

AMD EPYC™ 4004 Processor

Performance for Demanding Workloads

Server Motherboards

General Purpose/ GPU/ Multi-node Barebones



Server Platform Naming Rule

B650D4U-2L2T/BCM

| Character | Representation | Options |
|-----------|--------------------------|--|
| N | Chipset | <ul style="list-style-type: none">• B650 = AMD B650 chipset• AM5 = KNOLL3 X300• B550 = AMD B550 chipset• X570 = AMD X570 chipset• X470 = AMD X470 chipset |
| | Socket Type | <ul style="list-style-type: none">• B650 or AM5 = AM5 Socket• B550 or X570 or X470 = AM4 Socket |
| N+1 | Number of CPU Supported | <ul style="list-style-type: none">• NA = Single |
| Others | Number of DIMM Supported | <ul style="list-style-type: none">• D4 = 4 DIMM |
| | Form Factor | <ul style="list-style-type: none">• I = mini-ITX• ID = Deep mini-ITX (6.7" x 8.2")• U = Micro-ATX• NA = ATX |
| | Feature | <ul style="list-style-type: none">• 2T = Dual 10GbE RJ45 by Intel X710• 2T/BCM = Dual 10GbE RJ45 by Broadcom BCM57416• 4L = Quad 1GbE RJ45 by Intel i210• 2L = Dual 1GbE RJ45 by Intel i210• M = OCP 2.0 connector |

1U4LW-B650/2L2T

| Character | Representation | Options |
|-----------------------------------|----------------|---|
| 1 st + 2 nd | System Height | <ul style="list-style-type: none">• 1U = 1U chassis• 4U = 4U chassis |
| Others | Drive Bay | <ul style="list-style-type: none">• LW = 3.5" HDD Bay• S = 2.5" HDD/SSD Bay• E = U.2 Bay |
| | Feature | <ul style="list-style-type: none">• G = Dual-slot cards supported• N = Number of nodes• F = Front I/O |

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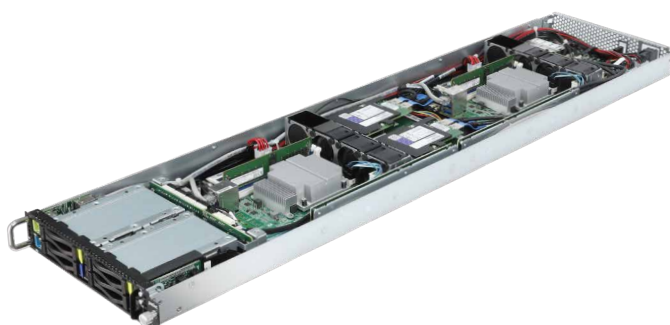
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|---|--|------|
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About ASRock Rack

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.

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.

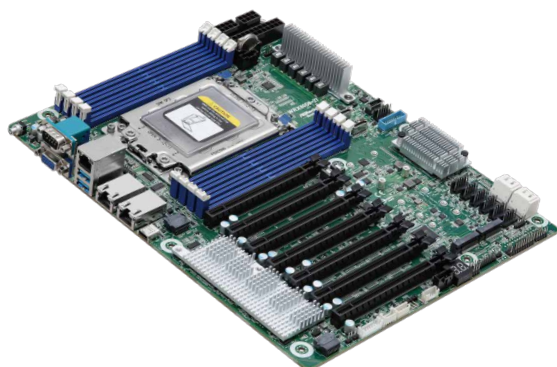


OPEN 19

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-B650/2L2T RPSU

1U4LW-B650 RPSU

General Purpose Server with Redundant PSU
Supporting up to 4 SATA Trays



| | | 1U4LW-B650/2L2T RPSU | 1U4LW-B650 RPSU |
|-----------------|-------------------|--|--|
| CPU | Socket | 1 Socket AM5 (LGA1718); Supports AMD EPYC™ 4004 and AMD Ryzen™ 8000/7000 series processors | |
| DIMM | Slot | 4 DDR5 288-pin (2DPC) | |
| System Physical | Form Factor | 1U Rackmount | |
| Status | Chassis Dimension | 533.4 x 438 x 44.4 mm (21" x 17.2" x 1.75") | |
| Front Panel | Buttons | Power w/ LED, UID w/LED, System reset | |
| | LEDs | LANs, HDD activity, System health | |
| | I/O | 2 Type-A (USB3.2 Gen1) | |
| Rear IO | RJ45 | 2 RJ45 (10GbE) by Broadcom BCM57416 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI | 2 RJ45 (1GbE) by Intel® i210 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 FHHL PCIe4.0 x16 | |
| Drive Bay/ | External | 4 Hot-swap 3.5" SATA drive bays | |
| Storage | Internal | M2_1 (PCIe5.0 x4), supports 2280/2242 form factor [CPU] | M2_1 (PCIe5.0 x4), supports 2280/2242 form factor [CPU] M2_2 (PCIe4.0 x4), supports 2280/2242 form factor [FCH] |
| | | | |
| Power Supply | Module | 1+1, 450W PSU | |
| System Cooling | Fan | 5 PWM Hot-swap 40x28 mm fans | |
| Management | | ASPEED BMC AST2600 | |
| Security | | TPM by optional accessory | |



AM5



1U4L2E-B650 RPSU

General Purpose Server with Redundant PSU
Supporting up to 2 Gen4 NVMe and 2 SATA Trays



| | | | |
|-----------------|-------------------|---|--|
| CPU | Socket | 1 Socket AM5 (LGA1718); Supports AMD EPYC™ 4004 and AMD Ryzen™ 8000/7000 series processors | |
| DIMM | Slot | 4 DDR5 288-pin (2DPC) | |
| System Physical | Form Factor | 1U Rackmount | |
| Status | Chassis Dimension | 676.5 x 438 x 43.4 mm (26.6" x 17.2" x 1.7") | |
| Front Panel | Buttons | Power, System Reset, UID button | |
| | LEDs | Power, HDD Activity, LANs, System Event | |
| | I/O | 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 | |
| Drive Bay/ | External | 2 hot-swap 2.5" NVMe ^{Note1} (PCIe4.0 x4) or 3.5" SATA drive bays | |
| Storage | Internal | 2 hot-swap 3.5" SATA drive bays | |
| | | M2_1 (PCIe5.0 x4), supports 2280/2242 form factor [CPU] M2_2 ^{Note1} (PCIe4.0 x4), supports 2280/2242 form factor [FCH] | |
| Power Supply | Module | 1+1, 80-PLUS Platinum, 650W Slim PSU | |
| System Cooling | Fan | 6 PWM Hot-swap 40x56 mm fans | |
| Management | | ASPEED BMC AST2600 | |
| Security | | TPM by optional accessory | |



Note1: If support 2 NVMe drive bays, only M2_2 can be used

1U4LW-B650/2L2T

1U4LW-B650

General Purpose Server Equipped with Dual 10GbE
Supporting up to 4 SATA Trays



| | | 1U4LW-B650/2L2T | 1U4LW-B650 |
|-----------------------|-------------------|--|--|
| CPU | Socket | 1 SocketAM5 (LGA1718); Supports AMD EPYC™4004 and AMD Ryzen™8000/7000 series processors | |
| DIMM | Slot | 4 DDR5 288-pin (2DPC) | |
| System Physical | Form Factor | 1U Rackmount | |
| Status | Chassis Dimension | 533.4 x 438 x 44.4 mm (21" x 17.2" x 1.75") | |
| Front Panel | Buttons | Power w/ LED, UID w/LED, System reset | |
| | LEDs | LANs, HDD activity, System health | |
| | I/O | 2 Type-A (USB3.2 Gen1) | |
| Rear IO | RJ45 | 2 RJ45 (10GbE) by Broadcom BCM57416 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI | 2 RJ45 (1GbE) by Intel® i210 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 FHHL PCIe4.0 x16 via RB1UX16_G4 (Up to 75W) | |
| Drive Bay/ Storage | External | 4 Hot-swap 3.5" SATA drive bays | |
| | Internal | M2_1 (PCIe5.0 x4), supports 2280/2242 form factor [CPU] M2_2 (PCIe4.0 x4), supports 2280/2242 form factor [FCH] | M2_1 (PCIe5.0 x4), supports 2280/2242 form factor [CPU] M2_2 (PCIe4.0 x4), supports 2280/2242 form factor [FCH] |
| Power Supply | Module | 1, 80-PLUS Gold, 400W PSU | |
| System Cooling | Fan | 5 PWM Hot-swap 40x28 mm fans | |
| Management | | ASPEED BMC AST2600 | |
| Security | | TPM by optional accessory | |



1U2S-B650

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



| | | | |
|-----------------------|-------------------|---|--|
| CPU | Socket | 1 SocketAM5 (LGA1718); Supports AMD EPYC™4004 and AMD Ryzen™8000/7000 series processors | |
| 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 | |
| | I/O | 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/ Storage | External | 2 hot-swap 2.5" SATA drive bays | |
| | Internal | 1 fixed 3.5" SATA drive bay or 1 Slim ODD M2_1 (PCIe5.0 x4), supports 2280/2242 form factor [CPU] M2_2 (PCIe4.0 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 | |



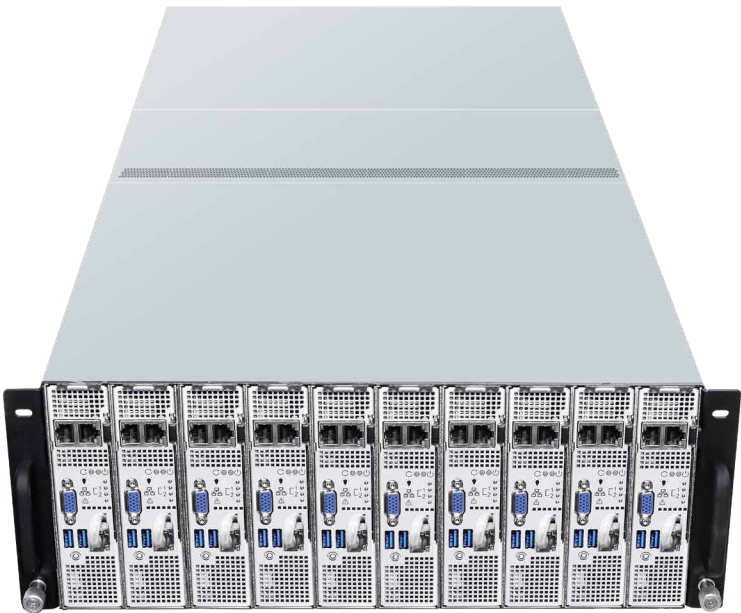
4U18N-AM5/2T

4U18N-AM5

4U Highest-density Multi-Node Server



AM5



2 RJ45 (10GbE)



2+2 CRPS (2000W)



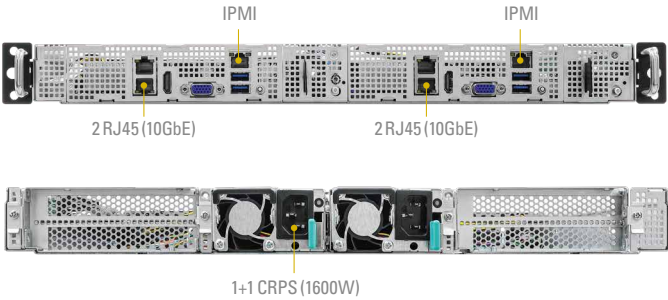
| 4U18N-AM5/2T | | 4U18N-AM5 |
|------------------------|---------------------------|---|
| CPU (per node) | Socket | 1 Socket AM5 (LGA 1718) for AMD EPYC™ 4004 and AMD Ryzen™ 8000/7000 series processors |
| | TDP | Up to 65W |
| DIMM (per node) | Slot | 4 DDR5 288-pin (2DPC) |
| System | Form Factor | 4U Rackmount |
| Physical Status | Chassis Dimension | 950 x 438 x 176 mm (37.4" x 17.2" x 6.9") |
| Front Panel (per node) | Buttons | UID, Power, RESET |
| | LEDs | System Fail, LAN1/LAN2, UID, Power |
| | RJ45 | 2 RJ45(10GbE) by BCM57416 1 dedicated IPMI |
| | USB | 2 Type-A (USB3.2 Gen1) |
| | VGA | 1 DB15 |
| Storage (per node) | Internal | 2 fixed 2.5" NVMe (PCIe4.0 x4) drive bays |
| | | 1 M-key (PCIe4.0 x4), supports 2280 form factor [CPU] |
| Power Supply | Module | 2+2, 80-PLUS Platinum, 2000W CRPS |
| System Cooling | Fan | 5 PWM Hot-swap 80x80 mm fans |
| Management (per node) | ASPEED BMC AST2600 | |
| Security (per node) | TPM by optional accessory | |

1U2N2G-AM5/2T

Density-optimized 1U 2 Node GPU Server
Equipped with Dual 10GbE Networking



AM5

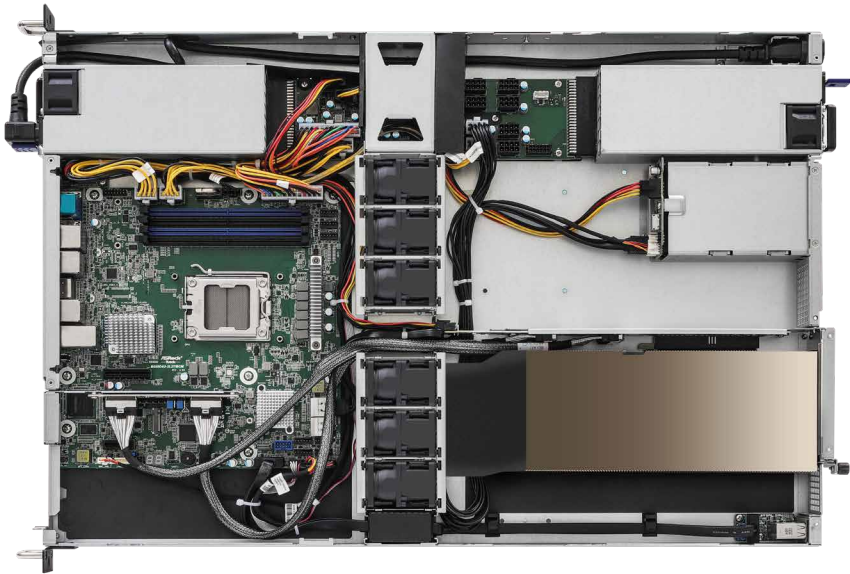


| | | |
|----------------------------|-------------------|---|
| CPU (per node) | Socket | 1 Socket AM5 (LGA1718); Supports AMD EPYC™ 4004 and AMD Ryzen™ 8000/7000 series processors |
| DIMM (per node) | Slot | 4 DDR5 288-pin (2DPC) |
| System | Form Factor | 1U Rackmount |
| Physical Status | Chassis Dimension | 650 x 438 x 43.5 mm (25.6" x 17.2" x 1.7") |
| Front Panel (per node) | Buttons | UID w/LED, Power w/LED |
| | LEDs | System Fail |
| | I/O | 2 RJ45 (10GbE) by Broadcom BCM57416, 1 dedicated IPMI 2 Type-A (USB3.2 Gen1), 1 DB15 (VGA), 1 HDMI |
| Expansion Slots (per node) | Rear | 1 FH dual-slot PCIe5.0 x16 |
| Storage (per node) | Internal | 1 M-key (PCIe5.0 x4), supports 2280 form factor |
| Power Supply | Module | 1+1, 80-PLUS Platinum, 1600W CRPS |
| System Cooling | Fan | 8 PWM Hot-swap 40x56 mm fans |
| Management (per node) | | ASPEED BMC AST2600 |
| Security (per node) | | TPM by optional accessory |

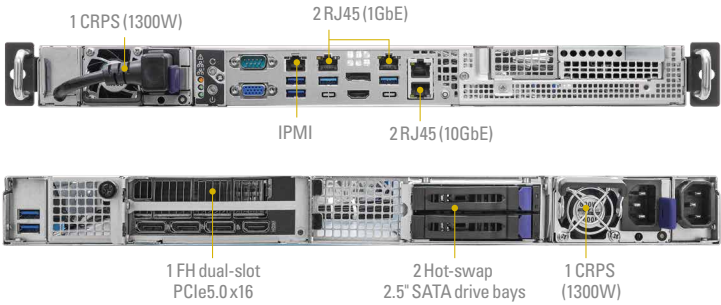
1U1G-B650/2L2T

1U1G-B650

AMD Short-depth 1U GPU Server for Edge Deployment



AMS



| 1U1G-B650/2L2T | | 1U1G-B650 |
|-----------------|-------------------|---|
| CPU | Socket | 1 Socket AM5 (LGA1718); Supports AMD EPYC™ 4004 and AMD Ryzen™ 8000/7000 series processors |
| DIMM | Slot | 4 DDR5 288-pin (2DPC) |
| System | Form Factor | 1U Rackmount |
| Physical Status | Chassis Dimension | 660.4 x 438.0 x 43.5 mm (26.00" 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 |
| Front Panel | I/O | 2 RJ45 (10GbE) by Broadcom BCM57416 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI 4 USB Type-A (USB3.2 Gen1) 1 DB15 (VGA), 1 DisplayPort, 1 HDMI 1 DB9 (COM) |
| | I/O | 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI 4 USB Type-A (USB3.2 Gen1) 1 DB15 (VGA), 1 DisplayPort, 1 HDMI 1 DB9 (COM) |
| Rear IO | USB | 2 Type-A (USB3.2 Gen1) |
| Expansion Slots | Front | 1 FHHL PCIe4.0 x4 ^{Note1} |
| | Rear | 1 FHFL dual-slot PCIe5.0 x16 |
| Drive Bay/ | External | 2 Hot-swap 2.5" SATA drive bays |
| Storage | Internal | 1 M-key (PCIe5.0 x4), supports 2280/2242 form factor [CPU] |
| | Internal | 1 M-key (PCIe5.0 x4), supports 2280/2242 form factor [FCH] |
| Power Supply | Module | 1+1, 80+PLUS Platinum, 1300W CRPS |
| System Cooling | Fan | 6 PWM dual-rotor 40x56 mm fans |
| Management | | ASPEED BMC AST2600 |
| Security | | TPM by optional accessory |

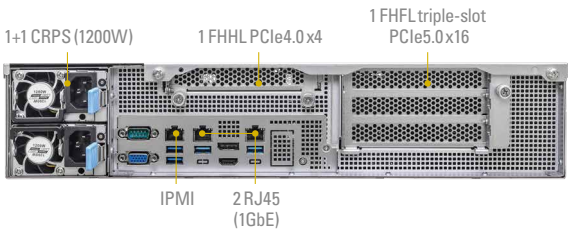
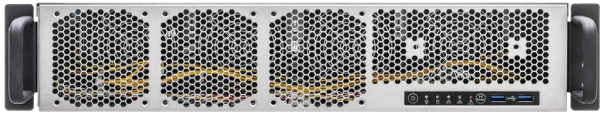
Note1: 1 FHHL PCIe4.0 x4 support requires additional PCIe4.0 x4 to x16 riser cable please contact ASRock Rack.

2U1G-B650

2U Short-Depth Rackmount Server Supporting Triple-Slot GPU Card



AM5



| | | |
|-------------------|-------------------|--|
| CPU | Socket | 1 Socket AM5 (LGA1718); Supports AMD EPYC™ 4004 and AMD Ryzen™ 8000/7000 series processors |
| DIMM | Slot | 4 DDR5 288-pin (2DPC) |
| System | Form Factor | 2U Rackmount |
| Physical Status | Chassis Dimension | 477.7 x 430.4 x 88 mm (18.8" x 16.9" x 3.5") |
| Front Panel | Buttons | Power button w/ LED, System Reset button |
| | LEDs | System Fail LED, LAN1/LAN2 Activity, Power Status LED |
| | I/O | 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 w/ LED, 1 DB15 (VGA), 1 DB9 (COM), 1 DisplayPort, 1 HDMI |
| Expansion Slots | Rear | 1 FHFL triple-slot PCIe5.0 x16 |
| | | 1 FHHL PCIe4.0 x4 |
| Drive Bay/Storage | Internal | 1 M-key (PCIe5.0 x4), supports 2280/2242 form factor [CPU] |
| | | 1 M-key (PCIe4.0 x4), supports 2280/2242 form factor [FCH] |
| Power Supply | Module | 1+1, 80-PLUS Platinum, 1200W CRPS |
| System Cooling | Fan | 4 PWM easy-swap 80x38 mm fans |
| Management | | ASPEED BMC AST2600 |
| Security | | TPM by optional accessory |

B650D4U-2L2T/BCM

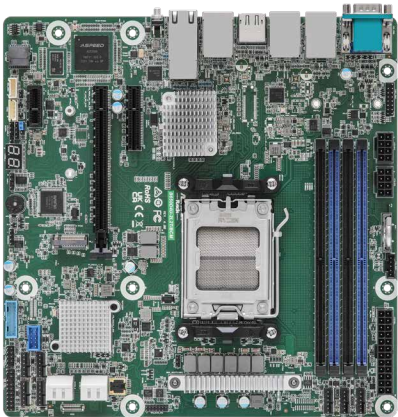
B650D4U

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 SocketAM5(LGA1718); Supports AMD EPYC™4004 and AMD Ryzen™8000/7000 series Processors | |
| | FCH | AMD B650E chipset | |
| Memory | Capacity | 4 DIMM Slots (2DPC); Supports DDR5 ECC/non-ECC UDIMM, max. 5200MHz (1DPC); max. 3600MHz (2DPC) | |
| Expansion | PCIe slot | SLOT7: PCIe5.0 x4 [CPU] SLOT6: PCIe5.0 x16 [CPU] SLOT4: PCIe4.0 x1 [FCH] | |
| | Others | OCuLink1 (PCIe4.0 x4) ^{Note1} [CPU] OCuLink2 (PCIe3.0 x4 or 4 SATA 6Gb/s) ^{Note2} [FCH] | |
| | | | |
| Storage | M.2 | M2_1 ^{Note1} (PCIe5.0 x4), supports 2280/2242 form factor [CPU] | M2_1 ^{Note1} (PCIe5.0 x4), 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 | |
| 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 DB9 (COM) | |
| | Video | 1 DB15 (VGA), 1 (15-pin) header, 1 DisplayPort, 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



B650D4U3-2L2Q/BCM

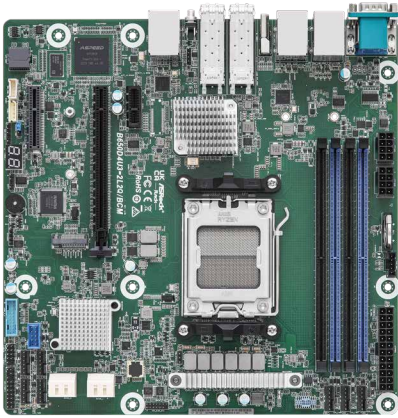
B650D4U3

General Purpose Motherboard with High-Speed
25GbE Connectivity For Maximum Data Throughput



| | | B650D4U3-2L2Q/BCM | B650D4U3 |
|------------------|----------------|--|--|
| Form Factor | | Micro-ATX (9.6" x 9.6") | |
| Processor System | CPU | 1 SocketAM5(LGA1718); Supports AMD EPYC™4004 and AMD Ryzen™8000/7000 series Processors | |
| | FCH | AMD B650E chipset | |
| Memory | Capacity | 4 DIMM Slots (2DPC); Supports DDR5 ECC/non-ECC UDIMM, max. 5200MHz (1DPC); max. 3600MHz (2DPC) | |
| Expansion | PCIe slot | SLOT7: PCIe4.0 x1 [FCH] SLOT6: PCIe5.0 x16 [CPU] SLOT4: PCIe4.0 x4 [FCH] | |
| | Storage | | |
| | | M2_1 (PCIe5.0 x4), supports 2280/2242 form factor [CPU] | M2_1 (PCIe5.0 x4), supports 2280/2242 form factor [CPU] M2_2 ^{Note1} (PCIe4.0 x4), supports 22110/2280 form factor [CPU] |
| Network | SATA port | 4 SATA 6Gb/s: 4 SATA 7-pin | |
| | RJ45 | 2 RJ45 (1GbE) by Intel® i210 | |
| Management | SFP28 | 2 SFP28 (25GbE) by Broadcom BCM57502 | N/A |
| | BMC | ASPEED AST2600 | |
| I/O | Dedicated IPMI | 1 RJ45 via Realtek RTL8211F | |
| | 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 DB9 (COM) | |
| | Video | 1 DB15 (VGA), 1 HDMI | |
| Security | TPM | Supports 13-pin (SPI) TPM modules | |

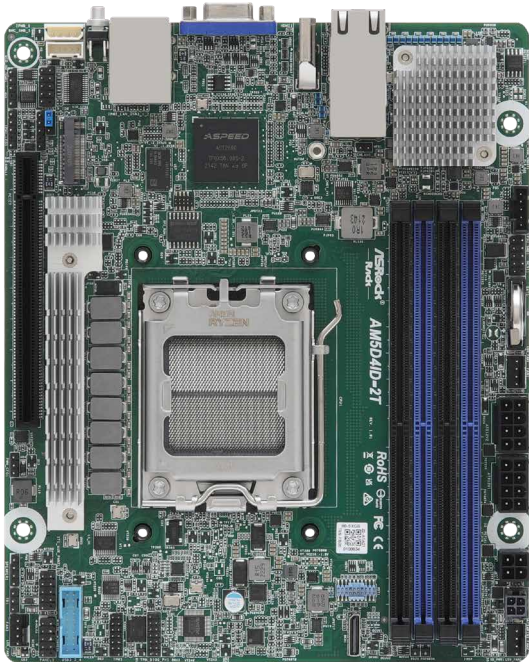
Note1: M2_2 only available on B650D4U3 SKU



AM5D4ID-2T/BCM

AM5D4ID-2L+/BCM

Compact Motherboard For Small Form Factor Applications



| | | AM5D4ID-2T/BCM | AM5D4ID-2L+/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 AMD EPYC™ 4004 and AMD Ryzen™ 8000/7000 series Processors | |
| | Chipset | KNOLL3 X300 | |
| Memory | Capacity | 4 DIMM Slots (2DPC); Supports DDR5 ECC/non-ECC UDIMM, max. 5200MHz (1DPC); max. 3600MHz (2DPC) | |
| Expansion | PCIe slot | SLOT7: PCIe5.0 x16 [CPU] | |
| | Others | 1 OCuLink (PCIe4.0 x2) [CPU] | |
| Storage | M.2 | 1 M-key (PCIe5.0 x4), supports 2280 form 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 | |
| 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 | |

1U2E-X570

General Purpose Server Equipped with
2 NVMe Drive Bays



| | | |
|-----------------|-------------------|--|
| 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 | 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 |
| | I/O | 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 PCIe3.0 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 Desktop Processors |
| DIMM | Slot | 4 DDR4 288-pin (2DPC) |
| System Physical | Form Factor | 1U Rackmount |
| Status | Chassis Dimension | 250 x 430 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 |
| | I/O | 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 PCIe4.0 x16 ^{Note1} |
| Drive Bay/ | Internal | 2 fixed 3.5" SATA drive bays 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] |
| Storage | | |
| 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 PCIe3.0 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 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 430 x 44.4 mm (15.5" x 16.93" x 1.75") | |
| Front Panel | Buttons | Power Switch, System Reset | |
| | LEDs | Power Status, HDD, LAN Activity LEDs | |
| | I/O | 2 Type-A (USB 3.2 Gen1) | |
| Rear IO | RJ45 | 2 RJ45 (10GbE) by Intel® X550-AT2 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI | 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI |
| | USB | 2 Type-A (USB3.2 Gen2) | |
| | Others | 1 UID w/ LED, 1 DB15 (VGA), 1 DB9 (COM) | |
| Expansion Slots | Rear | 1 FHHL PCIe4.0 x16 ^{Note1} via RB1UX16_G4 | |
| Drive Bay/ Storage | Internal | 1 fixed 3.5" SATA drive bay or 1 Slim ODD | |
| | | 1 fixed 3.5"/2.5" SATA drive bay | |
| | | 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/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 PCIe3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics

Supports PCIe3.0 x16 when using AMD Ryzen 4000G Series Processors with Radeon Graphics

Note2: Supports PCIe3.0 when using AMD Ryzen 4000G and 3000G Series Processors with Radeon Graphics



AM4



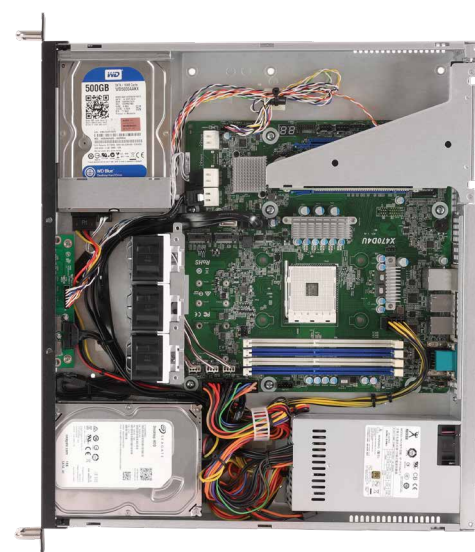
1U2LW-X470

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 430x 44.4 mm (15.5" x 16.93" x 1.75") |
| Front Panel | Buttons | Power switch, System reset |
| | LEDs | Power status, HDD, LAN activity LEDs |
| | I/O | 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 PCIe3.0 x16 ^{Note1} |
| Drive Bay/ Storage | Internal | 1 fixed 3.5" SATA drive bay or 1 Slim ODD |
| | | 1 fixed 3.5"/2.5" SATA drive bay |
| | | 1 M-key (PCIe3.0 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] |
| 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 PCIe3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics



1U4LW-X570/2L2T RPSU

1U4LW-X570 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, 3000G, 3000 Series Desktop Processors | | | |
| DIMM | Slot | 4 DDR4 288-pin (2DPC) | | | |
| System Physical | Form Factor | 1U Rackmount | | | |
| Status | Chassis Dimension | 533.4 x 438 x 44.4 mm (21" x 17.2" x 1.75") | | | |
| Front Panel | Buttons | Power button w/ LED, UID w/LED, System reset | | | |
| | LEDs | LANs, HDD activity, System health | | | |
| | I/O | 2 USB 3.2 Gen1 ports | | | |
| Rear IO | RJ45 | 2 RJ45 (10GbE) by Intel® X550-AT2 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI | 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI | 2 RJ45 (10GbE) by Intel® X550-AT2 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI | 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI |
| | USB | 2 USB3.2 Gen2 ports | | | |
| | Others | 1 UID, 1 DB15 (VGA), 1 DB9 (COM) | | | |
| Expansion Slots | Rear | 1 FH PCIe4.0 x16 ^{Note1} | | | |
| Drive Bay/ Storage | External | 4 Hot-swap 3.5" SATA drive bays [Front] | | | |
| | Internal | 3 fixed 2.5" SATA drive bays or 2 fixed 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/s), supports 2280/2260/2242 form factor [FCH] | | | |
| Power Supply | Module | 1+1 450W 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 PCIe3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics. Supports PCIe3.0 x16 when using AMD Ryzen 4000G Series Processors with Radeon Graphics
Note2: Supports PCIe3.0 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, 3000G, 3000 Series Desktop Processors | |
| DIMM | Slot | 4 DDR4 288-pin (2DPC) | |
| System Physical | Form Factor | 1U Rackmount | |
| Status | Chassis Dimension | 533.4 x 438 x 44.4 mm (21" x 17.2" x 1.75") | |
| Front Panel | Buttons | Power button w/ LED, UID w/LED, System reset, NMI | |
| | LEDs | LANs, HDD activity, System Fail activity LEDs | |
| | I/O | 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 PCIe3.0 x16 ^{Note1} | |
| Drive Bay/ Storage | External | 4 Hot-swap 3.5" SATA drive bays [Front] | |
| | Internal | 3 fixed 2.5" SATA drive bays or 2 fixed 2.5" SATA drive bays, 1 Slim ODD | |
| | | 1 M-key (PCIe3.0 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] | |
| 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 PCIe3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics

4U18N-B550/2T

4U18N-B550

4U Highest-density Multi-Node Server



2 fixed 2.5" NVMe/SATA drive bays

AM4



| 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 (37.4" x 17.2" x 6.9") | |
| Front Panel (per node) | Buttons | UID , Power , RESET | |
| | LEDs | System Fail, LAN1/LAN2, UID, Power | |
| | RJ45 | 2 RJ45(10GbE) by Intel® X710-AT2 1 dedicated IPMI | 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 (PCIe4.0 ^{Note1} x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU] 1 M-key (PCIe3.0 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 PCIe3.0 when using AMD Ryzen 5000G and 4000G Series Processors with Radeon Graphics

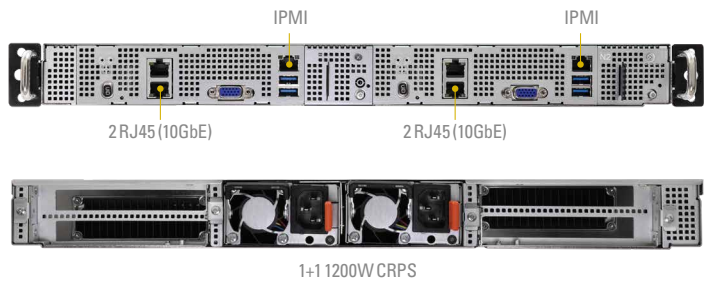
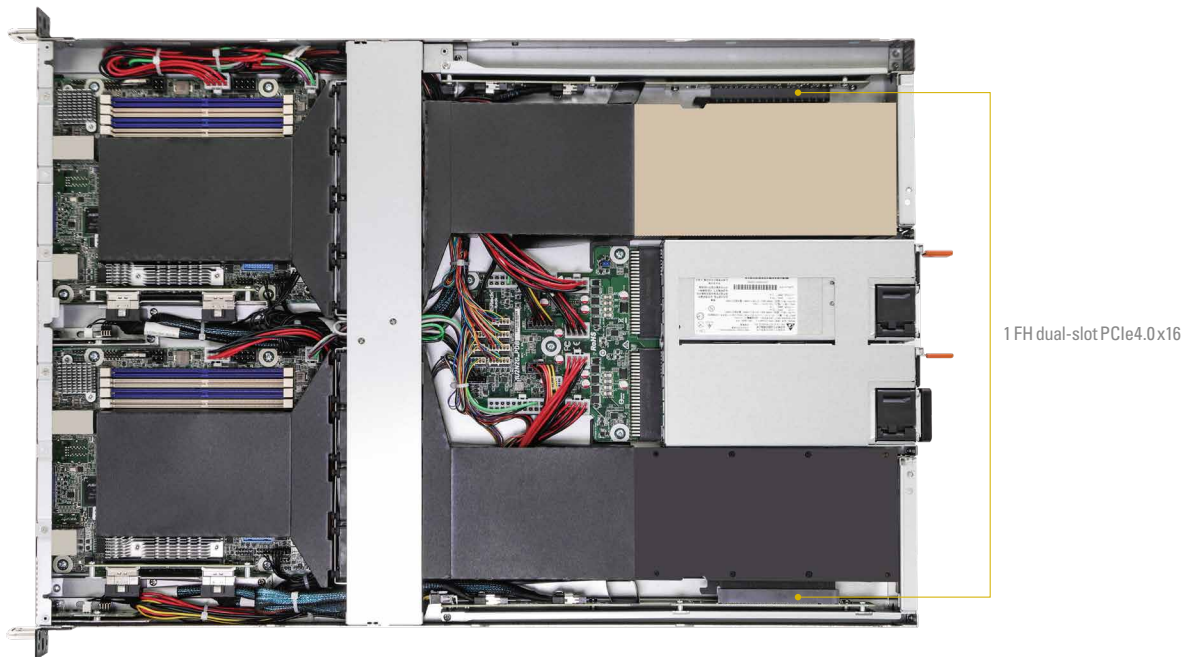
1U2N2G-B550/2T

1U2N2G-B550

Density-optimized 1U 2 Node
GPU Server



AM4



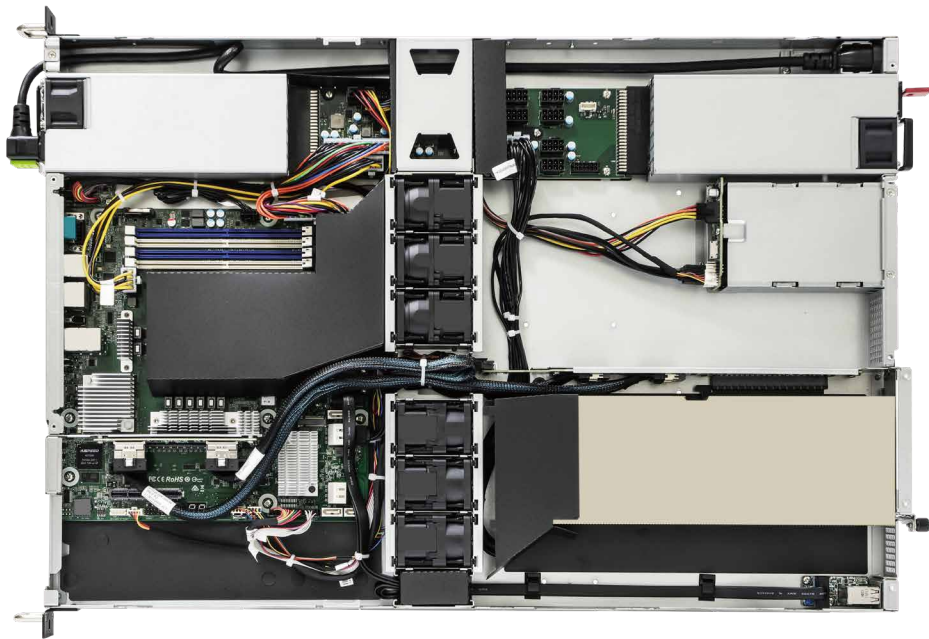
| | | 1U2N2G-B550/2T | 1U2N2G-B550 |
|----------------------------|-------------------|--|---|
| CPU (per node) | Socket | 1 AM4 (PGA 1331) for AMD Ryzen™ 5000G, 5000, 4000G, 3000 series desktop processors | |
| DIMM (per node) | Slot | 4 DDR4 288-pin (2DPC) | |
| System Physical | Form Factor | 1U Rackmount | |
| Status | Chassis Dimension | 650 x 438 x 43.5 mm (25.6" x 17.2" x 1.7") | |
| Front Panel (per node) | Buttons | UID , Power w/LED | |
| | LEDs | UID, System Fail | |
| | RJ45 | 2 RJ45(10GbE) by Intel® X710-AT2 1 dedicated IPMI | 2 RJ45(1GbE) by Intel® i210 1 dedicated IPMI |
| | USB | 2 USB 3.2 Gen1 ports | |
| | VGA | 1 DB15 | |
| Expansion Slots (per node) | Rear | 1 FH dual-slot PCIe4.0 ^{Note1} x16 | |
| Storage (per node) | Internal | 1 M-key (PCIe4.0 ^{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 PCIe3.0 when using AMD Ryzen 5000G and 4000G Series Processors with Radeon Graphics

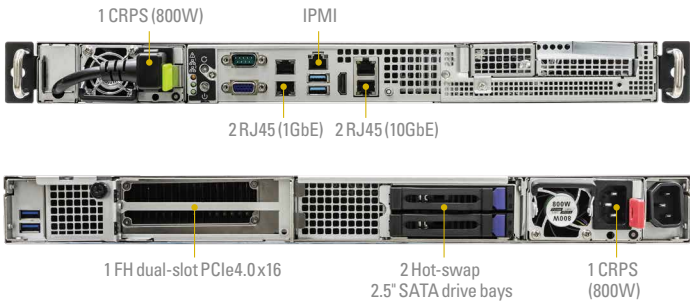
1U1G-X570/2L2T

1U1G-X570

AMD Ryzen Short-depth 1U GPU Server
for Edge Deployment



AM4



| 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 |
| Front Panel | I/O | 2 RJ45(10GbE) by Intel® X550-AT2 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI 2 USB3.2 Gen2 ports 1 DB15 (VGA), 1 DB9 (COM), 1 HDMI |
| | I/O | 2 RJ45 (1GbE) by Intel® i210 1 dedicated IPMI 2 USB3.2 Gen2 ports 1 DB15 (VGA), 1 DB9 (COM), 1 HDMI |
| Rear IO | USB | 2 USB3.2 Gen1 ports |
| Expansion Slots | Rear | 1 FH dual-slot PCIe4.0 x16 ^{Note1} |
| Drive Bay/ Storage | External | 2 Hot-swap 2.5" SATA drive bays |
| | Internal | 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/s), supports 2280/2260/2242 form factor [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 PCIe3.0 x8 when using AMD Ryzen 3000G Series Processors with Radeon Graphics
Supports PCIe3.0 x16 when using AMD Ryzen 4000G Series Processors with Radeon Graphics
Note2: Supports PCIe3.0 when using AMD Ryzen 4000G and 3000G Series Processors with Radeon Graphics

X570D4U-2L2T

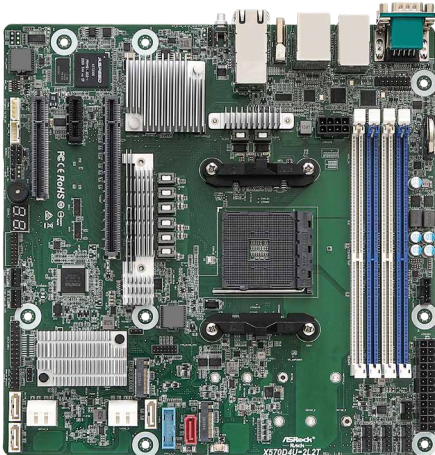
X570D4U

PCIe4.0 Ryzen Server Motherboard
with Dual 10GbE and IPMI



| | | X570D4U-2L2T | X570D4U |
|------------------|----------------|---|------------------------------|
| Form Factor | | Micro-ATX (9.6" x 9.6") | |
| Processor System | CPU | AM4 PGA 1331; Supports: AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics AMD Ryzen™ 5000 and 3000 Series Desktop Processors AMD Ryzen™ PRO 5000, 4000 and 3000 Series Desktop Processors AMD X570 | |
| | FCH | | |
| Memory | Capacity | 4 DDR4 DIMM Slots (2DPC); Supports: ECC ^{Note1} /UDIMMs up to 32GB each; max. 3200MHz | |
| | PCIe slot | SLOT6: PCIe4.0 x16 ^{Note2} , SLOT5: PCIe4.0 x1 ^{Note3} , SLOT4: PCIe4.0 x8 ^{Note4} | |
| Storage | M.2 | 1 M-key (PCIe4.0 ^{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 |
| | BMC | ASPEED AST2500: IPMI 2.0 | |
| Management | Dedicated IPMI | 1 RJ45 via Realtek RTL8211E | |
| | USB | 2 USB3.2 Gen2 ports: 2 rear Type A 2 USB3.2 Gen1 ports: 2 via 19-pin header | |
| I/O | Video | 1 DB15(VGA), 1 (15-pin) header, 1 HDMI ^{Note6} | |
| | TPM | Supports 17-pin (LPC) and 13-pin (SPI) TPM modules | |
| Security | | | |

Note1: For AMD Ryzen™ Desktop Processors with Radeon™ Graphics, ECC support is only with Processors with PRO technologies.
Note2: SLOT6 auto-switch to PCIe4.0 x8 when SLOT4 occupied.
SLOT6 supports PCIe3.0 only when installing AMD Ryzen™ 5000, 4000 G-Series Desktop Processors with Radeon™ Graphics and supports PCIe3.0 x8 only when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics.,
Note3: SLOT5 and M.2 supports PCIe3.0 only when installing AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics
Note4: SLOT4 supports PCIe3.0 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

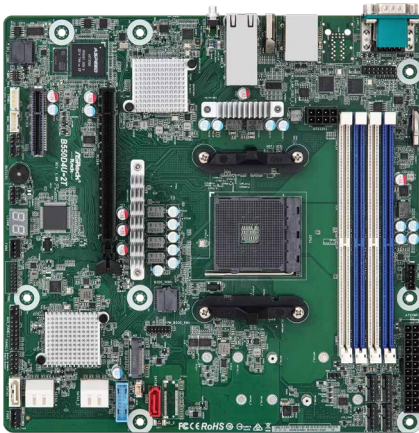
B550D4U

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 Desktop Processors with Radeon™ Graphics AMD Ryzen™ 5000 and 3000 Series Desktop Processors AMD Ryzen™ PRO 5000, 4000 and 3000 ^{Note1} Series Desktop Processors AMD B550 | |
| | FCH | | |
| Memory | Capacity | 4 DDR4 DIMM Slots (2DPC); Supports: ECC ^{Note2} /UDIMMs up to 32GB each; max. 3200MHz | |
| | PCIe slot | SLOT6: PCIe4.0 x16 SLOT4: PCIe4.0 x4 | |
| Storage | M.2 | 1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242 form factor | 1 M-key (PCIe3.0 x4 or SATA 6Gb/s) and 1 M-key (PCIe3.0x2), supports 22110/2280/2260/2242 form factor |
| | SATA port | 6 SATA 6Gb/s: 3 SATA 7-pin, 1 SATA DOM by AMD B550, 2 SATA 7-pin by ASM1061 | |
| Network | RJ45 | 2 RJ45 (10GbE) by Intel® X710 | 2 RJ45 (1GbE) by Intel® i210 |
| | BMC | ASPEED AST2500: IPMI 2.0 | |
| Management | Dedicated IPMI | 1 RJ45 via Realtek RTL8211E | |
| | USB | 4 USB3.2 Gen1 ports: 2 rear Type A, 2 via header | |
| I/O | Video | 1 DB15(VGA), 1 HDMI ^{Note3} | |
| | TPM | Supports 17-pin (LPC) and 13-pin (SPI) TPM modules | |
| Security | | | |

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



X470D4U

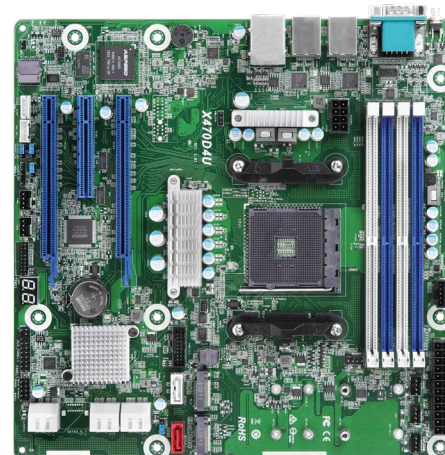
Cost-efficient AMD Ryzen Network
Server Solution



| | | |
|------------------|----------------|---|
| Form Factor | | Micro-ATX (9.6" x 9.6") |
| Processor System | CPU | AM4 PGA 1331; Supports: AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics 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 (PCIe3.0 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 | 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 | 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) |
| 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: SLOT6 will auto-switch to PCIe3.0 x8 when SLOT4 is occupied, and SLOT4 will not function when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics



AM4



X470D4U2-2T

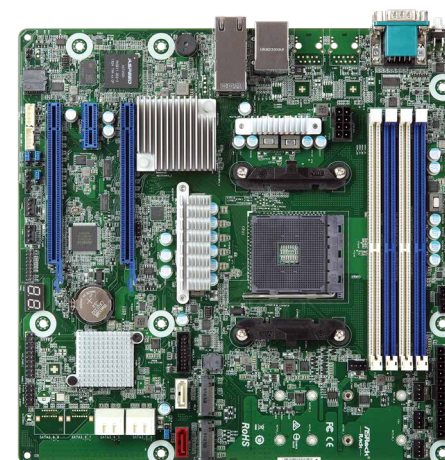
AMD Ryzen Network Server
with 10 Gb Ethernet Connectivity



| | | |
|------------------|----------------|---|
| Form Factor | | Micro-ATX (9.6" x 9.6") |
| Processor System | CPU | AM4 PGA 1331; Supports: AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics 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: PCIe3.0 x16 ^{Note2} [CPU] SLOT5: PCIe2.0 x1 [FCH] SLOT4: PCIe x16 (PCIe3.0 x8) ^{Note2} [CPU] |
| Storage | M.2 | 1 M-key (PCIe3.0 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 | 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) |
| 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: SLOT6 will auto-switch to PCIe3.0 x8 when SLOT4 is occupied, and SLOT4 will not function when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics



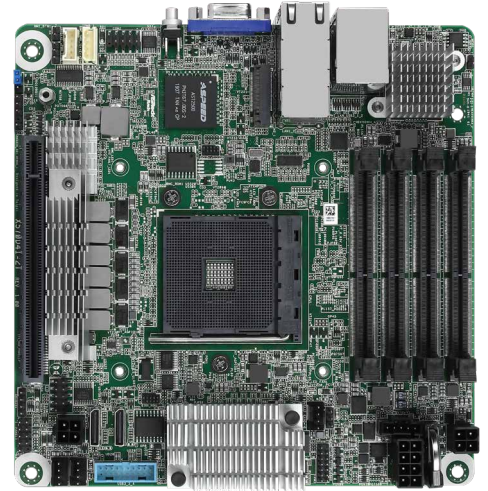
X570D4I-2T

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™ Graphics 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} (PCIe4.0 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 PCIe3.0 only when installing AMD Ryzen™ 5000, 4000 G-Series Desktop Processors with Radeon™ Graphics, and support PCIe3.0 x8 only when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics
Note3: OCuLink and M.2 supports PCIe3.0 only when installing AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics



B550D4ID-2L2T

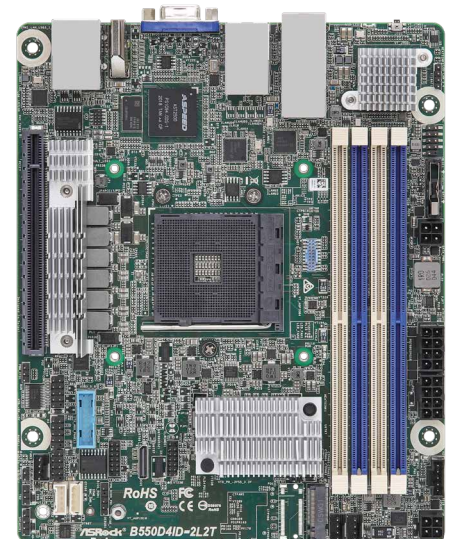
B550D4ID

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 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 | |
| | PCIe slot | SLOT7: PCIe4.0 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 (PCIe3.0 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) 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: Supports PCIe3.0 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

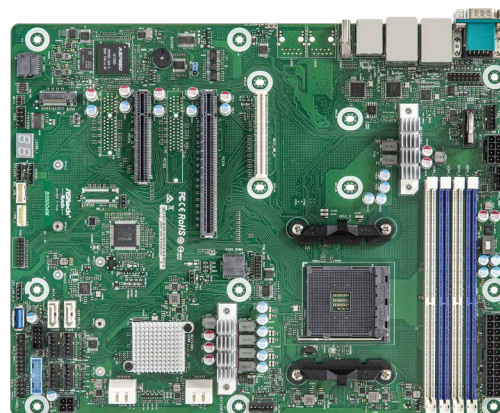


| | | |
|------------------|----------------|--|
| Form Factor | | ATX (12" x 9.6") |
| Processor System | CPU | AM4 PGA 1331; Supports: AMD Ryzen™ 5000 and 4000 G-Series Desktop Processors with Radeon™ Graphics AMD Ryzen™ 5000 and 3000 Series Desktop Processors AMD Ryzen™ PRO 5000, 4000 and 3000 ^{Note1} 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 (PCIe3.0 x8) |
| 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 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 |
| | | 1 DB15(VGA), 1 HDMI ^{Note3} |
| | Video | |
| 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



AM4



B550D4-4L

Ryzen Server Board with Quad 1GbE Network

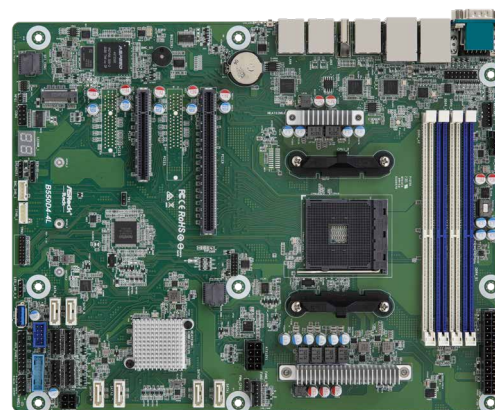


| | | |
|------------------|----------------|--|
| Form Factor | | ATX (12" x 9.6") |
| Processor System | CPU | AM4 PGA 1331; Supports: AMD Ryzen™ 5000 and 4000 G-Series Desktop Processors with Radeon™ Graphics AMD Ryzen™ 5000 and 3000 Series Desktop Processors AMD Ryzen™ PRO 5000, 4000 and 3000 ^{Note1} 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: PCIe4.0 x16 SLOT4: PCIe4.0 x4 |
| Storage | M.2 | 1 M-key (PCIe3.0 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 | 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, 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





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