
(1GbE)

Shared NIC

VGA   2 USB3.2   2 RJ45   UID
Gen1   (10GbE)

Shared NIC

		EC266D4U-2L2T	EC262D4U-2L2T
Form Factor		Micro-ATX (9.6" x 9.6")	
Processor System	CPU	1 Socket (LGA1700); Supports Intel® Xeon® E-2400 series and Intel® Pentium® Gold G7400/G7400T processors	
	PCH	Intel® C266	Intel® C262
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 ECC UDIMM, max. 4400MT/s (2DPC-1DIMM) / max. 4000MT/s (2DPC-2DIMM 1R) / max. 3600MT/s (2DPC-2DIMM 2R)	
Expansion	PCIe slot	SLOT7: PCIe4.0 x4 Note1 [PCH] SLOT6: PCIe5.0 x16 [CPU] SLOT4: PCIe4.0 x1 [PCH]	
	Others	OCuLink4 (PCIe4.0 x4) Note1 [CPU] OCuLink1 (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH] OCuLink2, 3 (PCIe4.0 x4) [PCH]	OCuLink4 (PCIe4.0 x4) Note1 [CPU] OCuLink1 (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH]
Storage	M.2	1 M-key (PCIe4.0 x4); support 2280/2260/2242/2230 form factor [PCH]	
	SATA port	8 SATA 6Gb/s: 4 SATA 7-pin, 1 OCuLink	
Network	RJ45	2 RJ45 (10GbE) by Intel® X710 2 RJ45 (1GbE) by Intel® i210	
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 3 USB2.0 ports: 1 vertical Type-A, 2 via 9-pin header	
	COM port	1 DB9 (COM)	
	Video	1 DB15 (VGA)	
Security	TPM	Supports 13-pin (SPI) TPM modules	

Note1: SLOT7 share lanes with OCuLink4. OCuLink4 will disable when SLOT7 is populated

EC266D4U2-2L2Q/E810

General-Purpose Server with
Greater Dual 25GbE Networking

EC262D4U2-2L2Q/E810

SLOT4: PCIe4.0 x4
SLOT6: PCIe5.0 x16
1 M.2 (PCIe4.0 x4)
SLIMSAS2 (PCIe3.0 x4 or 4 SATA 6Gb/s)
SLIMSAS4 (PCIe4.0 x4)
SLIMSAS1, 3 (PCIe4.0 x4)

COM
IPMI
Shared NIC
VGA
2 USB3.2 Gen1
Shared NIC
2 RJ45 (10GbE)
UID
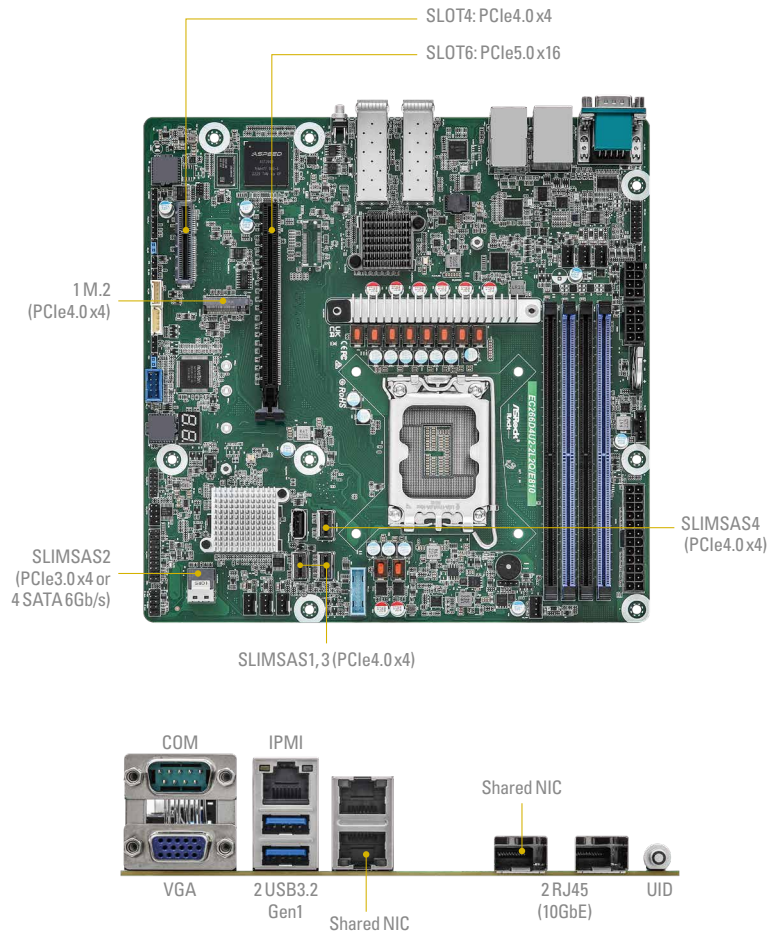
		EC266D4U2-2L2Q/E810	EC262D4U2-2L2Q/E810
Form Factor		Micro-ATX (9.6" x 9.6")	
Processor System	CPU	1 Socket (LGA1700); Supports Intel® Xeon® E-2400 series and Intel® Pentium® Gold G7400/G7400T processors	
	PCH	Intel® C266	Intel® C262
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 ECC UDIMM, max. 4400MT/s (2DPC-1DIMM) / max. 4000MT/s (2DPC-2DIMM 1R) / max. 3600MT/s (2DPC-2DIMM 2R)	
Expansion	PCIe slot	SLOT6: PCIe5.0 x16 [CPU]	
		SLOT4: PCIe4.0 x4 [PCH]	
	Others	SLIMSAS1, 3 (PCIe4.0 x4) [PCH]	SLIMSAS2 (4 SATA 6Gb/s) [PCH]
		SLIMSAS2 (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH]	SLIMSAS4 (PCIe4.0 x4) [CPU]
		SLIMSAS4(PCIe4.0 x4) [CPU]	
Storage	M.2	1 M-key (PCIe4.0 x4 or SATA 6Gb/s); support 2280/2260/2242/2230 form factor [PCH]	
	SATA port	5 SATA 6Gb/s: 1 SlimSAS, 1 M.2	
Network	RJ45	2 SFP28 (25GbE) by Intel® E810-XXVAM2	
		2 RJ45 (1GbE) by Intel® i210	
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	
		3 USB2.0 ports: 1 vertical Type-A, 2 via 9-pin header	
	COM port	1 DB9 (COM)	
	Video	1 DB15 (VGA)	
Security	TPM	Supports 13-pin (SPI) TPM modules	

EC266D4ID-2T/X550

Xeon E-2400 Compact Board
For Small Form Factor Applications

EC262D4ID-2T/X550

SLOT1: PCIe5.0 x16   M2_2 (PCIe4.0 x4)

1 OCuLink
(PCIe3.0 x4 or 4 SATA 6Gb/s)

1 OCuLink
(PCIe4.0 x4)

Micro-Fit
(ATX PSU signal)

12V DC-in

SATA power

1 OCuLink
(PCIe4.0 x4 or 4 SATA 6Gb/s)

M2_1 (PCIe4.0 x4)

2 RJ45
(10GbE)

IPMI

VGA

UID

Shared NIC

2 USB3.2
Gen1
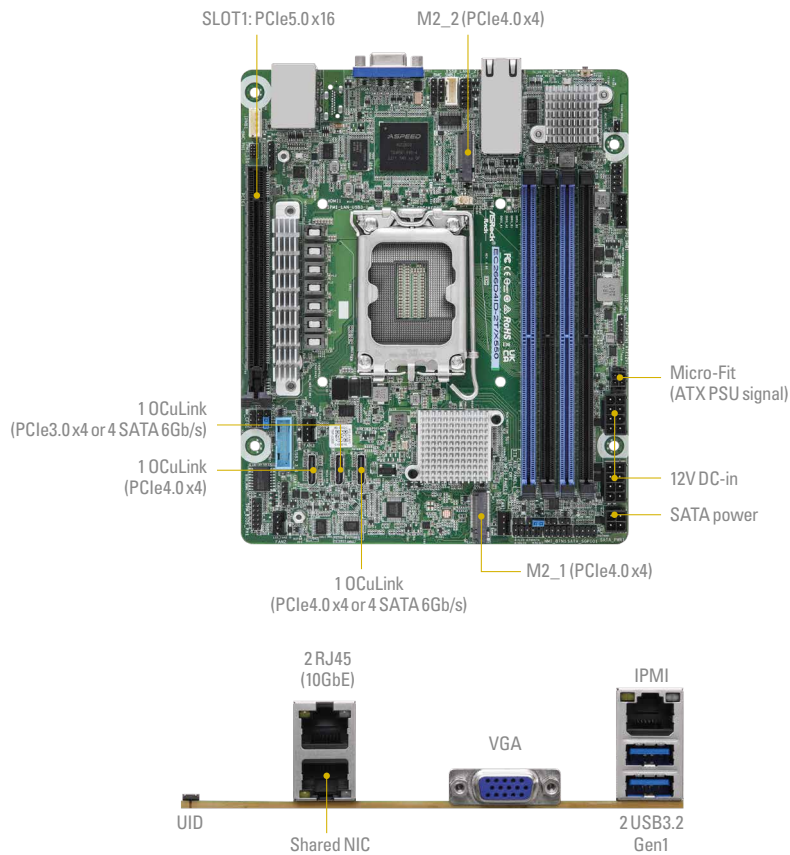
		EC266D4ID-2T/X550	EC262D4ID-2T/X550
Power source		Supports ATX PSU or 12V DC-in	
Form Factor		Deep mini-ITX (6.7" x 8.2")	
Processor System	CPU	1 Socket (LGA1700); Supports Intel® Xeon® E-2400 series and Intel® Pentium® Gold G7400/G7400T processors	
	PCH	Intel® C266	Intel® C262
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 ECC / UDIMM, max. 4400MT/s (2DPC-1DIMM) / 4000MT/s (2DPC-2DIMM 1R) / 3600MT/s (2DPC-2DIMM 2R)	
Expansion	PCIe slot	SLOT1: PCIe5.0 x16 [CPU]	
	Others	1 OCuLink (PCIe4.0 x4) [PCH]	1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH]
		1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH]	1 OCuLink (4 SATA 6Gb/s) [PCH]
		1 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH]	
Storage	M.2	M2_1 (PCIe4.0 x4); support 2280 form factor [PCH]	
		M2_2 (PCIe4.0 x4); support 2280 form factor [CPU]	
	SATA port	8 SATA 6Gb/s: 2 OCuLink	
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	
	Video	1 DB15 (VGA)	
Security	TPM	Supports 13-pin (SPI) TPM modules	

EC266D2I-2T/AQC

Mini-ITX Board for Mini-Tower and Home NAS Servers

EC266D2I   EC262D2I-2T/AQC   EC262D2I

SLOT7: PCIe5.0 x16

1 OCuLink
(PCIe3.0 x4 or
4 SATA 6Gb/s)

1 OCuLink
(PCIe4.0 x4 or
4 SATA 6Gb/s)

SATA power

12V DC-in

Micro-Fit
(ATX PSU signal)

1 M.2 (PCIe4.0 x4)

2 RJ45
(10GbE)

IPMI

VGA

UID

2 USB3.2
Gen1
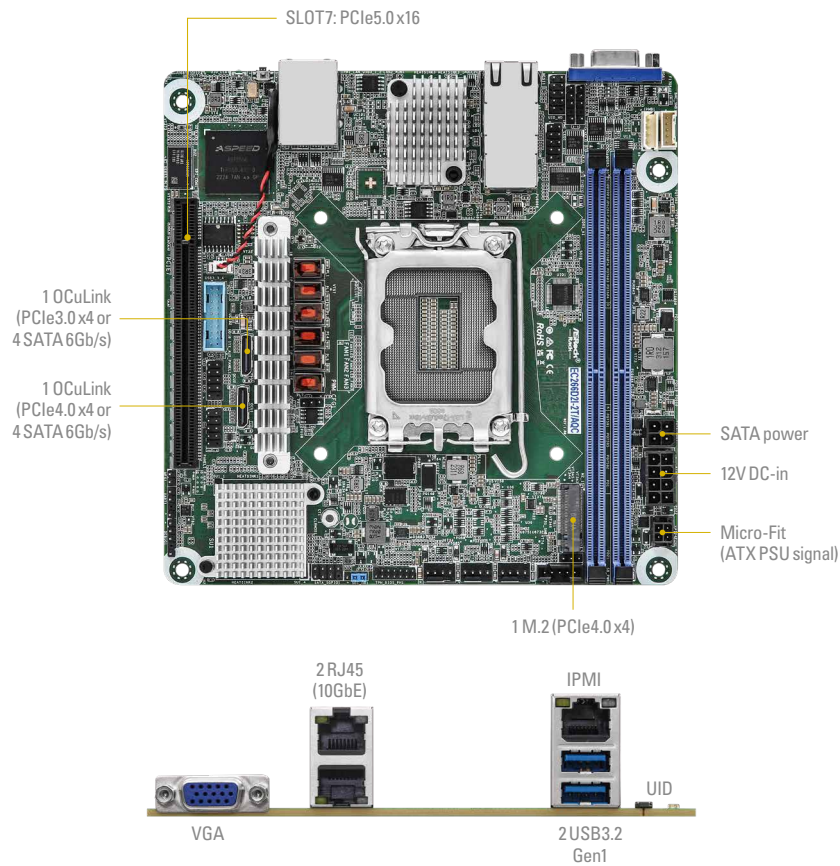
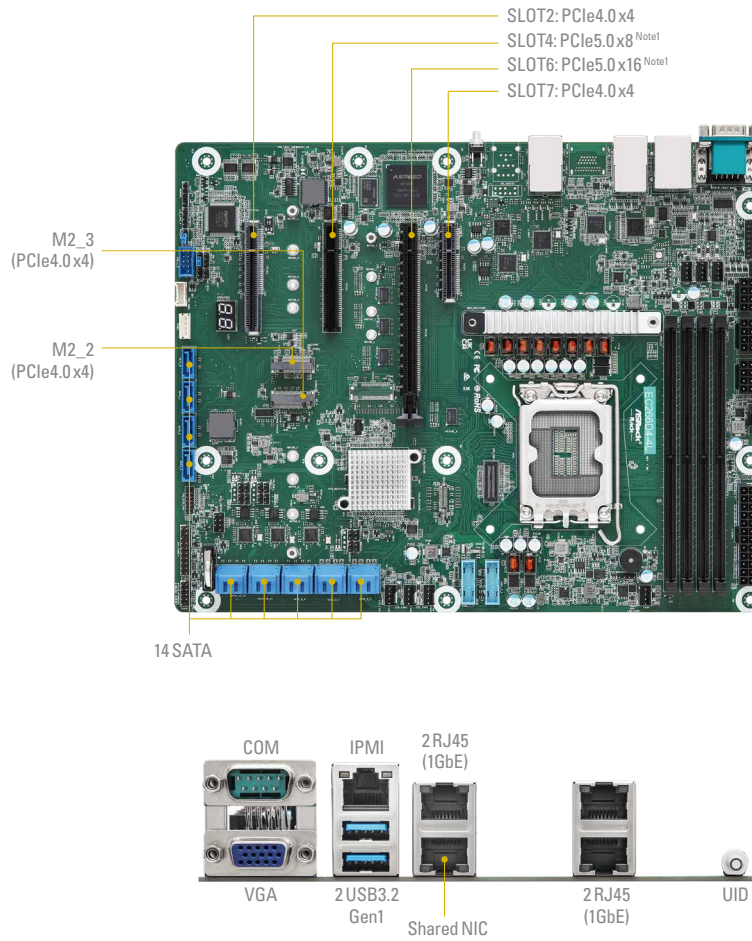|		EC266D2I-2T/AQC	EC266D2I	EC262D2I-2T/AQC	EC262D2I
Power source		Supports ATX PSU or 12V DC-in			
Form Factor		mini-ITX (6.7" x 6.7")			
Processor System	CPU	1 Socket (LGA1700); Supports Intel® Xeon® E-2400 series and Intel® Pentium® Gold G7400/G7400T processors			
	PCH	Intel® C266		Intel® C262	
Memory	Capacity	2 DIMM Slots (1DPC); Supports DDR5 ECC UDIMM, max. 4800MT/s			
Expansion	PCIe slot	SLOT7: PCIe5.0 x16 [CPU]			
	Others	1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH]		1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH]	
		1 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH]		1 OCuLink (4 SATA 6Gb/s) [PCH]	
Storage	M.2	1 M-key (PCIe4.0 x4); support 2280 form factor [CPU]			
	SATA port	8 SATA 6Gb/s: 2 OCuLink			
Network	RJ45	2 RJ45 (10GbE) by Marvell AQC113	2 RJ45 (1GbE) by Intel® i210	2 RJ45 (10GbE) by Marvell AQC113	2 RJ45 (1GbE) by Intel® i210
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			
	Video	1 DB15 (VGA)			
Security	TPM	Supports 13-pin (SPI) TPM modules			

EC266D4-4L

Intensive I/O Expansions ATX Board
Come with Quad 1GbE Networking

EC262D4-4L

SLOT2: PCIe4.0 x4
SLOT4: PCIe5.0 x8 Note1
SLOT6: PCIe5.0 x16 Note1
SLOT7: PCIe4.0 x4

M2_3
(PCIe4.0 x4)

M2_2
(PCIe4.0 x4)

14 SATA

COM
IPMI
2 RJ45 (1GbE)

VGA
2 USB3.2 Gen1
Shared NIC
2 RJ45 (1GbE)
UID

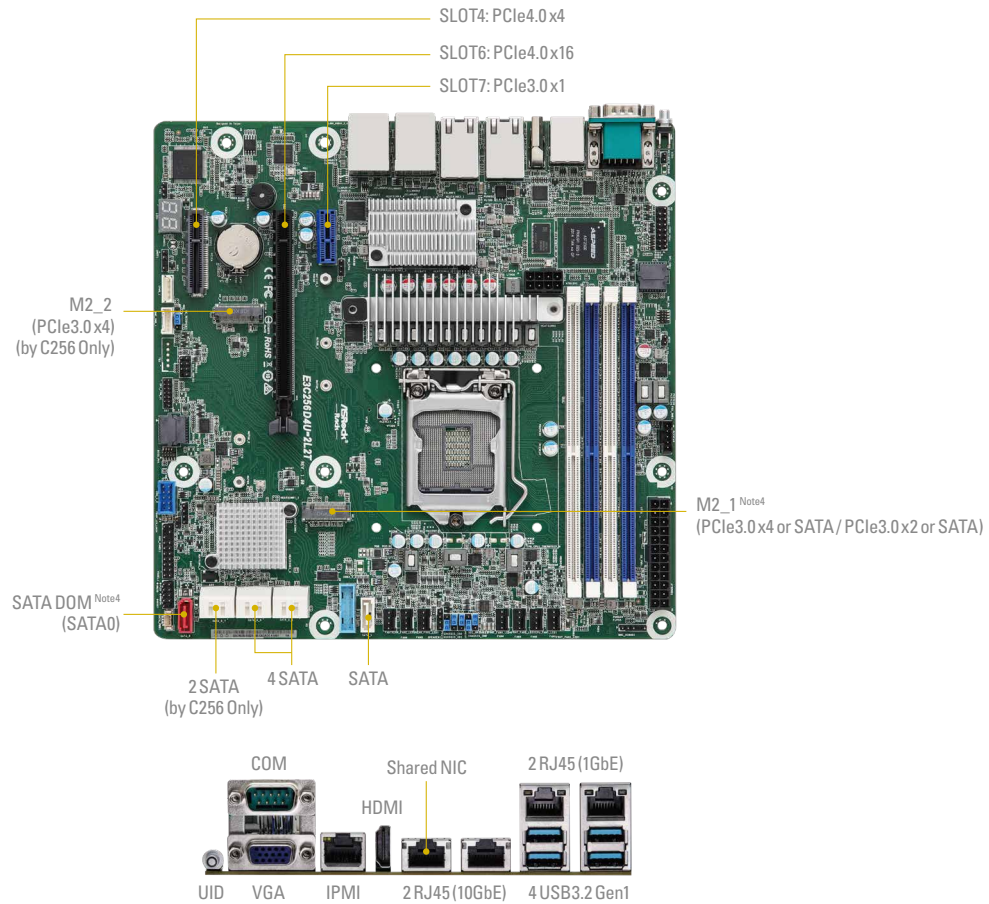|		EC266D4-4L	EC262D4-4L
Form Factor		ATX (12" x 9.6")	
Processor System	CPU	1 Socket (LGA1700); Supports Intel® Xeon® E-2400 series and Intel® Pentium® Gold G7400/G7400T processors	
	PCH	Intel® C266	Intel® C262
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 ECC UDIMM, max. 4400MT/s (2SPC - 1DIMM) / 4000MT/s (2SPC - 2DIMM 1R) / 3600MT/s (2SPC - 2DIMM 2R)	
Expansion	PCIe slot	SLOT7: PCIe4.0 x4 [CPU] SLOT6: PCIe5.0 x16 Note1 [CPU] SLOT4: PCIe5.0 x8 Note1 [CPU] SLOT2: PCIe4.0 x4 [PCH]	SLOT7: PCIe4.0 x4 [CPU] SLOT6: PCIe5.0 x16 Note1 [CPU] SLOT4: PCIe5.0 x8 Note1 [CPU]
Storage	M.2	M2_2 (PCIe4.0 x4); support 2280/2260/2242 form factor [PCH] M2_3 (PCIe4.0 x4); support 2280/2260/2242 form factor [PCH]	M2_2 (PCIe4.0 x4); support 2280/2260/2242 form factor [PCH]
	SATA port	14 SATA 6Gb/s: 14 SATA 7-pin	
Network	RJ45	4 RJ45 (1GbE) by Intel® i210	
Management	BMC	ASPEED AST2600	
	Dedicated IPMI	1 RJ45 via Realtek RTL8211F	
I/O	USB	6 USB3.2 Gen1 ports: 2 rear Type-A, 4 via 19-pin header	
		2 USB2.0 ports: 2 via 9-pin header	
	COM port	1 DB9 (COM)	
	Video	1 DB15 (VGA)	
Security	TPM	Supports 13-pin (SPI) TPM modules	

Note1: SLOT4 share lanes with SLOT6. SLOT6 will switch to x8 when SLOT4 is populated.

E3C256D4U-2L2T/BCM

General-Purpose Server with Greater
Dual 10GbE and 1GbE Networking

E3C256D4U-2L2T   E3C252D4U-2T   E3C252D4U

SLOT4: PCIe4.0 x4
SLOT6: PCIe4.0 x16
SLOT7: PCIe3.0 x1

M2_2
(PCIe3.0 x4)
(by C256 Only)

M2_1 Note4
(PCIe3.0 x4 or SATA / PCIe3.0 x2 or SATA)

SATA DOM Note4
(SATA0)

2 SATA
(by C256 Only)

4 SATA   SATA

COM   Shared NIC   2 RJ45 (1GbE)

HDMI

UID   VGA   IPMI   2 RJ45 (10GbE)   4 USB3.2 Gen1

		E3C256D4U-2L2T/BCM	E3C256D4U-2L2T	E3C252D4U-2T	E3C252D4U
Form Factor		Micro-ATX (9.6'' x 9.6'')			
Processor System	CPU	1 Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors			
	PCH	Intel® C256		Intel® C252	
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR4 ECC/non-ECC UDIMM up to 32GB each, max. 3200MHz Note1			
Expansion	PCIe slot	SLOT6: PCIe4.0 x16 Note2 [CPU] SLOT4: PCIe4.0 x4 Note3 [CPU]	SLOT7: PCIe3.0 x1 [PCH] SLOT6: PCIe4.0 x16 Note2 [CPU] SLOT4: PCIe4.0 x4 Note3 [CPU]		
Storage	M.2	1 M-key Note4 (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280/2260 form factor [PCH] 1 M-key (PCIe3.0 x4), supports 2280/2260 form factor [PCH]		1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 2280 form factor [PCH]	
	SATA port	8 SATA 6Gb/s: 7 SATA 7-pin, 1 M.2 or SATA DOM Note4		6 SATA 6Gb/s: 5 SATA 7-pin, 1 M.2 or SATA DOM Note4	
Network	RJ45	2 RJ45 (10GbE) by Broadcom BCM57416 2 RJ45 (1GbE) by Intel® i210	2 RJ45 (10GbE) by Intel® X710-AT2 2 RJ45 (1GbE) by Intel® i210	2 RJ45 (10GbE) by Intel® X710-AT2	2 RJ45 (1GbE) by Intel® i210
Management	BMC	ASPEED AST2500 : IPMI 2.0			
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E			
I/O	USB	6 USB3.2 Gen1 ports: 4 rear Type-A, 2 via 19-pin header 2 USB2.0 ports: 2 via 9-pin header			
	COM port	1 rear DB9			
Security	TPM	Supports 13-pin (SPI) TPM modules			

Note1: Up to DDR4 2666MHz when installing 10th Gen Intel® Pentium® Series Processors
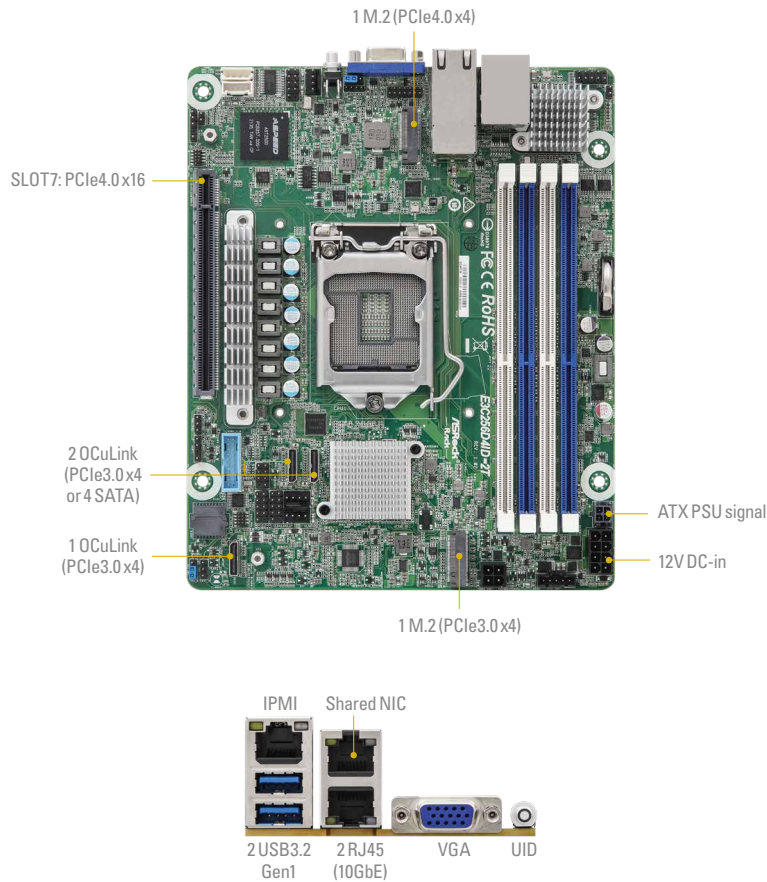Note2: SLOT6 supports PCIe3.0 only when installing 10th Gen Intel® Pentium® Series Processors
Note3: SLOT4 will not function when installing 10th Gen Intel® Pentium® Series Processors
Note4: SATA DOM will be disabled when M2_1 populated with SATA device

E3C256D4ID-2T

Most Compact Xeon E Unleashing
4 DIMMs and All PCIe

E3C252D4ID-2T   E3C256D4ID2

1 M.2 (PCIe4.0 x4)

SLOT7: PCIe4.0 x16

2 OCuLink
(PCIe3.0 x4
or 4 SATA)

1 OCuLink
(PCIe3.0 x4)

ATX PSU signal

12V DC-in

1 M.2 (PCIe3.0 x4)

IPMI   Shared NIC

2 USB3.2   2 RJ45   VGA   UID
Gen1   (10GbE)

		E3C256D4ID-2T	E3C252D4ID-2T	E3C256D4ID2
Power source		Supports ATX PSU or 12V DC-in		NA
Form Factor		Deep mini-ITX (6.7'' x 8.2'')		
Processor System	CPU	1 Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors		
	PCH	Intel® C256	Intel® C252	Intel® C256
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR4 ECC/ non-ECC UDIMM up to 32GB each, max. 3200MHz Note1		
Expansion	PCIe slot	SLOT7: PCIe4.0 x16 Note2 [CPU]		
	Others	2 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH] 1 OCuLink (PCIe3.0 x4) [PCH]	1 OCuLink (PCIe3.0 x2 or 4 SATA 6Gb/s) [PCH] 1 OCuLink (2 SATA 6Gb/s) [PCH]	2 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH] 1 OCuLink (PCIe3.0 x4) [PCH]
Storage	M.2	1 M-key Note3 (PCIe4.0 x4), supports 2280 form factor [CPU] 1 M-key (PCIe3.0 x4), supports 2280 form factor [PCH]		
	SATA port	8 SATA 6Gb/s: 2 OCuLink	6 SATA 6Gb/s: 2 OCuLink	8 SATA 6Gb/s: 2 OCuLink
Network	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2		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		
	COM port	9-pin header		
Security	TPM	Supports 13-pin (SPI) TPM modules		

Note1: Up to DDR4 2666MHz when installing 10th Gen Intel® Pentium® Series Processors
Note2: SLOT7 supports PCIe3.0 only when installing 10th Gen Intel® Pentium® Series Processors
Note3: M.2 from CPU will not function when installing 10th Gen Intel® Pentium® Series Processors

E3C256D2I

Mini-ITX Board for Mini-Tower and Home NAS Servers

Power source		Supports ATX PSU or 12V DC-in
Form Factor		m-ITX (6.7" x 6.7")
Processor System	CPU	1 Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors
	PCH	Intel® C256
Memory	Capacity	2 DIMM Slots (1DPC); Supports DDR4
		ECC/ non-ECC UDIMM up to 32GB each, max. 3200MHz [Note1]
Expansion	PCIe slot	SLOT7: PCIe4.0 x16 [Note2] [CPU]
	Others	2 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH]
Storage	M.2	1 M-key [Note3] (PCIe4.0 x4), supports 2280 form factor [CPU]
	SATA port	8 SATA 6Gb/s: 2 OCuLink
Network	RJ45	2 RJ45 (1GbE) by Intel® I210
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
		4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header
	COM port	9-pin header
Security	TPM	Supports 13-pin (SPI) TPM modules

Note1: Up to DDR4 2666MHz when installing 10th Gen Intel® Pentium® Series Processors
Note2: SLOT7 supports PCIe3.0 only when installing 10th Gen Intel® Pentium® Series Processors
Note3: M.2 will not function when installing 10th Gen Intel® Pentium® Series Processors

E3C256D4I-2T

Ultra Compact Server Board Equipped with 4 SO-DIMMs, Dual 10GbE and IPMI

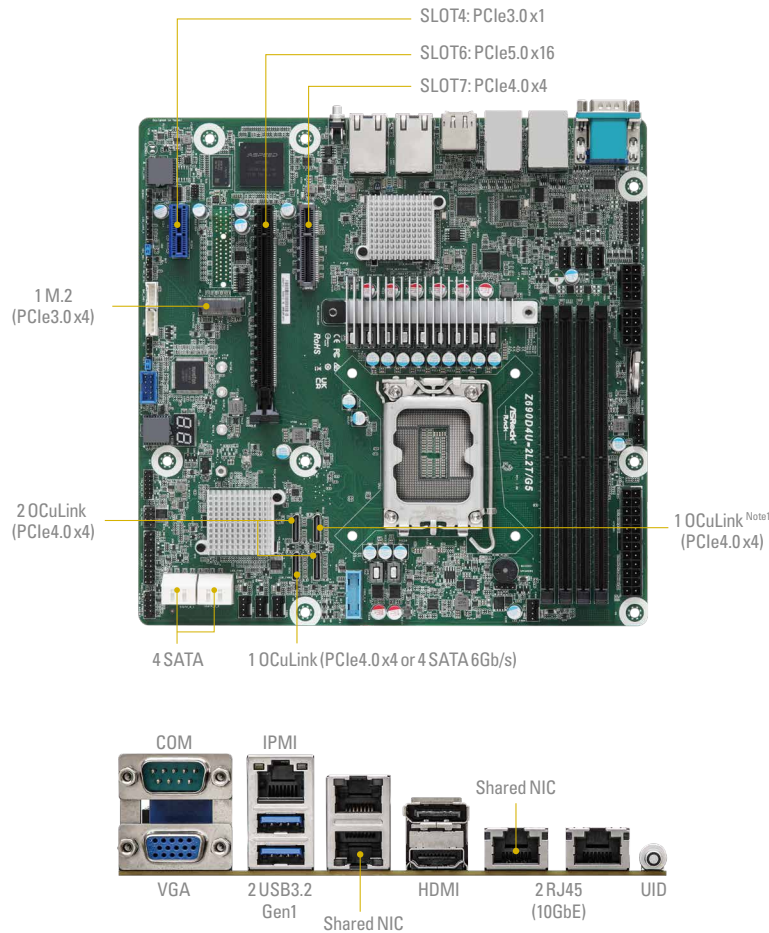|		
Power source		Supports ATX PSU or 12V DC-in
Form Factor		m-ITX (6.7'' x 6.7'')
Processor System	CPU	1 Socket H5 (LGA1200) for Intel® Xeon® E-2300 and 10th Gen Intel® Pentium® Series Processors
	PCH	Intel® C256
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR4
		ECC/non-ECC SODIMM up to 32GB each, 1DPC max. 3200MHz; 2DPC max. 2133MHz
Expansion	PCIe slot	SLOT7: PCIe4.0 x16 [Note1] [CPU]
	Others	2 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH]
Storage	M.2	1 M-key [Note2] (PCIe4.0 x4), supports 2280 form factor [CPU]
	SATA port	8 SATA 6Gb/s: 2 OCuLink
Network	RJ45	2 RJ45 (10GbE) by Intel® X550
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
	COM port	9-pin header
Security	TPM	Supports 13-pin (SPI) TPM modules

Note1: SLOT7 supports PCIe3.0 only when installing 10th Gen Intel® Pentium® Series Processors
Note2: M.2 will not function when installing 10th Gen Intel® Pentium® Series Processors

Z690D4U-2L2T/G5

Intel® Core™ Server Supporting DDR5 Memory Designed for Compute-intensive Edge Workloads with PCIe Gen5

W680D4U-2L2T/G5
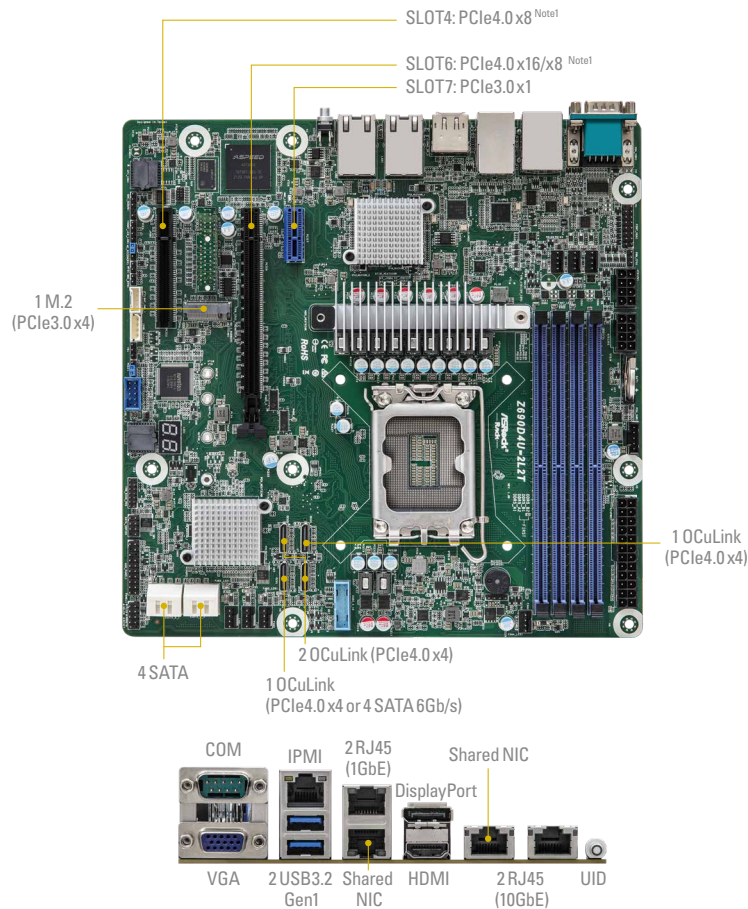

SLOT4: PCIe3.0 x1
SLOT6: PCIe5.0 x16
SLOT7: PCIe4.0 x4

1 M.2 (PCIe3.0 x4)

2 OCuLink (PCIe4.0 x4)

1 OCuLink Note1 (PCIe4.0 x4)

4 SATA   1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s)

COM   IPMI   Shared NIC

VGA   2 USB3.2   HDMI   2 RJ45   UID
        Gen1   (10GbE)
        Shared NIC

		Z690D4U-2L2T/G5	W680D4U-2L2T/G5
Form Factor		Micro-ATX (9.6" x 9.6")	
Processor System	CPU	1 Socket (LGA1700); Supports 13th & 12th Gen Intel® Core™, Pentium® and Celeron® series processors O.C.	1 Socket (LGA1700); Supports Intel® Core™ 14th Gen, 13th & 12th Gen Intel® Core™ series processors
	PCH	Intel® Z690	Intel® W680
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 non-ECC UDIMM, max. 4400MT/s (2DPC-1DIMM) / max. 4000MT/s (2DPC-2DIMM 1R) /max. 3600MT/s (2DPC-2DIMM 2R)	4 DIMM Slots (2DPC); Supports DDR5 ECC/non-ECC UDIMM, max. 4400MT/s (2DPC-1DIMM) / max. 4000MT/s (2DPC-2DIMM 1R) / max. 3600MT/s (2DPC-2DIMM 2R)
Expansion	PCIe slot	SLOT7: PCIe4.0 x4 [CPU] SLOT6: PCIe5.0 x16 [CPU] SLOT4: PCIe3.0 x1 [PCH]	
	Others	1 OCuLink Note1 (PCIe4.0 x4) [CPU] 1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH] 2 OCuLink (PCIe4.0 x4) [PCH]	
Storage	M.2	1 M-key (PCIe3.0 x4), supports 2280/2260/2242/2230 form factor [PCH]	
	SATA port	8 SATA 6Gb/s: 4 SATA 7-pin, 1 OCuLink	
Network	RJ45	2 RJ45 (10GbE) by Intel® X710 2 RJ45 (1GbE) by Intel® i210	
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 2 USB2.0 ports: 2 via 9-pin header	
	COM port	1 rear DB9	
	Video	1 DisplayPort, 1 HDMI, 1 DB15 (VGA)	
Security	TPM	Supports 13-pin (SPI) TPM modules	

Note1: OCulink4 shares lanes with SLOT7 and will be disabled when SLOT7 is populated.

Z690D4U-2L2T

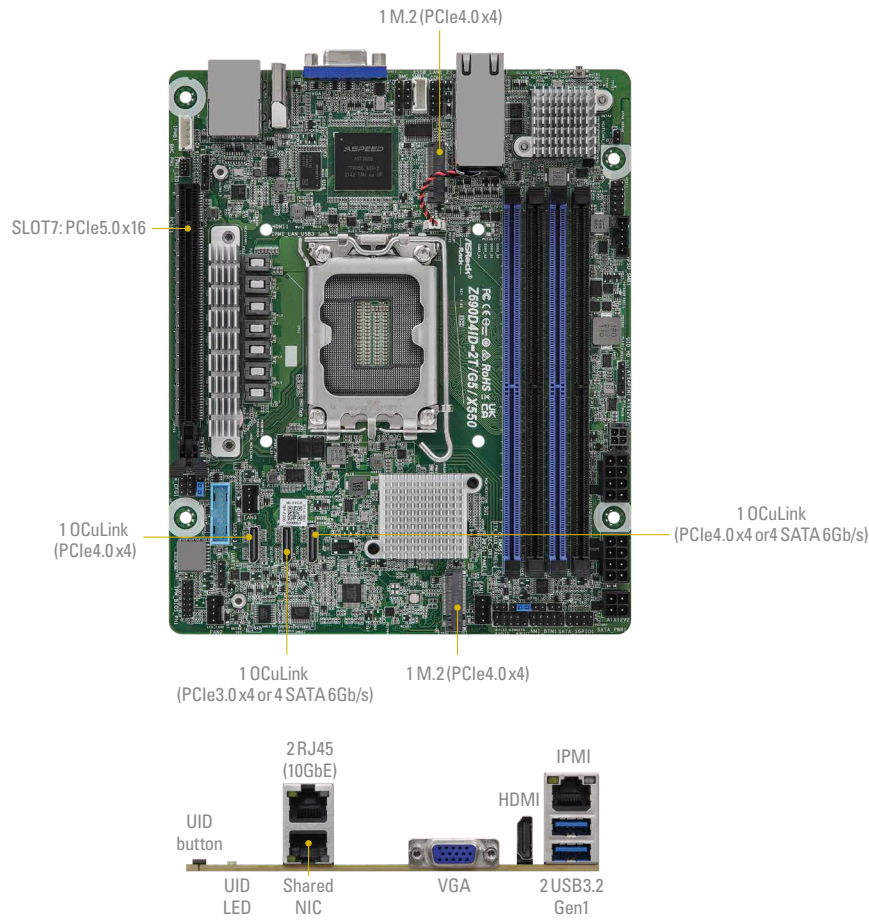Intel® Core™ Server Supporting DDR5 Memory Designed for Compute-intensive Edge Workloads

Z690D4U W680D4U-2L2T W680D4U

SLOT4: PCIe4.0 x8 Note1
SLOT6: PCIe4.0 x16/x8 Note1
SLOT7: PCIe3.0 x1

1 M.2
(PCIe3.0 x4)

1 OCuLink
(PCIe4.0 x4)

4 SATA

2 OCuLink (PCIe4.0 x4)

1 OCuLink
(PCIe4.0 x4 or 4 SATA 6Gb/s)

COM IPMI 2 RJ45 (1GbE) Shared NIC

DisplayPort

VGA 2 USB3.2 Gen1 Shared NIC HDMI 2 RJ45 (10GbE) UID

		Z690D4U-2L2T	Z690D4U	W680D4U-2L2T	W680D4U
Form Factor		Micro-ATX (9.6" x 9.6")			
Processor System	CPU	1 Socket (LGA1700); Supports 13th & 12th Gen Intel® Core™, Pentium® and Celeron® series processors O.C		1 Socket (LGA1700); Supports Intel® Core™ 14th Gen, 13th & 12th Gen Intel® Core™ series processors	
	PCH	Intel® Z690		Intel® W680	
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 non-ECC UDIMM, max. 4400MT/s (2DPC-1DIMM) / max. 4000MT/s (2DPC-2DIMM 1R) / max. 3600MT/s (2DPC-2DIMM 2R)		4 DIMM Slots (2DPC); Supports DDR5 ECC/non-ECC UDIMM, max. 4400MT/s (2DPC-1DIMM) / max. 4000MT/s (2DPC-2DIMM 1R) / max. 3600MT/s (2DPC-2DIMM 2R)	
Expansion	PCIe slot	SLOT7: PCIe3.0 x1 [PCH] SLOT6: PCIe4.0 x16 Note1 [CPU] SLOT4: PCIe4.0 x8 Note1 [CPU]			
	Others	1 OCuLink (PCIe4.0 x4) [CPU] 1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH] 2 OCuLink (PCIe4.0 x4) [PCH]			
Storage	M.2	1 M-key (PCIe3.0 x4), supports 2280/2260/2242/2230 form factor [PCH]			
	SATA port	8 SATA 6Gb/s: 4 SATA 7-pin, 1 OCuLink			
Network	RJ45	2 RJ45 (10GbE) by Intel® X710 2 RJ45 (1GbE) by Intel® i210	2 RJ45 (1GbE) by Intel® i210	2 RJ45 (10GbE) by Intel® X710 2 RJ45 (1GbE) by Intel® i210	2 RJ45 (1GbE) by Intel® i210
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			
		2 USB2.0 ports: 2 via 9-pin header			
	COM port	1 rear DB9			
	Video	1 DisplayPort, 1 HDMI, 1 DB15 (VGA)			
Security	TPM	Supports 13-pin (SPI) TPM modules			

Note1: SLOT6 auto-switch to PCIe4.0 x8 when SLOT4 occupied

Z690D4ID-2T/G5/X550

W680D4ID-2T/G5/X550

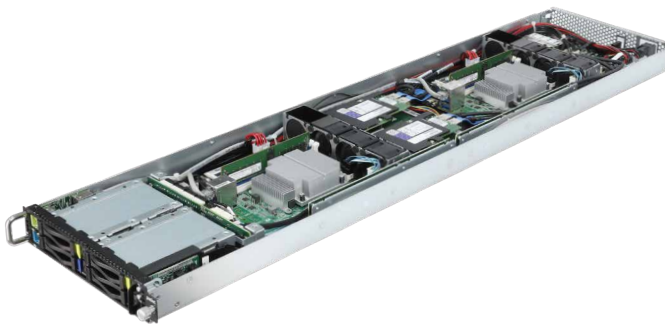Intel® Core™ Server Supporting DDR5 Memory Designed for Small Form Factor Applications

1 M.2 (PCIe4.0 x4)

SLOT7: PCIe5.0 x16

1 OCuLink (PCIe4.0 x4)

1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s)

1 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s)

1 M.2 (PCIe4.0 x4)

UID button

2 RJ45 (10GbE)

IPMI

HDMI

UID LED

Shared NIC

VGA

2 USB3.2 Gen1

		Z690D4ID-2T/G5/X550	W680D4ID-2T/G5/X550
Form Factor		Deep mini-ITX (6.7" x 8.2")	
Processor System	CPU	1 Socket (LGA1700); Supports 13th & 12th Gen Intel® Core™, Pentium® and Celeron® series processors O.C	1 Socket (LGA1700); Supports Intel® Core™ 14th Gen, 13th & 12th Gen Intel® Core™ series processors
	PCH	Intel® Z690	Intel® W680
Memory	Capacity	4 DIMM Slots (2DPC); Supports DDR5 non-ECC UDIMM, max. 4400MT/s (2DPC-1DIMM) / max. 4000MT/s (2DPC-2DIMM 1R) / max. 3600MT/s (2DPC-2DIMM 2R)	4 DIMM Slots (2DPC); Supports DDR5 ECC/non-ECC UDIMM, max. 4400MT/s (2DPC-1DIMM) / max. 4000MT/s (2DPC-2DIMM 1R) / max. 3600MT/s (2DPC-2DIMM 2R)
Expansion	PCIe slot	SLOT7: PCIe5.0 x16 [CPU]	
	Others	1 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [PCH]	
		1 OCuLink (PCIe3.0 x4 or 4 SATA 6Gb/s) [PCH]	
		1 OCuLink (PCIe4.0 x4) [PCH]	
Storage	M.2	1 M-key (PCIe4.0 x4); support 2280 form factor [CPU]	
		1 M-key (PCIe4.0 x4); support 2280 form factor [PCH]	
	SATA port	8 SATA 6Gb/s: 2 OCuLink	
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), 1 HDMI	
Security	TPM	Supports 13-pin (SPI) TPM modules	

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.

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Leveraging the Versatile Portfolio, ASRock Rack Barebones Series provide the solutions for Cloud, AI, Deep Learning and 5G with high density and multi-node of computing, storage and networking with lower TCO and greater efficiency.

OPEN 19

The Open19 project is an industry specification that defines a cross-industry common server form factor; with the open standard technology and wide levels of adoption, the Open19 creates more flexible and economic for data center and edge solutions as well as the operators of all sizes.

Server Motherboards

With the best performance, product lifetime, and optimized resource utilization, ASRock Rack Server Motherboards are famous and popular among industry investment, especially for the flexibility and versatility.

Workstation Motherboards

Featuring reliable, quiet, and power-efficient, these workstations are best tools for the content creators.

ASRock Rack

Reliable Server
Advancing Technology
Considerable Design
Knowledgeable Professional

ASRock Rack Incorporation

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