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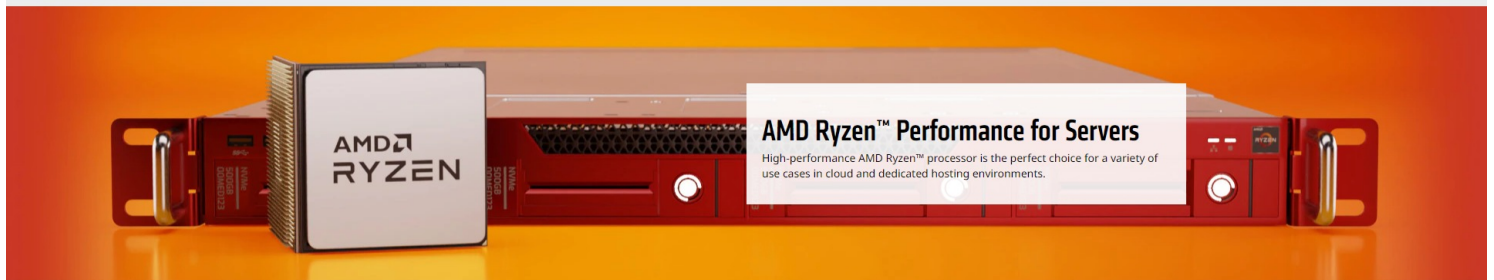
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AMD Ryzen™ Processors for Server: Solutions for Dedicated Hosting

Watch AMD Chair and CEO Dr. Lisa Su unveil 4th Gen AMD EPYC™ processors



AMD Ryzen™ Performance for Servers

High-performance AMD Ryzen™ processor is the perfect choice for a variety of use cases in cloud and dedicated hosting environments.

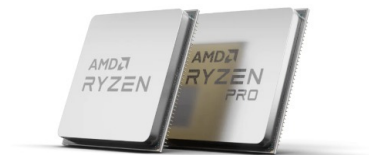
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A Perfect Match for Dedicated Hosting

Whereas the most demanding data centers, supercomputers and hyperscalers rely on AMD EPYC™ server processors, entry-level server workloads can be addressed with a smaller, cost-efficient infrastructure. That's why AMD has worked with its technology partners to offer AMD Ryzen™ processors in a server deployment scenario.

AMD Ryzen™ processors for servers offers:

- High Clock Speeds (up to 4.9GHz Max Boost)
- Up to 16 "Zen3" cores
- Power Efficiency at Load and Idle
- Built-in security features for Data Protection


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Ideal workloads for Dedicated Hosting Environments



E-commerce

AMD Ryzen™ helps you provide robust e-commerce platforms and Web hosting Solutions for your SMB customers to be successful with their digital transformation.



Code Development

Software engineers often face long compile times. Software compilation is a multithreaded process and the outstanding core density of AMD Ryzen™ processors help reduce compile times.



Cloud Gaming

Only AMD can deliver the ultimate gaming platform. With AMD Ryzen™, and its broad server ecosystem, you can propose to your customers the world's highest-rated gaming processor.*



Content Creation

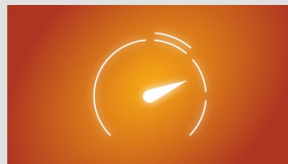
Whether designers edit 4K footage or craft complex designs, you can help them save time with AMD Ryzen™, letting you get back to what you do best - creating.



Low-Cost VPS

Give your customers superuser-level access to instantaneous Virtual Private Servers. With up to 16 physical cores per socket you can host 16 customers on a single processor.

Reasons to Believe



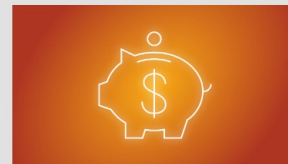
Leadership Performance

- Up to 16 high-performance cores for powerful parallel processing and market differentiation
- High frequency cores for low-threaded applications
- High-speed I/O for insanely fast storage needs



Server-grade Platforms

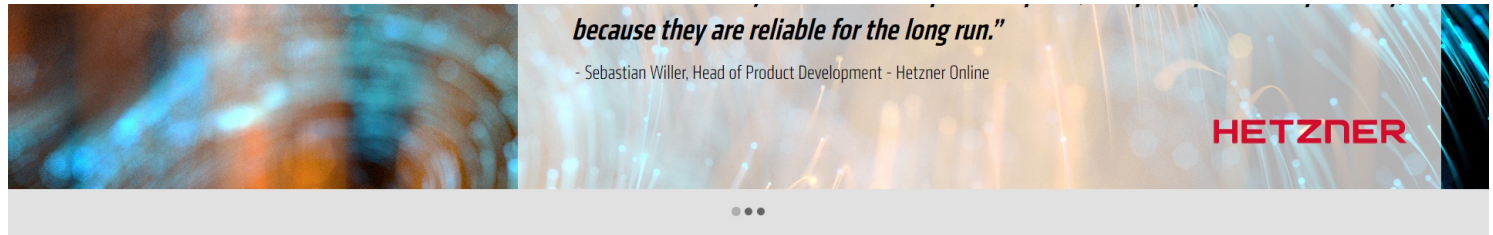
- ECC-enabled memory and remote management
- Standard and density-optimized rackmount platforms
- AES-128 Memory encryption to help protect data in-use



Low TCO

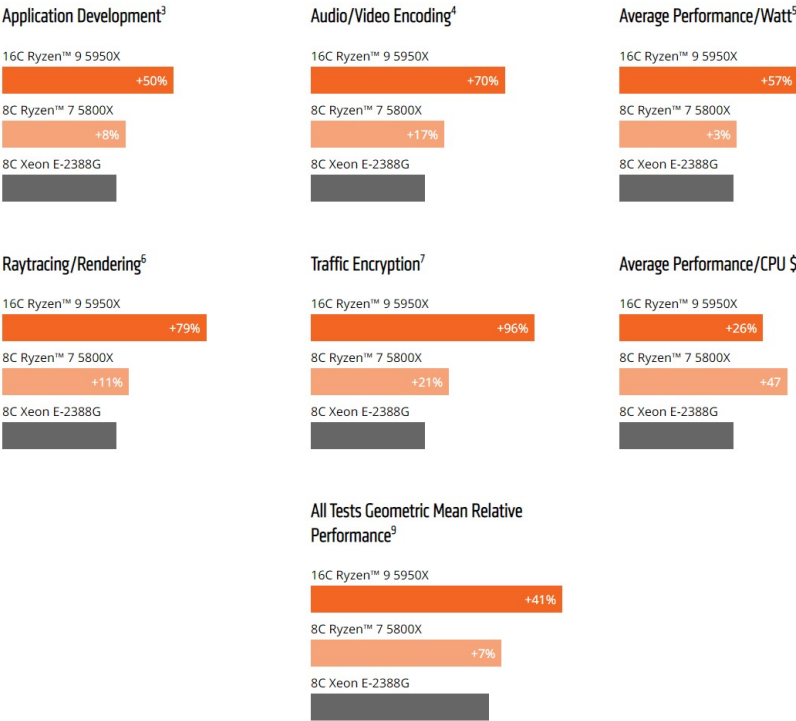
- Low-cost infrastructure for outstanding performance-per-dollar
- Innovative chiplet processor design that maximizes efficiency
- CPU TDPs as low as 65W to help reduce power usage, support sustainability efforts, and optimize rack utilization

“We chose AMD Ryzen™ for three reasons: they are incredibly energy efficient for the performance they provide, they have built-in support for ECC so there are no features artificially hidden behind special chipsets, and perhaps most importantly,



Small Footprint, Maximum Performance

Based on the same advanced architecture of AMD EPYC™ server processors, AMD Ryzen™ processors offer endless possibilities. AMD Ryzen™ excel in a variety of workloads whether your customers are playing the latest games, designing the next skyscraper, or crunching data.



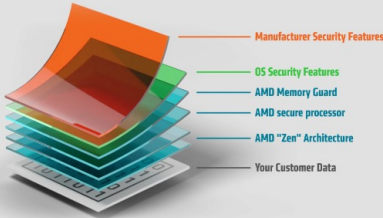
Security Features Built-In

Through a modern, multi-layered approach to security, AMD Ryzen™ processors help protect your sensitive data from today's sophisticated attacks, avoid downtime, and reduce resource drain.

AMD Ryzen™ Security features include:

- Integrated AMD secure processor
- AES-128 encryption key for memory protection
- Secure Boot / UEFI Secure Boot
- Memory Confidentiality
- NIST-SP-800-90 Compliance

AMD keeps implementing new security features at the core of its "Zen" Architecture. As an example, the core architecture of Ryzen™ 5000 series ("Zen 3") includes a Control-flow Enforcement Technology (CET) to help protect against ROP attacks.



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Try Before You Buy

REQUEST A DEMO SYSTEM

Our ODM Partners offer systems and boards, featuring remote management with BMC and iKVM and ECC-enabled memory subsystem

AMD Ryzen™ Powered Servers



ASRock® 4U18N-B550

- 4U chassis with 18 nodes support 36 x 2.5" NVMe SSD, 1600W Redundant (3+1) PSU
- 4 DDR4 ECC/ non-ECC UDIMM, up to 32GB each
- Supports 2 x 2.5" NVMe SSD per node
- Supports 2 M.2 per node
- 2x RJ45 (1GbE)
- Integrated IPMI 2.0 and KVM with Dedicated LAN

SPECIFICATIONS

ASRock® Rack 1U1G-X570/2L2T

- 1U Rackmount with 1+1 Redundant 800W CRPS
- 4 DDR4 ECC/ non-ECC UDIMM, up to 32GB each
- 2 Hot-swap 2.5" drive bays
- 2 M.2 (PCIe4.0 x4)
- 1 FH dual-slot PCIe4.0 x16
- 2 RJ45 (10GbE)
- Remote management (IPMI)

SPECIFICATIONS

ASRock® Rack 1U2LW-X570/2L2T

- 1U Rackmount with 315W PSU
- 4 DDR4 ECC/ non-ECC UDIMM, up to 32GB each
- 2 fixed 3.5" drive bays
- 2 M.2 (PCIe4.0 x4)
- 1 FHHL PCIe4.0 x16
- On-board dual 10GbE RJ45
- Remote management (IPMI)

SPECIFICATIONS

ASRock® Rack 1U2-X570/2T

- Front I/O
- 1U Rackmount with 265W PSU
- 4 DDR4 ECC/ non-ECC SO-DIMM, up to 32GB each
- Supports 2 fixed 3.5" drives and 2 fixed 2.5" 7mm drives
- On-board dual 10GbE RJ45
- Remote management (IPMI)

SPECIFICATIONS

ASRock® Rack 1U2LW-X570/2L2T

- 1U Rackmount with 315W PSU
- 4 DDR4 ECC/ non-ECC UDIMM, up to 32GB each
- 2 fixed 3.5" drive bays
- 2 M.2 (PCIe4.0 x4)
- 1 FHHL PCIe4.0 x16
- On-board dual 10GbE RJ45
- Remote management (IPMI)

SPECIFICATIONS

AMD Ryzen™ Powered Server Motherboards



GIGABYTE MC12-LEO

- Micro-ATX (9.6" x 9.6")
- Dual Channel ECC/ Non-ECC Unbuffered DDR4, 4 DIMMs
- 2 x 1Gb/s LAN ports
- 1 x Dedicated management port
- 6 x SATA 6Gb/s ports
- Ultra-Fast M.2 with PCIe Gen3 x1 interface
- 2 x PCIe Gen4 expansion slots

SPECIFICATIONS



ASRock® Rack B550D4ID-2L2T

- Deep mini-ITX (6.7" x 8.2")
- 4 DIMM slots (2DPC), supports DDR4 ECC/non-ECC UDIMM
- 1 PCIe4.0 x16
- 1 OCuLink (4 SATA 6Gb/s)
- Supports 1 M.2 (PCIe4.0 x4 or SATA 6Gb/s)
- 4 SATA 6Gb/s
- 2 RJ45 (10GbE)
- Remote management (IPMI)

SPECIFICATIONS



ASRock® Rack B550D4U-2T

- Micro-ATX (9.6" x 9.6")
- 4 DIMM slots (2DPC), supports DDR4 ECC/non-ECC UDIMM
- 1 PCIe4.0 x16, 1 PCIe4.0 x4
- 1 M.2 (PCIe3.0 x4 or SATA 6Gb/s)
- 6 SATA 6Gb/s
- 2 RJ45 (10GbE)
- Remote management (IPMI)

SPECIFICATIONS



ASRock® Rack X570D4I-2T

- Mini-ITX (6.7" x 6.7")
- 4 DIMM slots (2DPC), supports ECC/non-ECC SODIMM
- 1 PCIe4.0 x16
- 2 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s)
- Supports 1 M.2 (PCIe4.0 x4 or SATA 6Gb/s)
- 9 SATA 6Gb/s
- 2 RJ45 (10GbE)
- Remote Management (IPMI)

SPECIFICATIONS

ASRock® Rack X570D4I-2T

- ATX
- 4 DIMM slots (2DPC), supports ECC/non-ECC SODIMM
- 1 PCIe4.0 x16
- 2 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s)
- Supports 1 M.2 (PCIe4.0 x4 or SATA 6Gb/s)
- 9 SATA 6Gb/s
- 2 RJ45 (10GbE)
- Remote Management (IPMI)

SPECIFICATIONS

Featured Hardware Vendors Offering AMD Ryzen™ Platforms

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MODEL	SERVER SPECIFIC OPN	# OF CPU CORES	# OF THREADS	MAX. BOOST CLOCK*	BASE CLOCK	DEFAULT TDP
AMD Ryzen™ 9 5950X	100-000000059A	16	32	Up to 4.9GHz	3.4GHz	105W
AMD Ryzen™ 9 5900X	100-000000061A	12	24	Up to 4.8GHz	3.7GHz	105W
AMD Ryzen™ 7 5800X	100-000000063A	8	16	Up to 4.7GHz	3.8GHz	105W
AMD Ryzen™ 7 5700X	100-000000092A	8	16	Up to 4.6GHz	3.4GHz	65W
AMD Ryzen™ 5 5600X	100-000000065A	6	12	Up to 4.6GHz	3.7GHz	65W
AMD Ryzen™ 5 5600	100-000000092A	6	12	Up to 4.4GHz	3.5GHz	65W
AMD Ryzen™ 5 5500	100-000000045A	6	12	Up to 4.2GHz	3.6GHz	65W
AMD Ryzen™ 9 3950X	100-000000051A	16	32	Up to 4.7GHz	3.5GHz	105W
AMD Ryzen™ 9 3900X	100-000000023A	12	24	Up to 4.6GHz	3.8GHz	105W
AMD Ryzen™ 7 3800X	100-000000025A	8	16	Up to 4.5GHz	3.9GHz	105W
AMD Ryzen™ 7 3700X	100-000000071A	8	16	Up to 4.4GHz	3.6GHz	65W
AMD Ryzen™ 5 3600X	100-000000022A	6	12	Up to 4.4GHz	3.8GHz	95W
AMD Ryzen™ 5 3600	100-000000029A	6	12	Up to 4.2GHz	3.6GHz	65W

*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. Learn More.

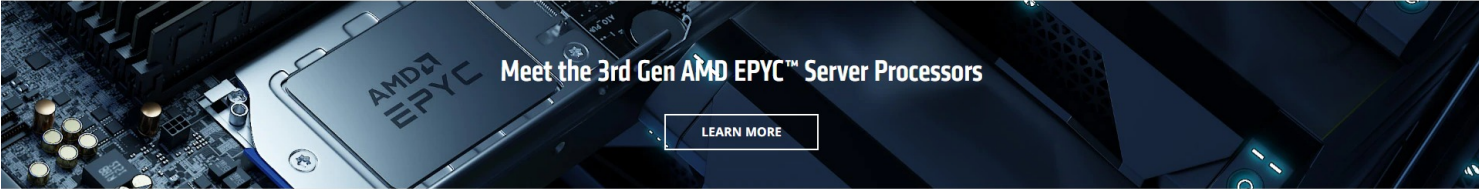
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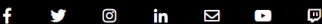
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