

5 REASONS 4TH GEN AMD EPYC™ PROCESSORS WITH AMD 3D V-CACHE™ TECHNOLOGY CAN SOLVE SOME OF TODAY'S MOST COMPLEX TECHNICAL PROBLEMS

AT A GLANCE

With new AMD EPYC™ 9x84X processors featuring AMD 3D V-Cache™ technology, you can accelerate productivity for EDA, CFD, FEA, WFA and other complex technical workloads. Uncover new capabilities for your business while modernizing

efficiently, addressing sustainability goals, and continuing to target and manage today's most pressing business risks and requirements. Unlock exceptional performance and efficiency for your business with 4th Gen AMD EPYC processors.

1

ACCELERATE PRODUCTIVITY

Give your teams new levels of performance for their HPC workloads, delivered with AMD EPYC 9x84X processors that use AMD 3D V-Cache technology to accelerate memory-intensive, serially dependent technical workloads.

2

GET TO MARKET FASTER

Deliver advanced capabilities for streamlined design and product development so your products can get to market faster. Do more with your software to find cost-saving opportunities. Meet business goals with fast modeling, gain insights to improve designs and better predict outcomes.

3

MODERNIZE YOUR INFRASTRUCTURE

With the innovative design and x86 compatibility of AMD EPYC processors, you can simply modernize your infrastructure and manage the complexity of integrating interfaces and platforms. AMD EPYC processors work with your existing software, out of the box, making your system upgrades easy.

4

CREATE ENERGY-EFFICIENT SOLUTIONS

Discover new ways to optimize core usage, enable lower TCO and advance your sustainability and corporate responsibility goals. Enable rapid digital transformations while simultaneously delivering efficiency - often by deploying fewer servers, using less energy and space and its associated lower CO₂ generation to accomplish the same jobs.

5

CONFIDENTLY NAVIGATE TODAY'S BUSINESS RISKS, COMPLEXITIES AND REQUIREMENTS

Compute with confidence, knowing that your business is targeting and managing today's newest challenges with AMD Infinity Guard^{GD-183} and AMD commitments to compliance, corporate responsibility, supply chain resilience and firm long-term processor roadmaps.

Continue reading for more technical detail

TECHNICAL DEEP DIVE

#1 ACCELERATE PRODUCTIVITY

- Give your teams new levels of performance and productivity for their technical workloads with innovative processors optimized for memory-intensive, serially dependent applications. AMD EPYC 9x84X processors featuring AMD 3D V-Cache technology bring your data closer to the core to enable faster time-to-results.

#2 GET TO MARKET FASTER

- Raise the bar for breakthrough performance on workloads like CFD, EDA, FEA and WFA. AMD EPYC 9x84X processors with AMD 3D V-Cache technology can solve today's real challenges, right now.
- Gain improvements fast and then further optimize your systems to expand your business's capabilities.
- Comparing 2P 96-core AMD EPYC 9684X powered servers with 2P 56-core Intel Xeon Platinum 8480+ servers, you get:
 - ~115% more average CFD jobs per day running Ansys Fluent® 2022 test cases.¹
 - ~118% more FEA crash simulation jobs/day running Ansys LS-DYNA® test cases.²
 - ~82% composite average WRF performance uplift.³

#3 MODERNIZE YOUR INFRASTRUCTURE

- Streamline your data center infrastructure transformations with AMD x86 processors that can work with your existing software, out of the box. Accelerate deployment so you can spend more time on empowering your business.
- Configure your platform to address your most demanding applications without burdensome tradeoffs.
- Turn to the expansive AMD ecosystem of major OEM, ODM and ISV partners for smooth installations, upgrades and transformations.

#4 CREATE ENERGY-EFFICIENT SOLUTIONS

- Lay the groundwork for rapid transformation and efficiency gains to get more performance from the same or less data-center power, space or budget and its associated lower CO₂ generation equivalents.
- Use up to 43% fewer servers and 36% less power, with an estimated 38% lower 3-year TCO, when you choose 2P servers based on 32-core AMD EPYC 9384X over Intel® Xeon® Platinum 8462Y+ to deliver 1,500 OpenFOAM Geomean jobs per day.^{SP5TCO-048}

#5 CONFIDENTLY NAVIGATE TODAY'S BUSINESS RISKS, COMPLEXITIES AND REQUIREMENTS

- AMD Infinity Guard offers state-of-the-art security features that help decrease potential attack surfaces as software is booted, executed and processes your critical data.⁴
- AMD also enables Confidential Computing, addressing the special security concerns about migrating sensitive applications and data to the cloud.
- Compliance and corporate responsibility are more straightforward with the confidence that AMD works with suppliers to advance human rights, drive environmental sustainability and support supply chain resilience.⁵

4TH GEN AMD EPYC™ PROCESSORS WITH AMD 3D V-CACHE TECHNOLOGY



TOGETHER WE ADVANCE HIGH PERFORMANCE COMPUTING

LEARN MORE AT [AMD.COM/EPYC](https://www.amd.com/epyc).

1 See [amd-epyc-9004x-pb-ansys-fluent.pdf](#).

2 See [amd-epyc-9004x-pb-ansys-ls-dyna.pdf](#).

3 See [amd-epyc-9004x-pb-wrf.pdf](#).

4 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>.

5 See [amd.com/en/corporate-responsibility/supply-chain-responsibility](https://www.amd.com/en/corporate-responsibility/supply-chain-responsibility).

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