

NOTHING STACKS UP TO EPYC™ PROCESSORS

The New Standard for the Modern Data Center

New capabilities in AI, HPC and analytics—and even virtualization and cloud—can drive customers' progress in a rapidly changing world. But customers are faced with the tasks of improving performance and managing long-term costs while simultaneously improving business agility, information security and, above all, time to value. Servers based on AMD EPYC™ 7003 Series Processors can help

customers achieve more, faster with leadership performance and enhanced built-in security features across a wide range of core counts. Supported by a broad and growing x86 ecosystem, AMD EPYC™ processors help you go from IT investment to business impact fast. **Nothing stacks up to EPYC™ Processors.**

THE CONVERSATION ROADMAP



ICE BREAKER

The revolution in IT is taking new shape: **55%** of organizations have signed on to **hybrid cloud and multi-cloud** as their preferred approach to enterprise IT¹ and by 2025, **90%** of all manual IT operations and data-management tasks will be **completely automated**.²



THE BREAKDOWN

Are you concerned with reducing persistent **costs**, your ability to increase **flexibility** and **efficiency** simultaneously, managing **risk** or simplifying **migrations**?



THE TURN

What if you could simply and confidently **improve workload performance, accelerate results** and **gain transformative agility, efficiency and performance**—without **hidden costs**?



THE BREAKTHROUGH

Nothing Stacks Up to EPYC™ Processors, The New Standard for the Modern Data Center.

KEY MESSAGES

A platform you can rely on—built for solutions, not just specs

Take advantage of **architectural leadership** with the latest processors in AMD's consistent execution of its multi-year server CPU roadmap, with expanded applicability thanks to predictable performance scaling and memory flexibility. Upgrade to 3rd Gen AMD EPYC™ Processor-based servers and enable new capabilities for your business in HCI, AI, ML, HPC, advanced data analytics and more.

Easily adopt a newly flexible and efficient foundation

Drive advanced virtualization, hyperconverged infrastructure (HCI), containerization and superior database performance—whether on premises or in the cloud—for **data your way**. Extract optimal value from upgrade, facility and licensing costs, thanks to a platform that's powerful and capable while being compatible out of the box with your existing x86 applications.

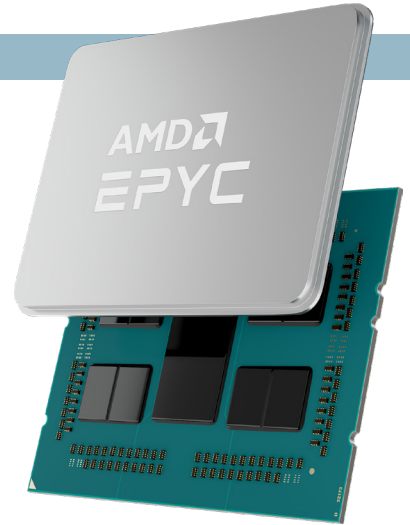
Help reduce risk effortlessly—and confidently

3rd Gen AMD EPYC™ Processors have enhanced their **modern security by design** with advanced security features, called AMD Infinity Guard,³ by adding strong memory integrity protection capabilities. With no x86 application software changes required, AMD Infinity Guard helps your organization take control of security and decrease risks to your most important assets.

Designed for performance that redefines your potential

Turn to the **workload performance leadership** of 3rd Gen AMD EPYC™ processor-based servers for the simple power, flexibility, enduring efficiency and security features you need in an environment where every stakeholder now relies on technology to move forward. Transform efficiently, reach goals faster, gain a competitive advantage—and maybe even change the world.

DELIVERING INSIGHTS



- How are you planning to improve efficiency and agility but also control complexity and costs?
- Where are you in adopting software-defined infrastructure and containerization?
- Are you experiencing data bottlenecks that impede application performance? Is throughput important to your business model?
- Are you upgrading your R&D and analysis capabilities with HPC but also need to improve TCO?
- Where do Big Data or other massive data analytics fit into your organization’s business strategy?
- Would you like to be able to add protective shielding to applications and databases running in virtual and cloud environments without having to add costs or code?
- Where is your organization in its use of ML, modeling, simulation or grid computing?

HOW AMD EPYC PROCESSORS DELIVER

ARCHITECTURE LEADERSHIP

Industry leading I/O,⁴ enhanced “Zen3” 7nm x86 hybrid die core and an integrated security processor on die. 3rd Gen AMD EPYC™ Processors provide up to 32MB of L3 cache, 4 and 6 channel memory interleaving designed for better performance in small DIMM count configurations, and synchronized clocks between fabric and memory all driving better, faster time to results.

DATA YOUR WAY

Generate new value—on premises or in the cloud—with a simple, powerful server choice. Drive advanced virtualization, hyperconverged infrastructure, hybrid cloud, containerization and compelling database performance while getting optimal value from upgrade, facility and licensing costs, thanks to a platform that’s both powerful and capable while being compatible out of the box with your existing x86 applications.

MODERN SECURITY BY DESIGN

Strong AMD Infinity Guard technology gets stronger with new Secure Encrypted Virtualization-Secure Nested Paging (SEV-SNP) and Secure Encrypted Virtualization-Encrypted State (SEV-ES) features, helping further enhance virtualization security.³

WORKLOAD PERFORMANCE LEADERSHIP

Supporting a broader range of use cases than ever before, 3rd Gen AMD EPYC™ Processors power the world’s most important workloads, delivering world record performance across several industry standard benchmarks.⁵

OPPORTUNITY AREAS

- **HCI**, where 3rd Gen AMD EPYC™ Processors’ superior support for VMware vSAN™ enhances both performance and VM density while helping reduce data risk and TCO.
- **Relational databases**, where advanced throughput reduces SQL⁶ and in-memory query times, helping you achieve actionable results faster.
- **HPC**, where advanced caching and architecture vastly increase the number of floating point computations per core, which can accelerate simulation timelines and shorten design cycles.⁷
- **Big Data analytics**, with faster map-reduce query response times and more queries per node.⁸
- **SDI** (software-defined infrastructure), with greater efficiency and densities for advanced virtualization and hybrid cloud.⁹
- **Confidential computing**, with advanced security features on the die, helping defend against threats and keep your data safe, when enabled in your data center or in the cloud.³
- **ML** (machine-learning) inference, with increased instructions per clock¹⁰ for faster learning and better responsiveness.
- **Financial services**, with higher per-core performance¹¹ and density for grid computing, the most important differentiating workload in this vertical.

The latest advancement in x86 server architectural innovation, AMD EPYC™ 7003 Series Processors boost performance and agility to empower innovation, consume and process more data and accelerate you to better business outcomes confidently—and simply. You’ll feel like you’re getting 28 hours in a day.

KEY TAKEAWAYS

Leave every prospect with these four facts:

1

3rd Gen AMD EPYC™ Processors bring industry-leading performance⁵ and a full feature set to a wide range of more granular core counts

2

3rd Gen AMD EPYC™ Processors help deliver fast, outstanding business value and lower TCO¹²

3

3rd Gen AMD EPYC™ Processors have modern security by design, with added memory integrity protection capabilities to help prevent malicious hypervisor-based attacks

4

3rd Gen AMD EPYC™ Processors bring power, efficiency and security features to a broader range of use cases than ever, whether in your data center or in the cloud

TO LEARN MORE, VISIT [AMD.COM/EPYC](https://www.amd.com/epyc) AND THE [AMD SALES RESOURCE CENTER](#)

¹ “451 Research: Multicloud and Hybrid Cloud: What is the state of enterprise adoption?”. 451 Research (video), 2019, cited at 0:27. https://mediacenter.ibm.com/media/1_rs0qe7qy (451 Research, 2019)

² Oracle’s Top 10 Cloud Predictions, 2020, page 2.

³ AMD Infinity Guard features vary by EPYC™ Processor generations. Infinity Guard security features must be enabled by server OEMs and/or Cloud Service Providers to operate. Check with your OEM or provider to confirm support of these features. Learn more about Infinity Guard at https://www.amd.com/en/technologies/infinity-guard_GD-183

⁴ See [amd.com/en/claims/epyc#faq-MLN-055](https://www.amd.com/en/claims/epyc#faq-MLN-055)

⁵ For a complete list of world records, see [amd.com/worldrecords](https://www.amd.com/worldrecords).

⁶ See [amd.com/en/claims/epyc#faq-MLN-006](https://www.amd.com/en/claims/epyc#faq-MLN-006)

⁷ See [amd.com/en/claims/epyc#faq-MLN-058K](https://www.amd.com/en/claims/epyc#faq-MLN-058K)

⁸ See [amd.com/en/claims/epyc#faq-MLN-069K](https://www.amd.com/en/claims/epyc#faq-MLN-069K)

⁹ See [amd.com/en/claims/epyc#faq-MLN-004](https://www.amd.com/en/claims/epyc#faq-MLN-004)

¹⁰ See [amd.com/en/claims/epyc#faq-MLN-003](https://www.amd.com/en/claims/epyc#faq-MLN-003)

¹¹ See [amd.com/en/claims/epyc#faq-MLN-057](https://www.amd.com/en/claims/epyc#faq-MLN-057)

¹² See [amd.com/en/claims/epyc#faq-MLNTCO-001](https://www.amd.com/en/claims/epyc#faq-MLNTCO-001)