AMD Meet the Experts

Maximizing Server Deployments with AMD Ryzen™ Processors: A Showcase of Partner Portfolios for AM5 Socket

May 22, 2023 | 5 PM CDT

Thank you for joining. We will begin shortly.

How to Use the Console

MEDIA PLAYER

PRESENTATION

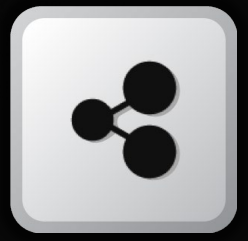
SUBMIT A QUESTION

EXPERT BIO

TABLE OF CONTENTS

HELP

AMD ARENA



SHARE THIS WEBINAR

REGISTER NOW

RESOURCES

SUBSCRIBE

GIVE US YOUR FEEDBACK

What we'll cover in today's Meet the Experts Webinar:

- AMD Ryzen™ processors for servers – leadership performance with a new AM5 socket for next-gen I/O
- Explore partners ASRock Rack, Gigabyte, and MSI's portfolios for AMD Ryzen™ processor-powered for server solutions
- Q&A with our experts

Meet Our Experts

AMD
Meet the Experts

STELLA PAPADAKIS
Sr Manager, Server ODM, Portfolio, & Marketing Management
AMD

KEVIN YU
Product Marketing Manager
ASRock Rack

CHEN LEE
Sr. Director, Enterprise and Data Center Solutions for Americas
GIGABYTE

SHERMAN TANG
Technology Evangelist
MSI

AMD

STELLA PAPADAKIS

Sr Manager, Server ODM, Portfolio, & Marketing Management

AMD
Meet the Experts

AMD Ryzen™ Processors for Server

amd/hosting

Disclaimers and Attributions

The information contained herein is for informational purposes only, and is subject to change without notice. Timelines, roadmaps, and/or product release dates shown in these slides are plans only and subject to change. “Naples”, “Rome”, “Milan”, “Genoa”, “Bergamo”, “SP5”, SP6”, and “Zen” are codenames for AMD architectures, and are not product names.

The information contained herein is for informational purposes only, and is subject to change without notice. While every precaution has been taken in the preparation of this document, it may contain technical inaccuracies, omissions and typographical errors, and AMD is under no obligation to update or otherwise correct this information. Advanced Micro Devices, Inc. makes no representations or warranties with respect to the accuracy or completeness of the contents of this document, and assumes no liability of any kind, including the implied warranties of noninfringement, merchantability or fitness for particular purposes, with respect to the operation or use of AMD hardware, software or other products described herein. No license, including implied or arising by estoppel, to any intellectual property rights is granted by this document. Terms and limitations applicable to the purchase or use of AMD’s products are as set forth in a signed agreement between the parties or in AMD's Standard Terms and Conditions of Sale. GD-18

©2023 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, EPYC, Ryzen, and combinations thereof are trademarks of Advanced Micro Devices, Inc. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies.

AMD SERVER PORTFOLIO:
AMD RYZEN™ 7000 SERIES PROCESSORS

AMD

EPYC

2P Platforms

Public/Private Cloud
VPS
Enterprise Dedicated Servers

High throughput
High core density
Enterprise-class RAS

EPYC

1P Platforms

Public Cloud/Private Cloud
Mid-market Dedicated Servers
IO-heavy Dedicated Servers

No-compromise 1P platforms
Efficient computing / storage
Enterprise-class RAS

RYZEN

Ryzen™ & Ryzen™ PRO Processors

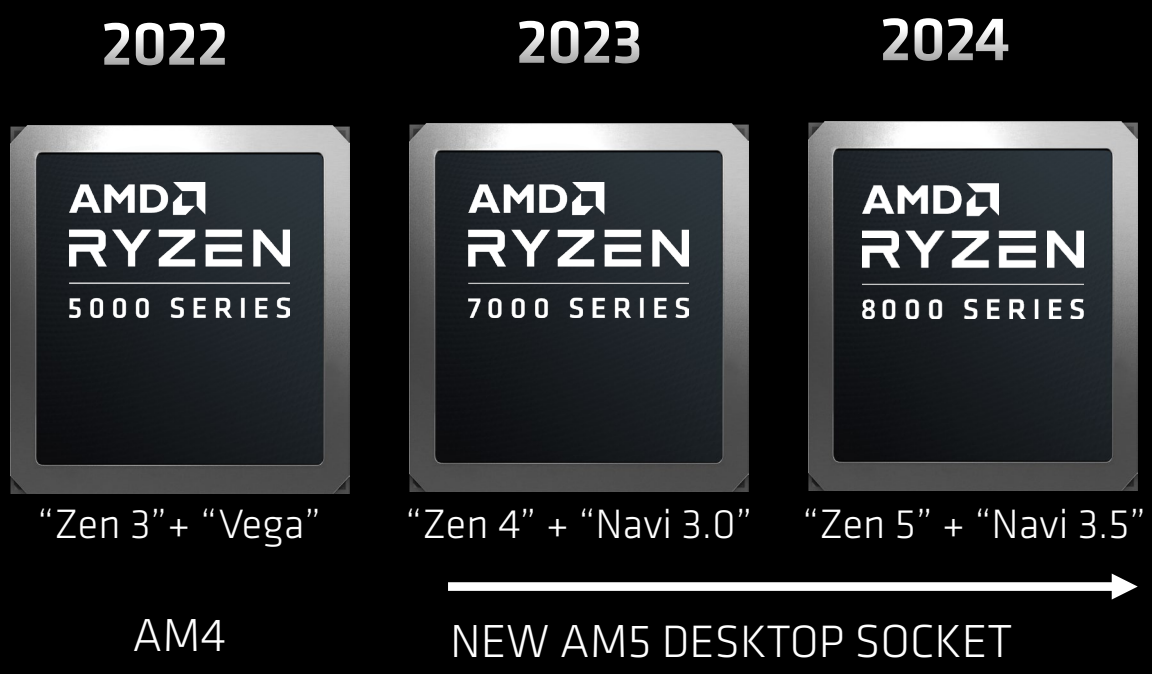
Value Dedicated Servers

Small Business E-commerce, Code Development, Content Creation, Cloud Gaming

High frequency
Low power
Low infrastructure costs
Platforms with ECC and BMC

AMD SOCKET ROADMAP
SCALE, LONGEVITY, PERFORMANCE

- New desktop socket AM5 launched in 2022 that will scale into 2026
- The AM5 infrastructure will support new CPU core and graphics upgrade on annual cadence
- AM5 AMD CPUs will be available in 65W -170w power bands for Workstation/Value Server
- AMD will bring leading performance per watt advancing our lead on power efficiency in ALL segments



PRELIMINARY GUIDANCE - ROADMAP, FEATURES & SCHEDULES SUBJECT TO CHANGE

AMD Ryzen™ Processors for Server SKU Stack

	Model	OPN	Cores	TDP	Cache	F_{Base} (GHz)	F_{Max} Boost (GHz)[1]	$SPECrate_{(R)_int_base}$ (estimated)
PERFORMANCE & MAINSTREAM	Ryzen 9 7950X	100-000000514A	16C	170W	L2: 16MB L3: 64MB	4.5 GHz	5.7 GHz	178
	Ryzen 7 7700X	100-000000591A	8C	105W	L2: 8MB L3: 32MB	4.5 GHz	5.4 GHz	106
	Ryzen 9 7900	100-000000590A	12C	65W	L2: 12MB L3: 64MB	3.7 GHz	5.4 GHz	153
	Ryzen 7 7700	100-000000592A	8C	65W	L2: 8MB L3: 32MB	3.8 GHz	5.3 GHz	106
	Ryzen 5 7600	100-000001015A	6C	65W	L2:6MB L3: 32MB	3.8GHz	5.1 GHz	76
AMD 3D V-CACHE™ TECHNOLOGY	Ryzen 9 7950X3D	100-000000908A	16C	120W	L2: 16MB L3: 128MB	4.2 GHz	5.7 GHz	182
	Ryzen 9 7900X3D	100-000000909A	12C	120W	L2: 12MB L3: 128MB	4.7 GHz	5.6 GHz	147
	Ryzen 7 7800X3D	100-000000910A	8C	120W	L2: 8MB L3: 96MB	TBD	5.0 GHz	110

[1]See endnote: GD-150

AMD

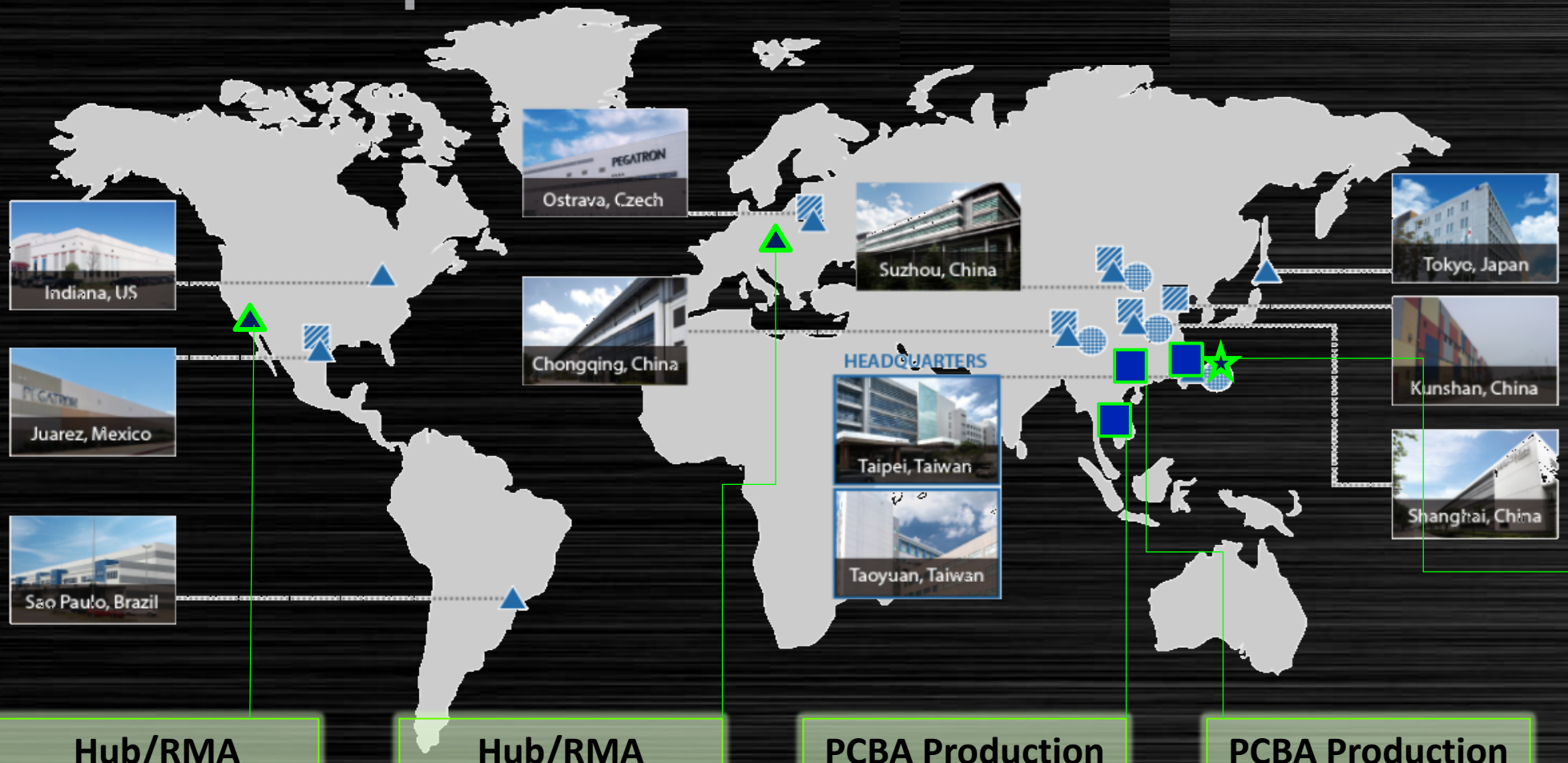
ASRock Rack AM5 Portfolio

KEVIN YU
Product Marketing Manager

AMD
Meet the Experts

ASRock Rack
Global Operation Infrastructure

Headquarter
Manufacturing Site
Service Center



Headquarter
Taipei, Taiwan

System Assembly
Taoyuan, Taiwan

Hub/RMA Services
Chino, CA, USA

Hub/RMA Services
Netherlands

PCBA Production
Vietnam

PCBA Production
Shenzhen, China

PCBA Production
Taiwan

AM4 Product Portfolio: 8 server boards & 11 barebones

Shipping since 2019

X570D4I-2T
mini-ITX

X570D4U-2L2T
Micro-ATX

B550D4U
Micro-ATX

B550D4M
ATX

B550D4ID-2L2T
6.7" x 8.2"

X470D4U
Micro-ATX

X470D4U2-2T
Micro-ATX

B550D4-4L
ATX

General Purpose

1U4LW-X570/2L2T RPSU

1U4LW-X470/2L2T RPSU

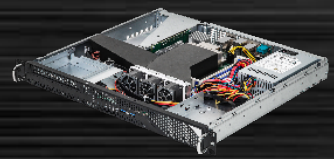
1U2E-X570

1U4LW-X570/2L2T

1U4LW-X470/2L2T

1U2-X570

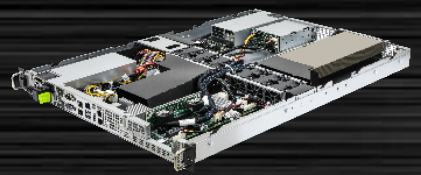
1U2LW-X570/2L2T



1U2LW-X470/2L2T

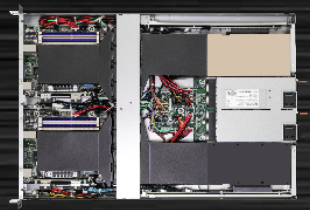
GPU

1U1G-X570/2L2T



Multi-node

1U2N2G-B550



4U18N-B550/2T

AM4 Reviews

ServeTheHome

ASRock Rack X570D4U-2L2T Review an AMD Ryzen Server Motherboard

★★★★½ 36

In our ASRock Rack X570D4U-2L2T review, we see the company's latest server motherboard with 10GbE for the AMD Ryzen platform

ASRock Rack X470D4U2-2T Review AMD Ryzen Server with 10GbE

★★★★½ 23

In our ASRock Rack X470D4U2-2T review, we see what this AMD Ryzen server platform has to offer including the trade-offs made to add 10Gbase-T networking

ASRock Rack X470D4U Review AMD Ryzen Meet Server

★★★★½ 51

In our ASRock Rack X470D4U review, we take a look at this mATX AMD Ryzen platform to see how it performs and considerations of using Ryzen in a server

ANANDTECH

ASRock Rack B550D4-4L Motherboard Review: B550 Goes Professional with BMC

Over the last year, we've seen several B550 models, with the vast majority of these catering to desktop users and gamers looking for a cost-efficient option to use with AMD's Ryzen processors. Back in January, we reported that ASRock Rack had readied up a new B550 model with a...

73 by Gavin Bonshor - on 5/20/2021

Hardwareluxx

ASRock Rack X570D4U-2L2T im Test - Für den Home-Server-Bereich

2020-09-04 12:38:27

Heute steht ein weiteres Mainboard von ASRock Rack auf unserem Testplan. Dieses Mal schauen wir uns an, wie die eigentlich für den Desktop vorgesehene X570-Plattform bzw. ein Sockel AM4 sich zusammen mit einem X570-Chipsatz im professionellen Segment schlägt. Keine für ein Gaming-Produkt typischen Funktionen stehen hier im Fokus, sondern ein einfaches Management sowie viele Netzwerk- und Speicher-Optionen. Das ASRock Rack X570D4U-2L2T ist weniger als reinrassiges Server-Mainboard aus dem professionellen...

Autor: Marcel Niederste-Berg | Kategorie: Artikel - Mainboards | Veröffentlichungsdatum: 2020-09-04 12:38:27

Mynotes.kr

Asrock X470D4U

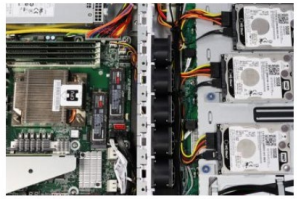
2019/07/13

Asrock X470D4U Asrock X470D4U Ryzen 서버 / 워크스테이션 보드. 현재 Ryzen B350 MainBoard에서 VMWare ESXi 서버를 이용중에 있었으나 PCEI Card 패스스루 문제로...

Phoronix

AMD Ryzen with its range of SKUs currently up to 16 cores / 32 threads is more than enough for light web servers, mini/infrequent build/compilation boxes, gaming servers, and other light tasks not requiring as large of a scale and investment as AMD EPYC. AMD Ryzen has proven incredibly popular with open-source developers (and software developers at large) due to the high core count desktop processors, speed, and value. We've previously reported on developers increasingly switching over to Ryzen hardware for powering build boxes for distributions and other open-source projects and individual developer workstations. This just isn't a Linux thing but Ryzen build boxes have proven popular with the BSDs too. Content creation with small studios have has similarly seen much success with Ryzen when needing strong performance but not quite to the levels (or costs) of EPYC.

StorageReview



Consumer ◦ Workstation

ASRock Rack 1U4LW-X570 Review

by Brian Beeler | June 10, 2021

...ready for virtualization, expanding its use cases. The **ASRock Rack** 1U4LW-X570 is available through retailers like NewEgg for under $1200. The **ASRock Rack** 1U4LW-X570/2L2T RPSU is a barebones system that...

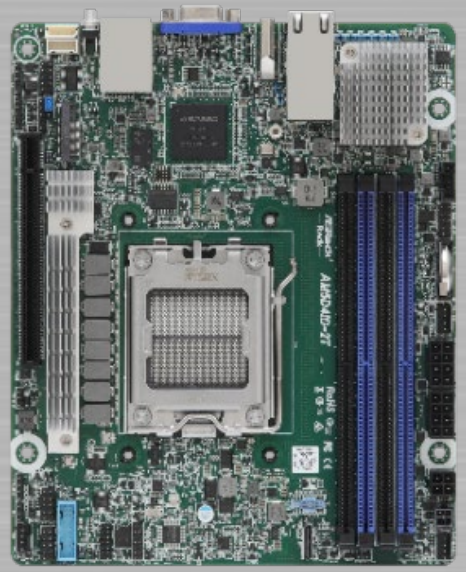
Source: https://www.servethehome.com/asrock-rack-x570d4u-2l2t-review-amd-ryzen-server-motherboard/
Source: https://www.servethehome.com/asrock-rack-x470d4u2-2t-review-amd-ryzen-server-with-10gbe/
Source: https://www.servethehome.com/asrock-rack-x470d4u-review-amd-ryzen-meet-server/
Source: https://www.phoronix.com/review/amd-ryzen-server
Source: https://www.mynotes.kr/asrock-x470d4u-ryzen-vmware-esxi-%ec%a0%81%ec%9a%a9-%eb%a6%ac%eb%b7%b0/
Source: https://www.hardwareluxx.de/index.php/artikel/hardware/mainboards/53917-asrock-rack-x570d4u-2l2t-im-test-fuer-den-home-server-bereich.html
Source: https://www.anandtech.com/show/16663/asrock-rack-b550d4l-motherboard-review-b550-goes-professional-with-bmc
Source: https://www.storagereview.com/review/asrock-rack-1u4lw-x570-review

AM5 Server Boards Overview

Ultra Compact

AM5D4ID-2T/BCM
AM5D4ID-2L+/BCM

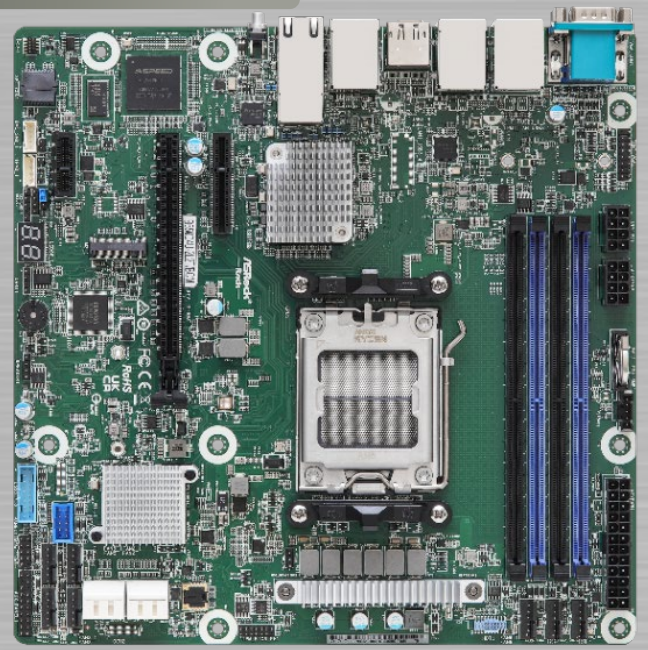
6.7" x 8.2"



Mainstream

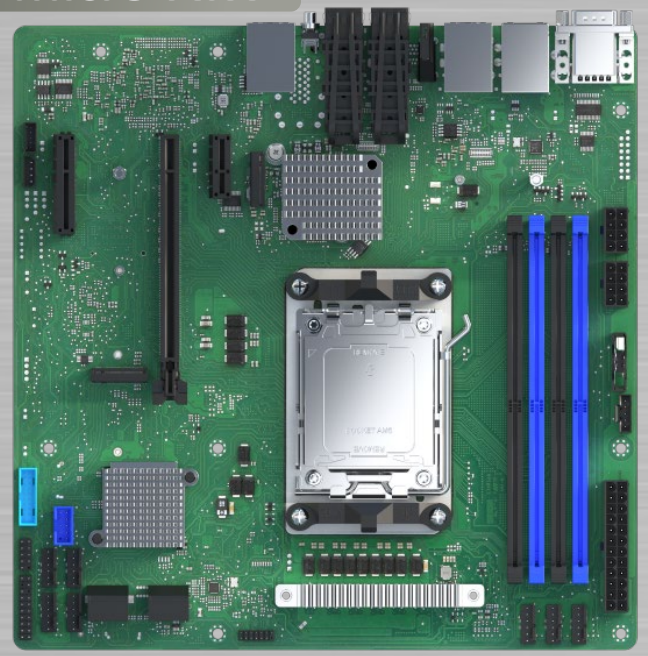
B650D4U-2L2T/BCM

Micro-ATX



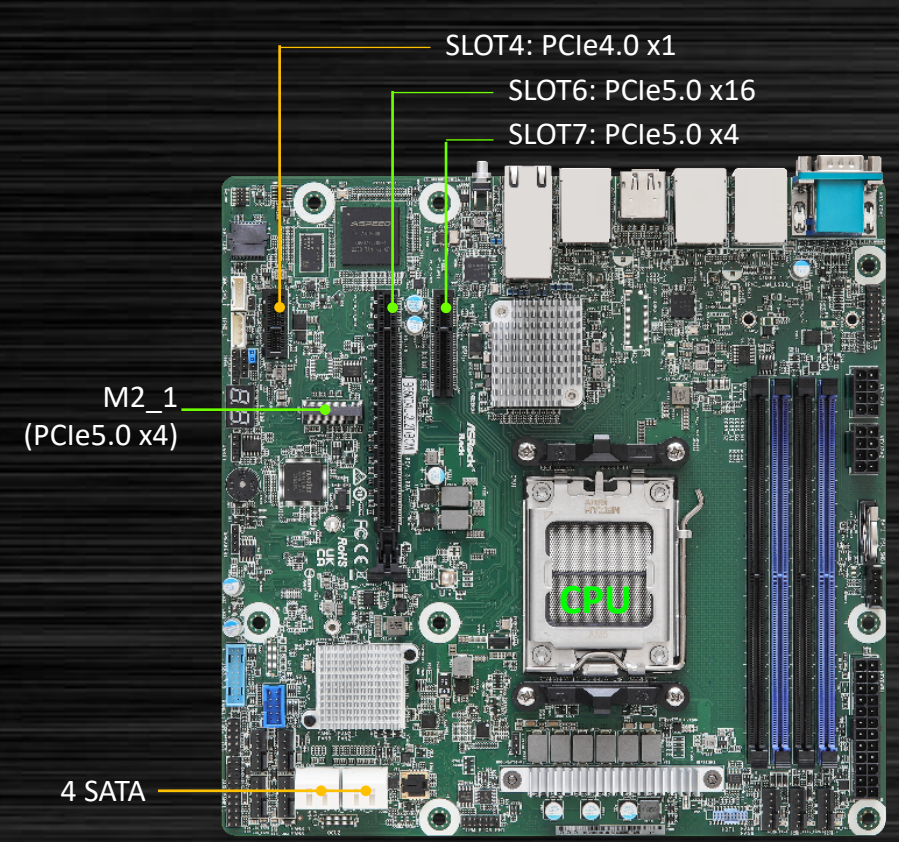
B650D4U2-2L2Q/E810

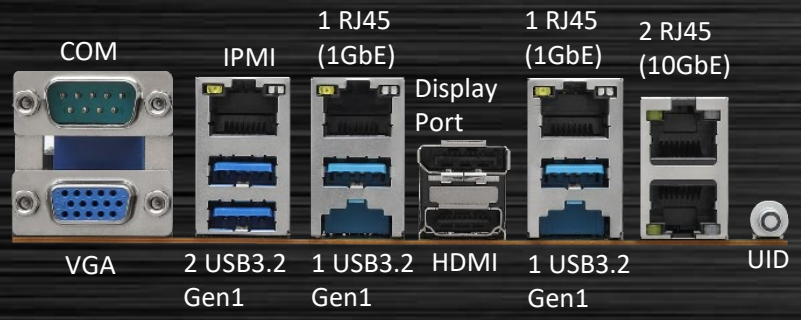
Micro-ATX



B650D4U-2L2T/BCM

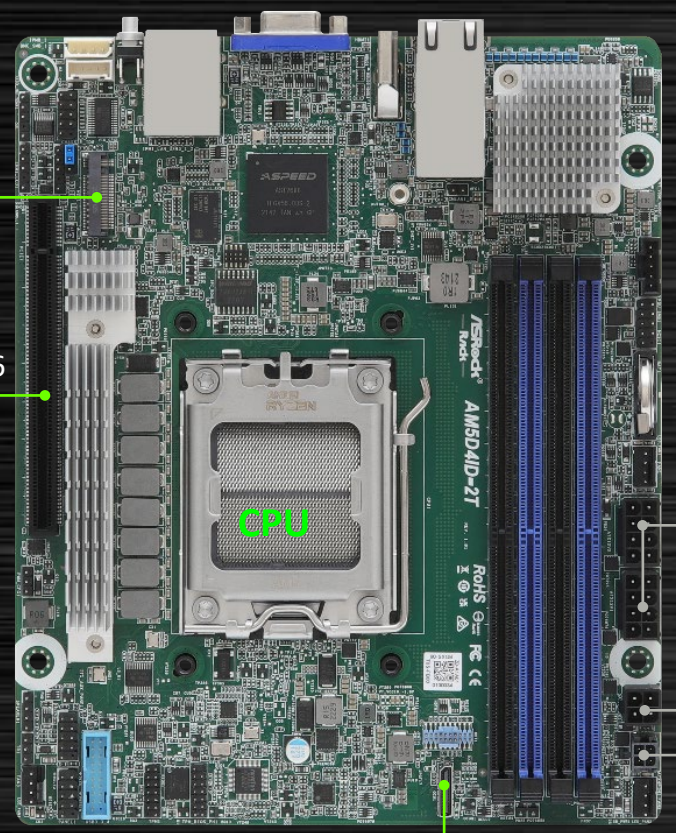
- Micro-ATX (9.6" x 9.6")
- DDR5, 4 DIMMs, 2DPC
- 1 PCIe5.0 x16, 1 PCIe5.0 x4, 1 PCIe4.0 x1
- 1 M.2 (PCIe5.0 x4)
- 4 SATA 7-pin
- 1 DisplayPort, 1 HDMI
- 2 RJ45 (10GbE)
  2 RJ45 (1GbE)

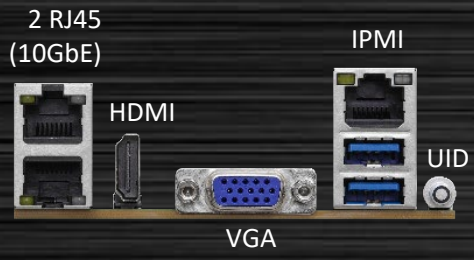




AM5D4ID-2T/BCM

- Support ATX PSU and 12V DC-in
- Deep mini-ITX (6.7" x 8.2")
- DDR5, 4 DIMMs, 2DPC
- 1 PCIe5.0 x16
- 1 OCuLink (PCIe4.0 x2)
- 1 M.2 (PCIe5.0 x4)
- 1 HDMI
- 2 RJ45 (10GbE)





AM5 Server Barebones Overview

General Purpose Storage Server

1U4LW-B650/2L2T RPSU

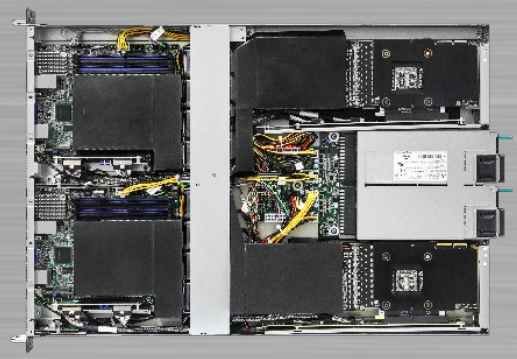
1U4LW-B650/2L2T

1U4L2E-B650 RPSU

1U2S-B650

Multi-node Server

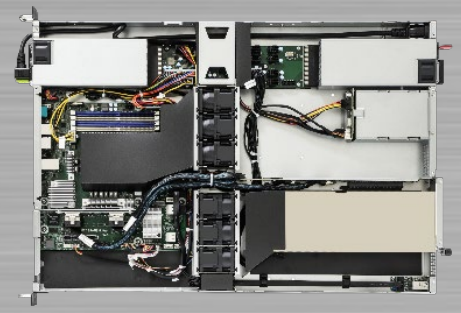
1U2N2G-AM5/2T



4U18N-S/AM5-2T

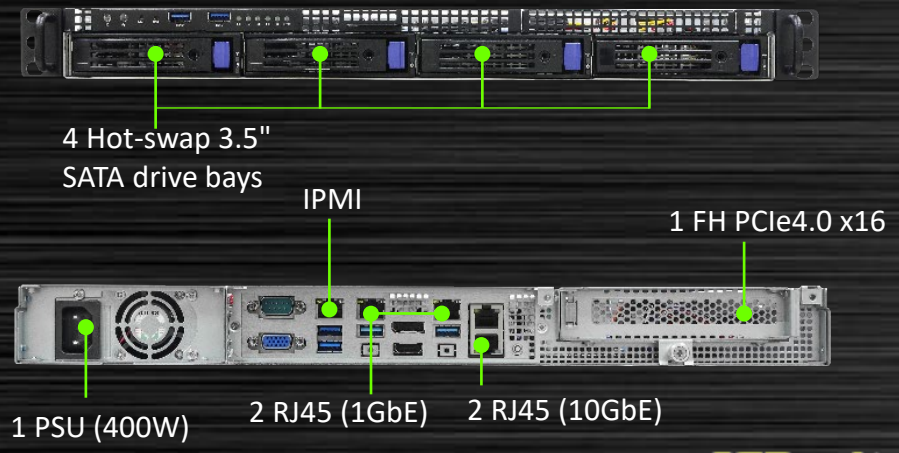
GPU Server

1U1G-B650

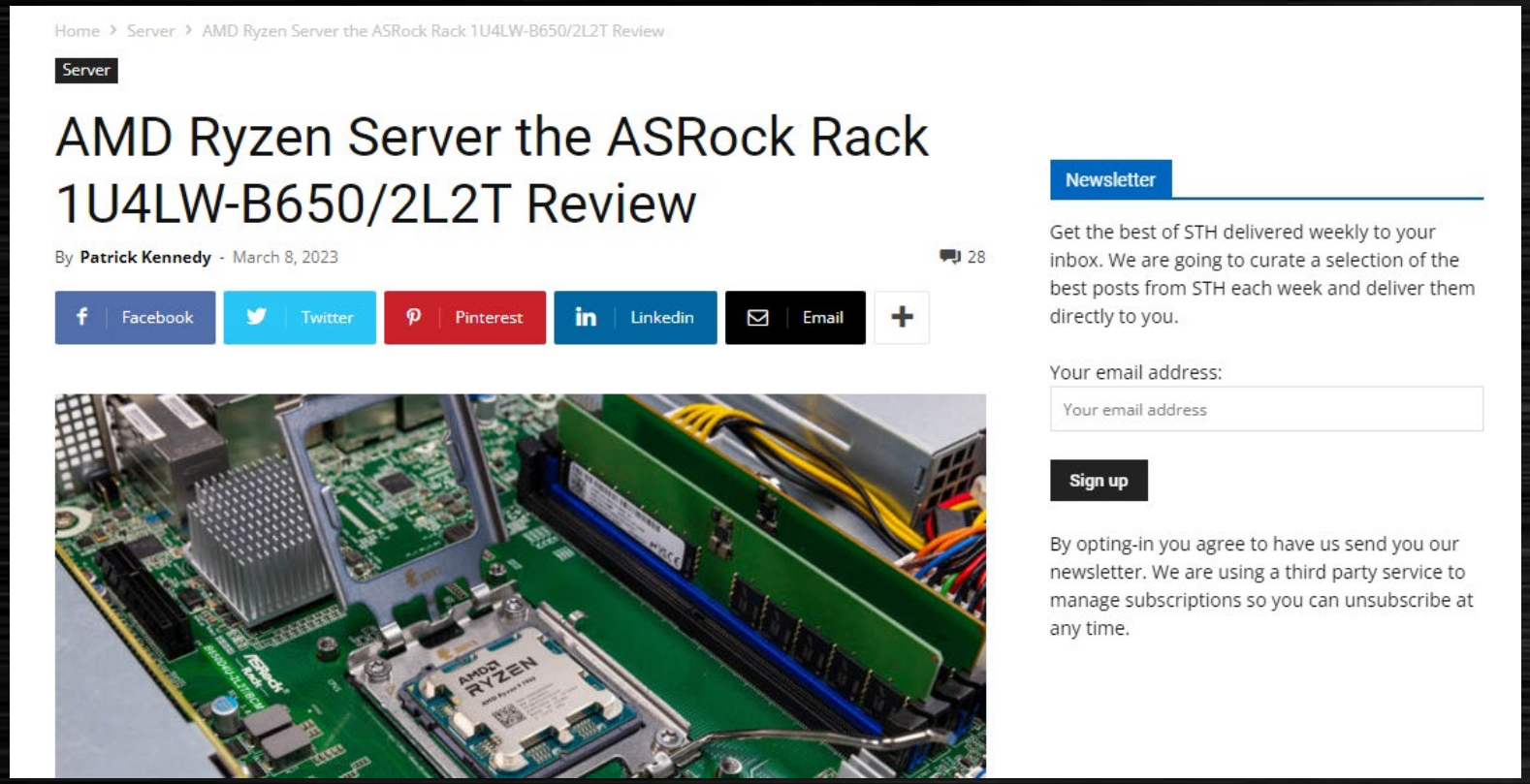


1U4LW-B650/2L2T

- 1U Rackmount
- 4 hot-swap 3.5" SATA drive bays
- 1 FH PCIe4.0 x16
- 1 M.2 (PCIe5.0 x4)
- 1 DisplayPort, 1 HDMI
- 2 RJ45 (10GbE)
  2 RJ45 (1GbE)
- Remote Management (IPMI)



1U4LW-B650/2L2T Review - ServeTheHome



Home › Server › AMD Ryzen Server the ASRock Rack 1U4LW-B650/2L2T Review

Server

AMD Ryzen Server the ASRock Rack 1U4LW-B650/2L2T Review

By **Patrick Kennedy** - March 8, 2023 28

Facebook Twitter Pinterest Linkedin Email +

Newsletter

Get the best of STH delivered weekly to your inbox. We are going to curate a selection of the best posts from STH each week and deliver them directly to you.

Your email address:

Your email address

Sign up

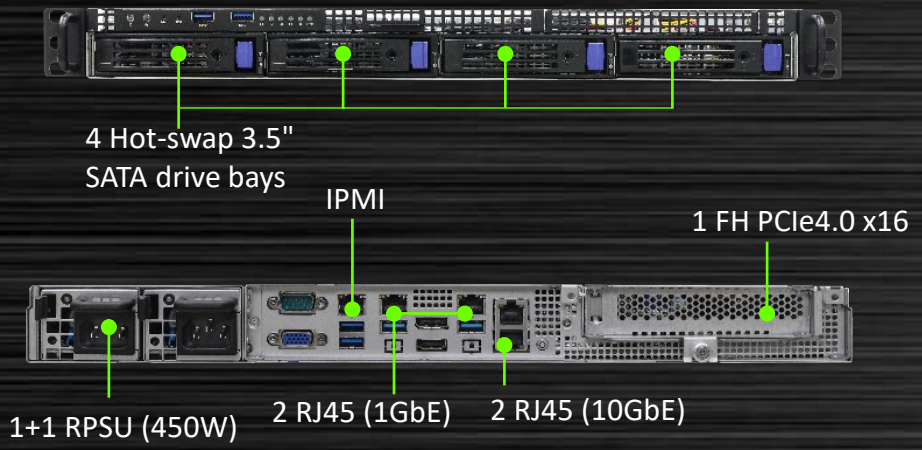
By opting-in you agree to have us send you our newsletter. We are using a third party service to manage subscriptions so you can unsubscribe at any time.

Ryzen line, there are going to be sockets Ryzen will not compete for. This server is so good, it is proof that AMD needs to give us an EPYC Ryzen. If you are looking in this segment, it is worth taking a look at this ASRock Rack 1U4LW-B650/2L2T because it is so far ahead of the alternatives. That is not something we get to say often at STH.

Source: https://www.servethehome.com/amd-ryzen-server-the-asrock-rack-1u4lw-b650-2l2t-review/

1U4LW-B650/2L2T RPSU

- 1U Rackmount
- 4 hot-swap 3.5" SATA drive bays
- 1 FH PCIe4.0 x16
- 1 M.2 (PCIe5.0 x4)
- 1 DisplayPort, 1 HDMI
- 2 RJ45 (10GbE)
  2 RJ45 (1GbE)
- Remote Management (IPMI)



1U4L2E-B650 RPSU

- 1U Rackmount
- 2 hot-swap 2.5" NVMe drive bays or
  2 hot-swap 3.5" SATA drive bays
  2 hot-swap 3.5" SATA drive bays
- 1 FHHL PCIe4.0 x16
- 1 M.2 (PCIe5.0 x4), 1 M.2 (PCIe4.0 x4)
- 1 DisplayPort, 1 HDMI
- 2 RJ45 (1GbE)
- Remote Management (IPMI)

2 Hot-swap 2.5" NVMe or
2 Hot-swap 3.5" SATA drive bays

2 Hot-swap 3.5" SATA drive bays

1 FH PCIe4.0 x16

IPMI

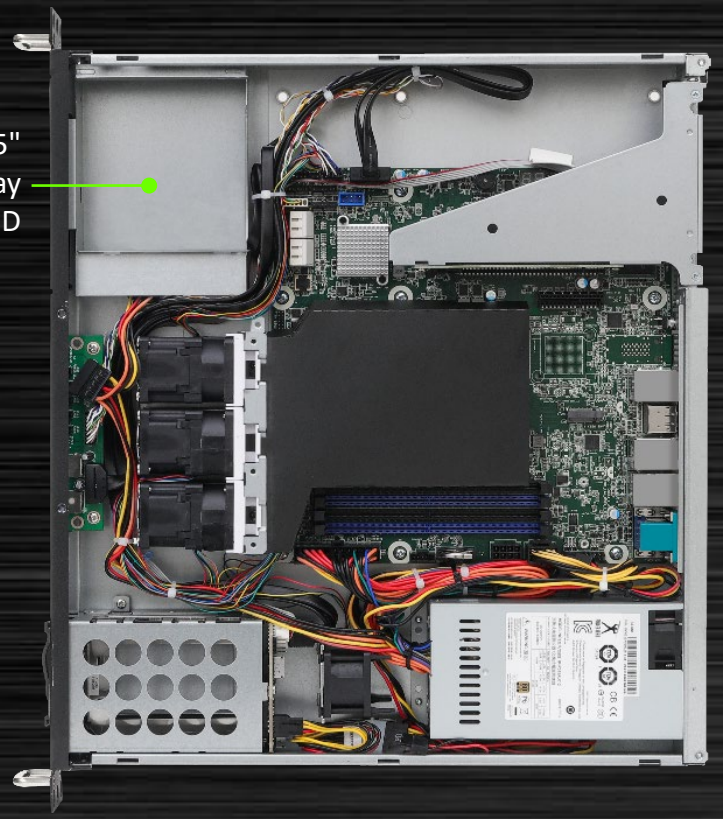
1+1 PSU (650W)

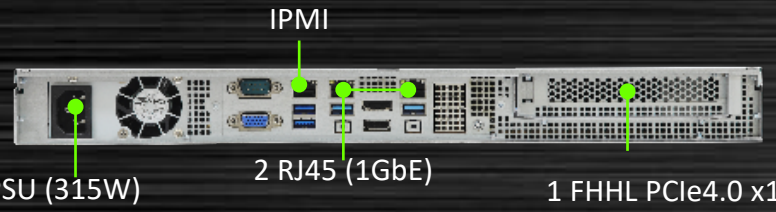
2 RJ45 (1GbE)

ASRock Rack

1U2S-B650

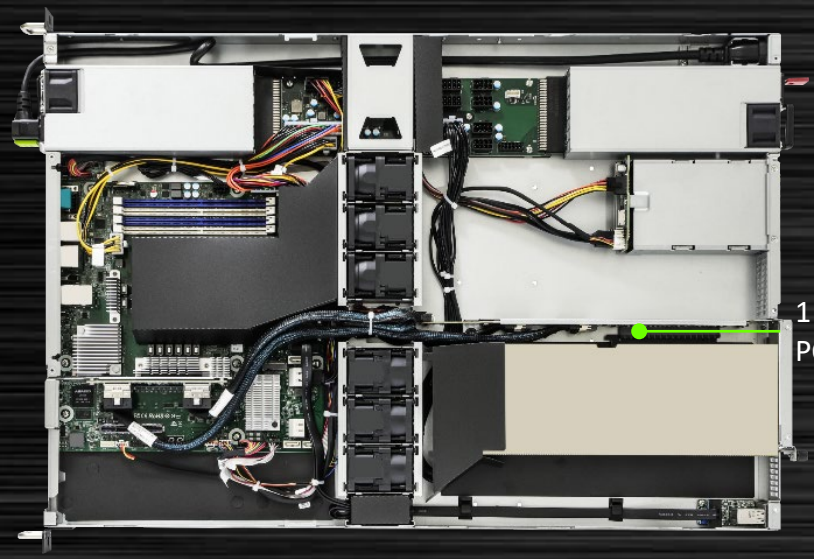
- 1U Rackmount
- 2 hot-swap 2.5" SATA drive bays
- 1 fixed 3.5" SATA drive bay or 1 Slim ODD
- 1 FHHL PCIe4.0 x16
- 1 M.2 (PCIe5.0 x4), 1 M.2 (PCIe4.0 x4)
- 1 DisplayPort, 1 HDMI
- 2 RJ45 (1GbE)
- Remote Management (IPMI)

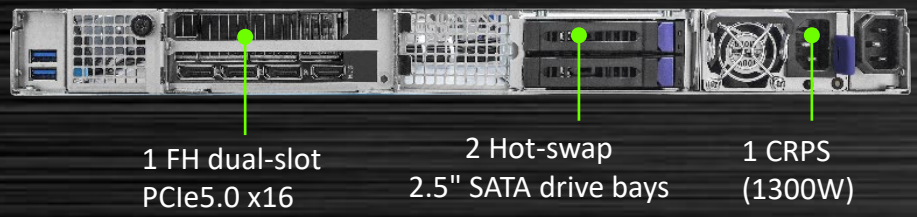




1U1G-B650

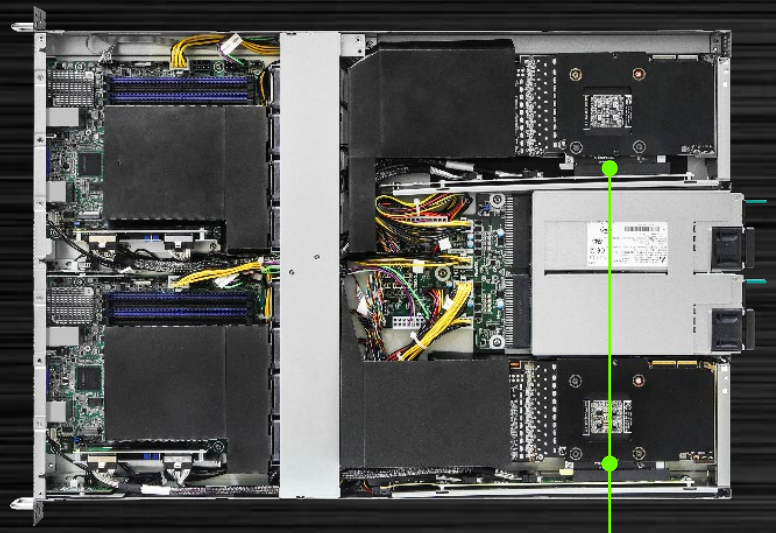
- 1U Rackmount
- 2 hot-swap 2.5" SATA drive bays
- 1 FHFL dual-slot PCIe5.0 x16
- 1 M.2 (PCIe5.0 x4), 1 M.2 (PCIe4.0 x4)
- 1 DisplayPort, 1 HDMI
- 2 RJ45 (1GbE)
- Remote Management (IPMI)

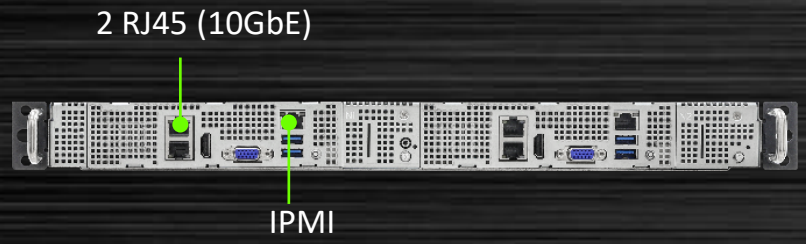


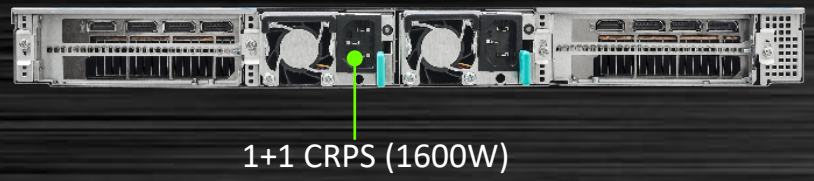


1U2N2G-AM5/2T

- 1U Rackmount
- 1 FH dual-slot PCIe5.0 x16 per node
- 1 M.2 (PCIe5.0 x4) per node
- 1 HDMI per node
- 2 RJ45 (10GbE) per node
- Remote Management (IPMI) per node







4U18N-S/AM5-2T

- 4U Rackmount
- 2 fixed 2.5" NVMe (PCIe4.0 x4) drive bays or
  2 fixed 2.5" SATA drive bays per node
- 1 M.2 (PCIe5.0 x4) per node
- 1 HDMI per node
- 2 RJ45 (10GbE) per node
- Remote Management (IPMI) per node

2 fixed 2.5" NVMe or SATA drive bays

3+1 CRPS (1600W)

ASRock Rack

www.asrockrack.com

CONTACT US

ASRockRack_sales@asrockrack.com

ASRockRack_marketing@asrockrack.com

FOLLOW US

@ASROCKRACK

ASROCK RACK INC.

GIGABYTE AM5 Portfolio

CHEN LEE

Sr. Director, Enterprise and Data Center Solutions for Americas

AMD
Meet the Experts

GIGABYTE

GIGA COMPUTING

AMD Ryzen™ Server Solution

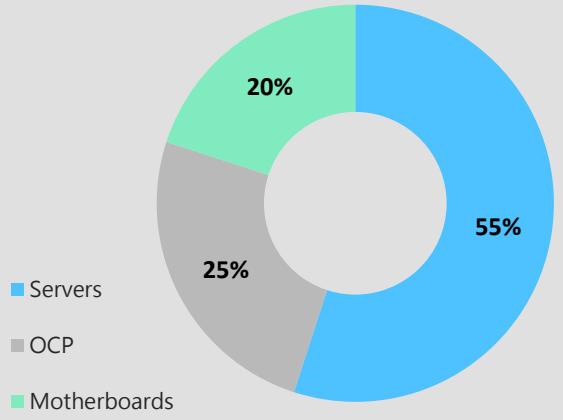
Giga Computing Overview

Background

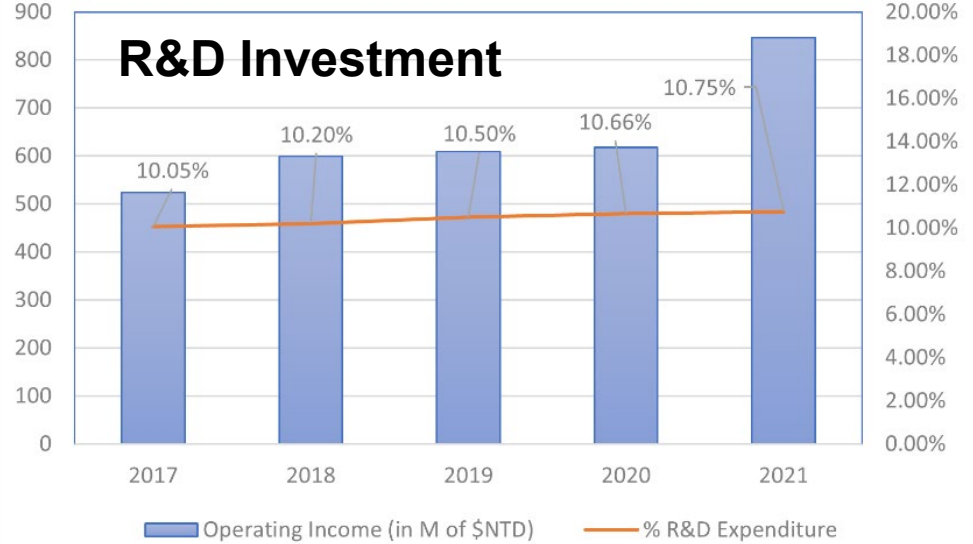
Founded in 2000, GIGABYTE's Network and Communication Business Unit has designed and developed enterprise solutions for over 20 years.

As a wholly owned GIGABYTE subsidiary, Giga Computing has a mature financial background. The spin-off allows better development of enterprise products and optimizes business operations.

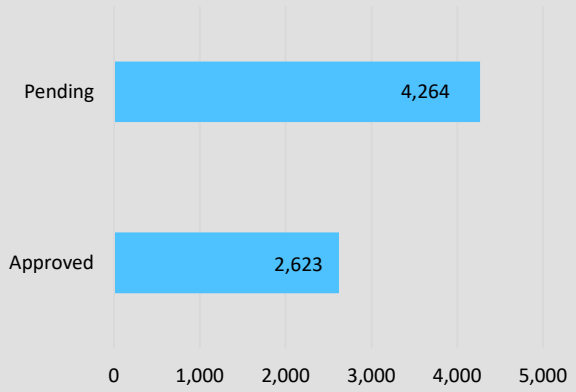
Revenue



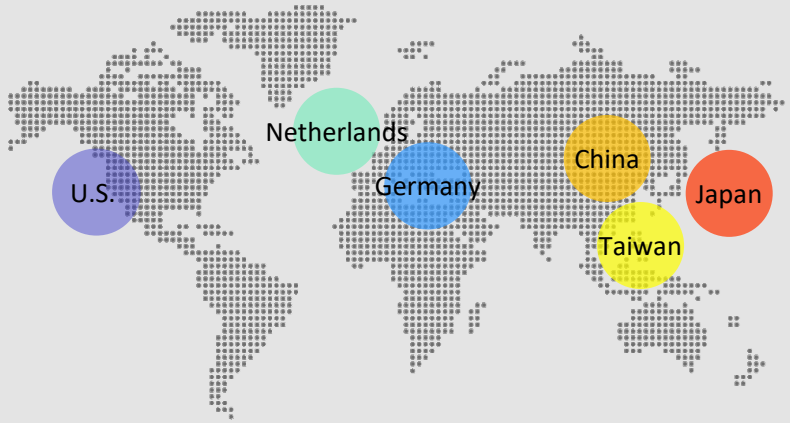
R&D Investment



Global Patents by GIGABYTE



Factory Locations



Compliance Management

ISO 9001: 2015

IECQ QC 080000: 2017

ISO 14001/ ISO 14064/ PAS 2050
ISO 14051/ OHSAS 18001/ AEO

GIGABYTE AMD Ryzen™ 7000 Platform

Performance
Up to 16 cores and 32 threads, the AMD Ryzen™ processors can reach its potential in GIGABYTE platforms, including support for a dual-slot GPU.

Cost-effective
Providing many choices of compelling compute servers allows for customers to buy the features that they need and do so at an optimal price.

Ease of Administration
GIGABYTE servers come with GIGABYTE Management Console for IPMI management. Using a web based browser remotely is key to simplifying management.

Continuous Operation
Systems are rigorously designed and tested to ensure downtime will not occur. Customers have come to expect stable performance around the clock.

Energy Efficiency
Our engineers have baked in features to achieve higher efficiency by customizing fan curves and by the choice of PSU -Titanium or Platinum.

Gigabyte Entry Server Architecture (R)

New: PCIe Gen5 Entry Solution SKU

2 x 10GbE on board
2 x 1GbE on board

R133 Series

R133-C11 Family Specification

SKU	R133-C10-AAA1	R133-C10-AAG1
MB	MC13-BL0	
CPU Generation	AMD Ryzen™ 7000 Series processor	
Storage	4 x 3.5”/2.5” SATA 4 x 2.5” 9.5mm SATA	
Rear I/O	1 x FHFL Slot (@Gen5 x16) support GPU 1 x FHHL Slot (@Gen4 x4)	
OCP 3.0 Slot	-	
PSU	Redundant 550W 80+ Platinum	Redundant 800W 80+ Titanium

* The default power supply is based on a basic system configuration. Please contact with technical representatives to determine the best power supply selection for your system configuration requirements and preferred efficiency.

R133-C13 Family Specification

SKU	R133-C13-AAB1	R133-C13-AAG1
MB	MC13-BL1	
CPU Generation	AMD Ryzen™ 7000 Series processor	
Storage	4 x 3.5”/2.5” SATA	
Rear I/O	1 x FHFL Slot (@Gen5 x16) support GPU (300W) 1 x FHHL Slot (@Gen4 x4)	
OCP 3.0 Slot	-	
PSU	Redundant 800W 80+ Platinum	Redundant 800W 80+ Titanium

* The default power supply is based on a basic system configuration. Please contact with technical representatives to determine the best power supply selection for your system configuration requirements and preferred efficiency.

R133 Series Specification - MB (MC13-BL0)

FEATURE	SPECIFICATION
Form factor	Proprietary (383 x 157 mm x 1.6mm)
Processor Support	AM5 Socket AMD Ryzen™ 7000 Series AM5 Single Processor
Chipset	AMD B650E
Memory	4 x DIMM slots support 2 channel DDR5 UP to 5600MHz (2DPC) UDIMM ECC/Non-ECC
LAN	2 x 10Gb/s LAN ports (Broadcom® BCM57416) 2 x 1Gb/s LAN ports (Broadcom® BCM5720) 1 x Management LAN 10/100/1G
VGA / VRAM	Integrated in BMC

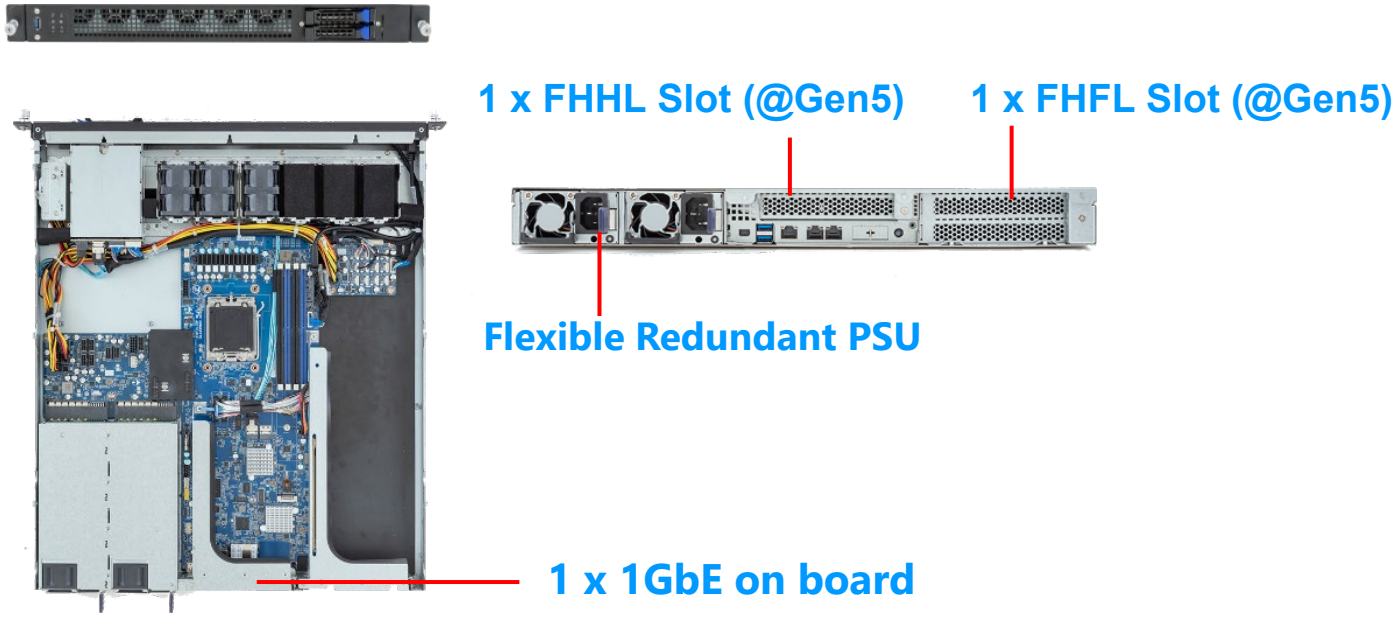
FEATURE	SPECIFICATION
BMC	ASPEED AST2600
Expansion Slot	2 x MCIO x8 (@Gen5 x8) 1 x PCIe x4 (@Gen5 x4)
Storage	4 x SATAIII (Slimline 4i) from FCH 4 x SATAIII (Slimline 4i) from Asmedia ASM1164 1 x M.2 M Key(PCIe Gen 4 x4) from FCH
Rear IO Connector	1x mDP, 2x RJ45 1GbE, 2x USB3.1, 1x MLAN(RJ45),1x ID Button
Internal Connector	USB3.0 Header (2 ports), USB2.0 Header (2 ports), TPM module, Front Panel, Back Panel, FAN Header(4 Pin x2),PMBUS Header

R133 Series Specification - MB (MC13-BL1)

FEATURE	SPECIFICATION
Form factor	Proprietary (383 x 157 mm x 1.6mm)
Processor Support	AM5 Socket AMD Ryzen™ 7000 Series AM5 Single Processor
Chipset	AMD B650E
Memory	4 x DIMM slots support 2 channel DDR5 UP to 5600MHz (2DPC) UDIMM ECC/Non-ECC
LAN	2 x Broadcom BCM5720L (1GbE) 1 x Management LAN 10/100/1G
VGA / VRAM	Integrated in BMC

FEATURE	SPECIFICATION
BMC	ASPEED AST2600
Expansion Slot	2 x MCIO x8 (@Gen5 x8) 1 x PCIe x4 (@Gen5 x4)
Storage	4 x SATAIII (Slimline 4i) from FCH 4 x SATAIII (Slimline 4i) from Asmedia ASM1164 1 x M.2 M Key(PCIe Gen 4 x4) from FCH
Rear IO Connector	1x mDP, 2x RJ45 1GbE, 2x USB3.1, 1x MLAN(RJ45),1x ID Button
Internal Connector	USB3.0 Header (2 ports), USB2.0 Header (2 ports), TPM module, Front Panel, Back Panel, FAN Header(4 Pin x2),PMBUS Header

Gigabyte Edge Server Architecture(E)



E133 Series

E133-C10 Family Specification

back

SKU	E133-C10-AAA1	E133-C10-AAG1
MB	MC13-BL1	
CPU Generation	AMD Ryzen™ 7000 Series processor	
Storage	2 x 2.5” SATA	
Rear I/O	1 x FHFL Slot (@Gen5 x16) 1 x FHHL Slot (@Gen4 x4)	
OCP 3.0 Slot	-	
PSU	Redundant 550W 80+ Platinum	Redundant 800W 80+ Titanium

* The default power supply is based on a basic system configuration. Please contact with technical representatives to determine the best power supply selection for your system configuration requirements and preferred efficiency.

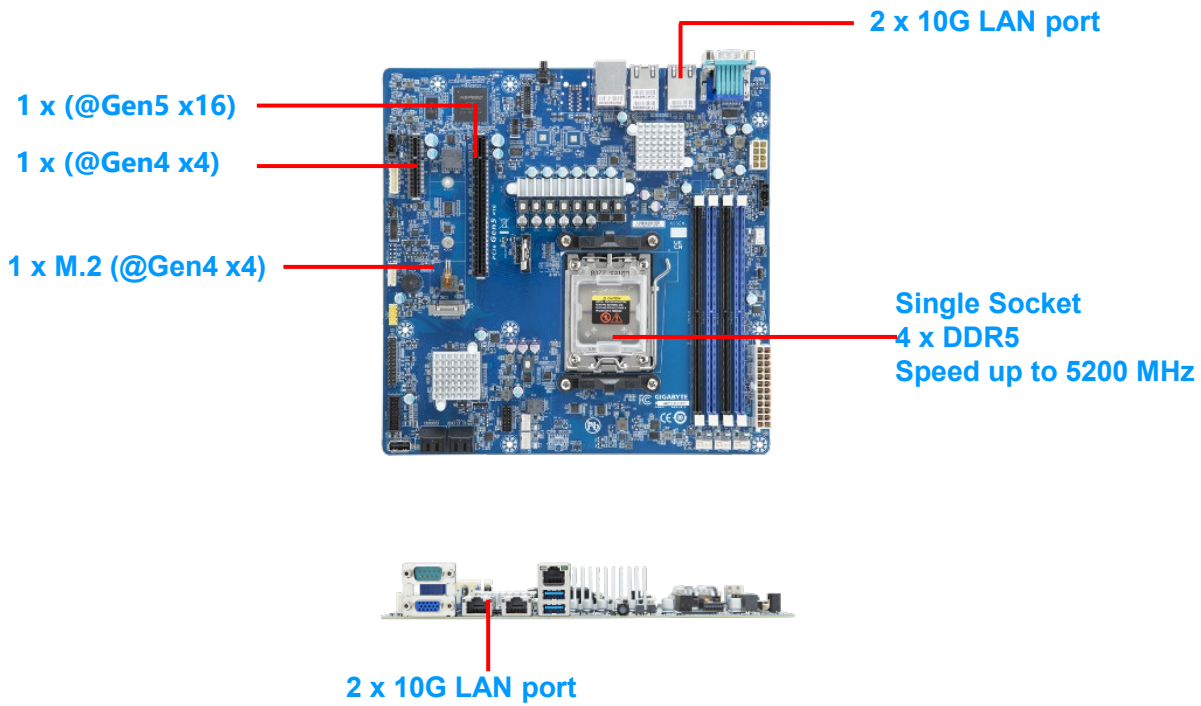
E133 Series Specification - MB (MC13-BL1)

back

FEATURE	SPECIFICATION
Form factor	Proprietary (383 x 157 mm x 1.6mm)
Processor Support	AM5 Socket AMD Ryzen™ 7000 Series AM5 Single Processor
Chipset	AMD B650E
Memory	4 x DIMM slots support 2 channel DDR5 UP to 5600MHz (2DPC) UDIMM ECC/Non-ECC
LAN	2 x Broadcom BCM5720L (1GbE) 1 x Management LAN 10/100/1G
VGA / VRAM	Integrated in BMC

FEATURE	SPECIFICATION
BMC	ASPEED AST2600
Expansion Slot	2 x MCIO x8 (@Gen5 x8) 1 x PCIe x4 (@Gen5 x4)
Storage	4 x SATAIII (Slimline 4i) 4 x SATAIII (Slimline 4i) 1 x M.2 M Key (@Gen 4 x4)
Rear IO Connector	1 x mDP, 2 x RJ45 1GbE, 2 x USB3.1, 1 x MLAN(RJ45),1 x ID Button
Internal Connector	USB3.0 Header (2 ports), USB2.0 Header (2 ports), TPM module, Front Panel, Back Panel, FAN Header(4 Pin x2),PMBUS Header

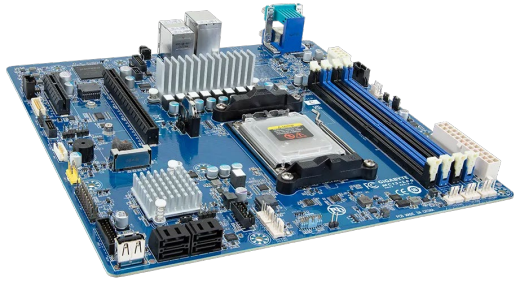
Gigabyte Entry Server Board (M)



MC13 Series (mATX)

MC13-LE0/LE1 Specification

back



FEATURE	SPECIFICATION
Form factor	uATX (243.84 x 243.84mm ; 9.6”x 9.6”)
Processor Support	AMD Ryzen Series AM5 Single Processor
Chipset	B650
Memory	4 x DIMM slots support 2 channel DDR5 5200 (1DPC) UDIMM ECC/Non-ECC
LAN	(LE0) (Intel i210) 2 x 1GbE Ports (LE1) (Intel X710) 2 x 10GbE Ports 1 x Management LAN 10/100/1G
VGA / VRAM	Integrated in BMC

FEATURE	SPECIFICATION
BMC	ASPEED AST2600
Expansion Slot	1 x PCIe slot (@Gen5 x16) 1 x PCIe slot (@Gen4 x4)
Storage	4 x SATAIII 6Gb/s; 1 x M.2 M Key(PCIe Gen 5 x4)
Rear IO Connector	1 x VGA, 1 x COM, 2 x RJ45, 2 x USB3.2 Gen1, 1 x MLAN(RJ45),1 x ID Button
Internal Connector	2 x USB 3.2 Gen1, 2 x USB2.0, TPM module, USB2.0 vertical, Front Panel, Back Panel, FAN Header(4 Pin x 6),PMBUS Header

AM4
Portfolio

MC12-LE0 Specification

AMD

FEATURE	SPECIFICATION
Form factor	uATX (244 x 244 mm ; 9.6”x 9.6”)
Processor Support	AMD Ryzen Series AM4 Single Processor
Chipset	B550
Memory	4 x DIMM slots support 2 channel DDR4 3200 (2DPC)
LAN	(Intel i210) 2 x 1GbE Ports 1 x Management LAN 10/100/1G
VGA / VRAM	Integrated in BMC

FEATURE	SPECIFICATION
BMC	ASPEED AST2500
Expansion Slot	1 x PCIe slot (@Gen4 x16) 1 x PCIe slot (@Gen4 x4)
Storage	6 x SATAIII 6Gb/s;
Rear IO Connector	1 x VGA, 1 x COM, 2 x RJ45 10G, 2 x USB3.0, 1 x MLAN(RJ45),1 x ID Button
Internal Connector	2 x USB 3.0, 2 x USB 2.0, TPM module, Front Panel, Back Panel, FAN Header(4 Pin x 6),PMBUS Header

GIGABYTE

Power Efficiency

Automatic Fan Speed Control

GIGABYTE servers are enabled with Automatic Fan Speed Control to achieve the best cooling and power efficiency. Individual fan speeds will be automatically adjusted according to temperature sensors strategically placed in the servers.

High Availability

Smart Ride Through (SmaRT)

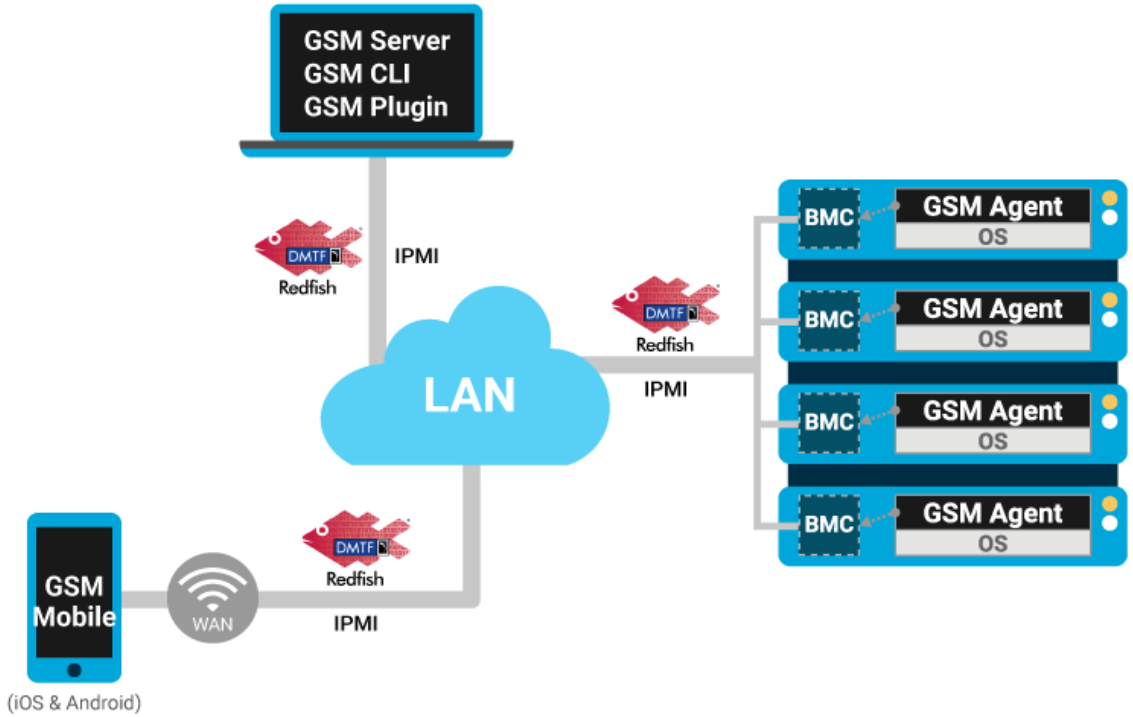
To prevent server downtime and data loss as a result of loss of AC power, GIGABYTE implements SmaRT in all our server platforms. When such an event occurs, the system will throttle while maintaining availability and reducing power load. Capacitors within the power supply can supply power for 10-20ms, which is enough time to transition to a backup power source for continued operation.

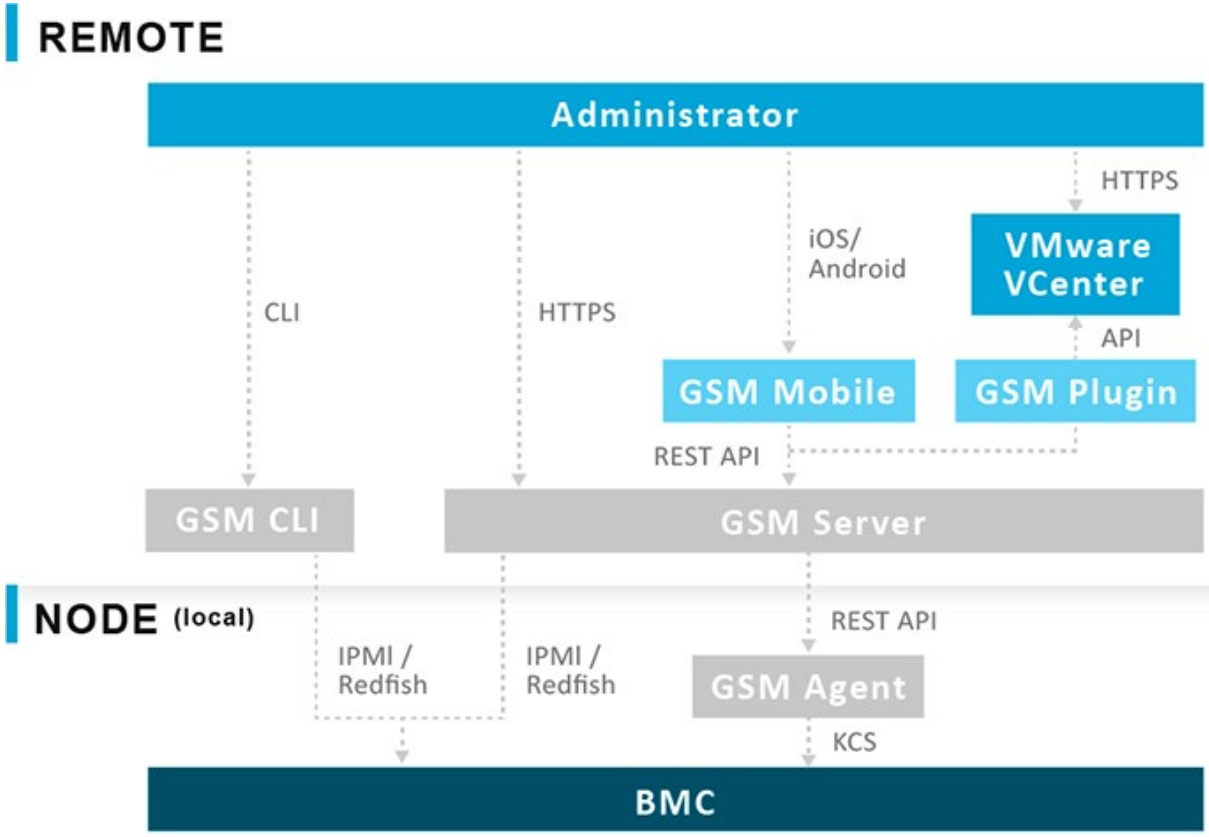
User Friendly

Tool-less Drive Bays Design

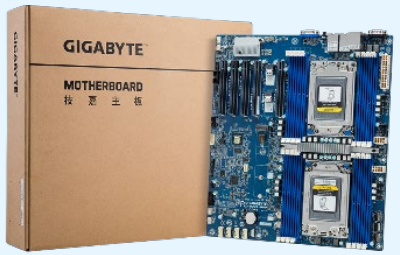
Clipping mechanism secures the drive in place. Install or replace a new drive in seconds.

GIGABYTE Server Management (GSM)





Flexible Business



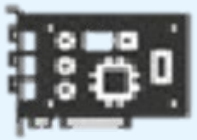
Server Board Only

Barebone (L6)

CPU

Memory

Storage



Accessory

Accelerator

Server System (L10)

GIGABYTE™

GIGABYTE™

GIGA COMPUTING

marketing@gigacomputing.com www.gigabyte.com/enterprise

MSI AM5 Portfolio

SHERMAN TANG
Technology Evangelist

AMD
Meet the Experts

Product Overview

AMD Ryzen™ 7000 Series Processors (AM5)

Enterprise Platform Solution
Sherman Tang, Tech Evangelist
Website I eps.msi.com | msi.com/Ryzen

Tech meets Aesthetic

Edge Server

5G Core and Edge Computing, Telecom Application Server, Network Function Virtualization, Ultra-Bandwidth Networking

AMD Ryzen™ 7000 (AM5)

E2102 (2U, PCIe Gen5, UDDR5)

Specification:

- 1 x AMD Ryzen™ 7000 Series (170W)
- 4 x DDR5, ECC/non-ECC UDIMM, 5200Mhz
- 2U, 1 x PCIe5.0 x16 slot, 1 x PCIe4.0 x8 slot
- 2 x 10GBase-T, 2x GbE RJ45 1 x GbE RJ45 Mgmt.
- 6 x 2.5"HDDs (SATA)
- 2 x M.2
- 1+1 500W CRPS Redundant PSU

Entry Server

Small Business, Enterprise Computing, Webhosting, Streaming

AMD Ryzen™ 7000 (AM5)

S1102-01 (1U, PCIe Gen5, UDDR5)

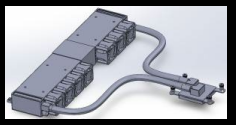
Specification:

- CPU: 1 x AMD Ryzen™ 7000 Series (105W)
- DIMM: 4 x DDR5, ECC/non-ECC UDIMM, 5200Mhz
- Expansion: 1x Gen5 x16 FH/FL
- Storage: 4 x 3.5" + 2 x 2.5" SATA/SAS, 2 xM.2
- Ethernet: 2x 10GBaseT (option: additional 2x GbE)
- PSU: Single 500W ATX (or 1+1 Redundant)

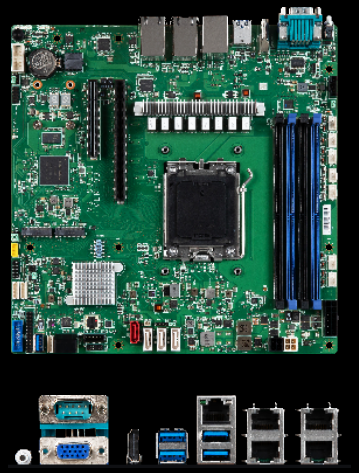
S1102-02 (1U, PCIe Gen5, UDDR5) - Liquid Cooling Module

Specification:

- CPU: 1 x AMD Ryzen™ 7000 Series (170W supported with "Liquid Cooling Module" integration)
- DIMM: 4 x DDR5, ECC/non-ECC UDIMM, 5200Mhz
- Expansion: 1x Gen5 x16 FH/FL
- Storage: 4 x 3.5" + 2 x 2.5" SATA/SAS, 2 xM.2
- Ethernet: 2x 10GBaseT (option: additional 2x GbE)
- PSU: Single 500W ATX (or 1+1 Redundant)

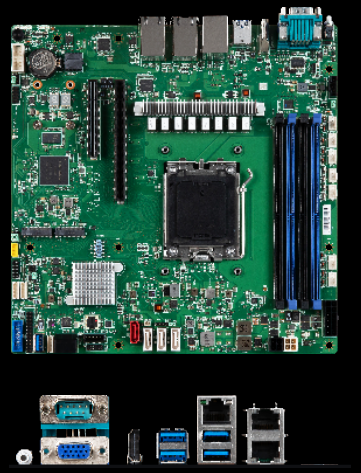


AMD Ryzen™ 7000 (AM5) Product Portfolio



D3050-01

- Ryzen™ 7000 (170W)
- 1 x PCIe5.0 x16 slot, 1 x PCIe4.0 x8 slot
- 4 x GbE RJ45, 1 x GbE RJ45 Mgmt.
- 4 x SATA3.0, 2 x M.2 22110/2280
- Power: ATX, DC12V



D3050-02

- Ryzen™ 7000 (170W)
- 1 x PCIe5.0 x16 slot, 1 x PCIe4.0 x8 slot
- 2 x GbE RJ45, 1 x GbE RJ45 Mgmt.
- 4 x SATA3.0, 2 x M.2 22110/2280
- Power: ATX, DC12V

D3051-01

- Ryzen™ 7000 (170W)
- 1 x PCIe5.0 x16 slot, 1 x PCIe4.0 x8 slot
- 2 x 10GBaseT, 2 x GbE RJ45, 1 x GbE RJ45 Mgmt.
- 6 x SATA3.0, 2 x M.2 22110/2280
- Power: ATX

D3051-02

- Ryzen™ 7000 (170W)
- 1 x PCIe5.0 x16 slot, 1 x PCIe4.0 x8 slot
- 2 x 10GBaseT, 1 x GbE RJ45 Mgmt.
- 6 x SATA3.0, 2 x M.2 22110/2280
- Power: ATX

D3051-03

- Ryzen™ 7000 (170W)
- 1 x PCIe5.0 x16 slot, 1 x PCIe4.0 x8 slot
- 2 x GbE RJ45, 1 x GbE RJ45 Mgmt.
- 6 x SATA3.0, 2 x M.2 22110/2280
- Power: ATX

msi
Thank You
Sherman Tang, Tech Evangelist / shermantang@msi.com
MSI Global - The Leading Brand in High-end Gaming & Professional Creation |
GOLDEN RATIO
MSI CREATOR AWARDS
ESL
THE OFFICIAL GAMING PARTNER
IEM
Intel® Extreme Masters Certified PC
MGA
MSI GAMING ARENA

AMD Meet the Experts

Q & A

Please submit your question via the Q&A Widget

Resource List

[AMD Ryzen™ Processors for Server: Solutions for Dedicated Hosting]

[Your Most Budget-saving and High Performing 1U Server (MSI)]

AMD Ryzen™ Processor Performance for Demanding Workloads (ASRock Rack)

[Enterprise Applications for the AMD Ryzen™ 7000 Series Desktop Processor (GIGABYTE)]

[Giga Computing Announces Entry-Level AMD Ryzen-based Servers by GIGABYTE]

Datasheets (GIGABYTE)

[AMD Meet the Experts Webinars]

[AMD Arena]

[Subscribe to Partner Newsletters]

Visit the AMD Partner Hub

AMD Partner Hub

Partner website
Sales & marketing resources
Multiple languages

amd.com/partner

AMD Partner Newsletter

Newsletters for partners
Latest resources
Multiple languages

Subscribe now!
amd.com/PartnerSubscribe

AMD Arena

Incentivized partner training
Learn, Earn, Win!
Multiple languages

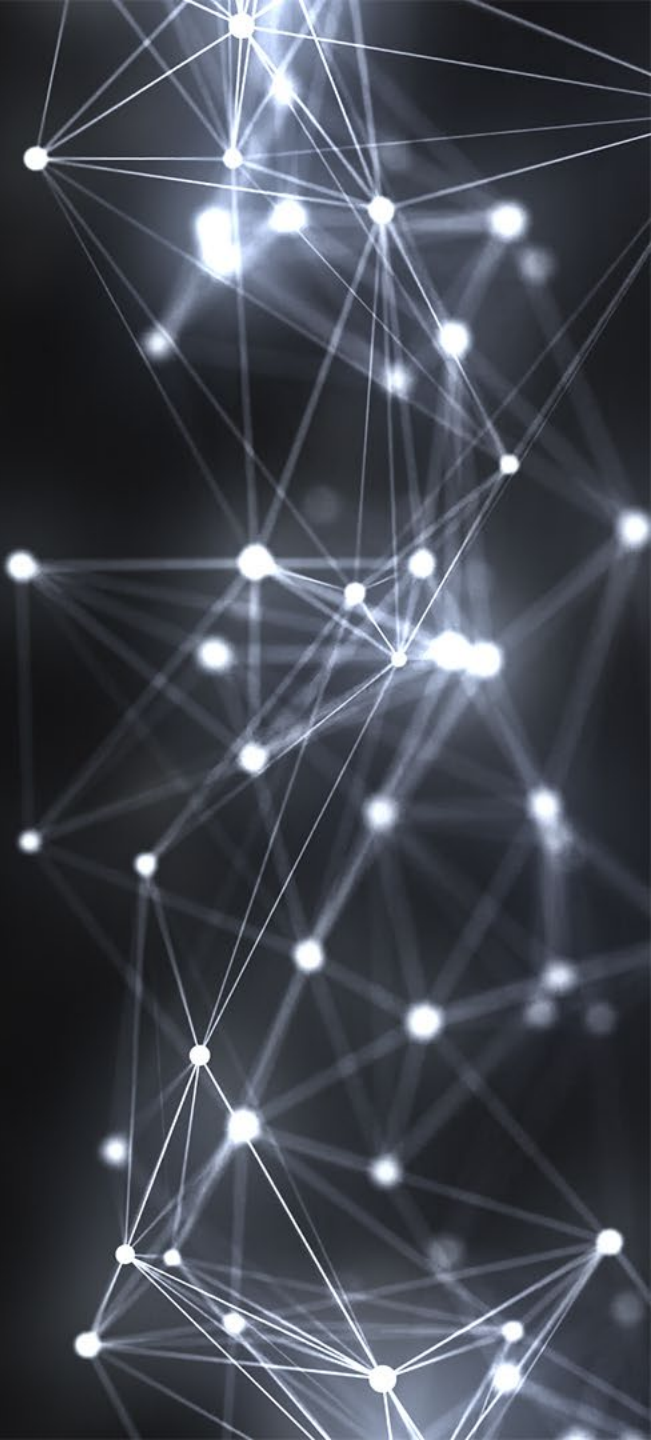
amd.com/arena

*See endnote: GD-163

Thank you for joining!

AMD Meet the Experts

Please take a moment to fill out our brief survey.



Endnotes

GD-150: Max boost for AMD Ryzen processors is the maximum frequency achievable by a single core on the processor running a bursty single-threaded workload. Max boost will vary based on several factors, including, but not limited to: thermal paste; system cooling; motherboard design and BIOS; the latest AMD chipset driver; and the latest OS updates. GD-150

GD-163: AMD Arena is open to employees of AMD Partners. Employment verification is required. Geographic and other limitations apply. For the full terms and conditions see https://www.amd.com/en/partner/amd-arena-terms-conditions.

Disclaimer and Attributions

The information contained herein is for informational purposes only and is subject to change without notice. While every precaution has been taken in the preparation of this document, it may contain technical inaccuracies, omissions and typographical errors, and AMD is under no obligation to update or otherwise correct this information. Advanced Micro Devices, Inc. makes no representations or warranties with respect to the accuracy or completeness of the contents of this document, and assumes no liability of any kind, including the implied warranties of noninfringement, merchantability or fitness for particular purposes, with respect to the operation or use of AMD hardware, software or other products described herein. No license, including implied or arising by estoppel, to any intellectual property rights is granted by this document. Terms and limitations applicable to the purchase or use of AMD’s products are as set forth in a signed agreement between the parties or in AMD's Standard Terms and Conditions of Sale. GD-18

©2023 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, Radeon, AMD RDNA, Ryzen, EPYC and combinations thereof are trademarks of Advanced Micro Devices, Inc. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies.