

# 5 REASONS TO REFRESH WITH AMD (MILLIONS IN SOFTWARE SAVINGS ARE JUST THE START)

## Rising software costs change the calculus on data center upgrades

Aging data center hardware and exploding software costs make modernizing infrastructure with AMD EPYC™ CPUs a smart business move. Imagine getting the latest performance and security features in a 3X smaller data center that can save millions in energy and software fees—savings so great a new data center could break even in as few as six months.<sup>1</sup>

1

### SAVE ON SOFTWARE: SLASH LICENSING FEES BY UP TO 61%<sup>1</sup>

Software fees are exploding as vendors shift from charging by server sockets or user seats to billing by CPU cores. Older, slower CPUs run fewer virtual machines per core, which means you pay more licensing fees to maintain the same service level. AMD EPYC high-performance CPUs can run more instances per core, giving you a “licensing loophole” that lets you maintain services with fewer cores and lower fees.

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### STRENGTHEN YOUR SECURITY: PROTECT YOUR DATA FROM THE SILICON UP

AMD Infinity Guard offers the advanced capabilities required to help defend against internal and external threats and keep your valuable data safe. Secure boot, memory encryption, and a suite of virtualization security technologies work together to mount a comprehensive defense.<sup>2</sup>

3

### MAKE ROOM FOR AI: SHRINK YOUR DATA CENTER FOOTPRINT UP TO 3X<sup>1</sup>

High-performance AMD EPYC CPUs can support the same number of users, virtual machines, and workloads as a legacy x86 data center with an estimated 71% fewer servers.<sup>1</sup> Fewer servers can mean less rack space, smaller data centers, and streamlined operations.



4

## CONSERVE ENERGY: CONSUME UP TO 50% LESS POWER OVER FIVE YEARS<sup>1</sup>

AMD EPYC CPUs are designed for energy efficiency, delivering more performance-per-watt than competing processors.<sup>3</sup> Relying on fewer, more efficient servers can significantly reduce your data center's energy costs. This helps save money and contributes to achieving your sustainability goals.

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## UNLOCK RESOURCES: POTENTIALLY SAVE MILLIONS WITH AMD EPYC CPUs<sup>1</sup>

Data centers built with faster, high-performance servers can generate millions of dollars in energy and software licensing savings alone compared to slower legacy servers. Use the savings to offset the cost of upgrading, scale up operations, or invest in AI infrastructure. AMD EPYC CPUs give you performance for current workloads with headroom for future growth.

# SEE HOW YOUR NEXT DATA CENTER CAN PAY FOR ITSELF WITH AMD EPYC CPUs

If you run virtual machine software that charges by the core, upgrading to servers with high-performance AMD EPYC CPUs can drastically lower software costs and deliver the security features, performance, and consolidation benefits of a new data center.

Contact your Connection Account Team for more information.



Business Solutions	Enterprise Solutions	Public Sector Solutions
1.800.800.0014	1.800.369.1047	1.800.800.0019
<a href="http://www.connection.com/AMD">www.connection.com/AMD</a>		

### Endnotes

- This scenario contains many assumptions and estimates and, while based on AMD internal research and best approximations, should be considered an example for information purposes only, and not used as a basis for decision making over actual testing. The Server & Greenhouse Gas Emissions TCO (total cost of ownership) Estimator Tool compares the selected AMD EPYC™ and Intel® Xeon® CPU based server solutions required to deliver a Target Performance Metric of 28700 units of integer performance as of April 10, 2025. This estimation reflects a 5 year time frame. Only power costs and software license costs contribute to OPEX. This analysis compares a 2P AMD 32 core EPYC\_9375F powered server with a SPECrate2017\_int\_base score of 1010 (<https://spec.org/cpu2017/results/res2024q4/cpu2017-20241105-45389.pdf>) compared to a 2P Intel Xeon 32 core Platinum\_8562Y+ based server with a SPECrate2017\_int\_base score of 729 (<https://spec.org/cpu2017/results/res2024q2/cpu2017-20240530-43623.pdf>) versus legacy 2P Intel Xeon 24 core Gold\_6252 based server with a SPECrate2017\_int\_base score of 287 (<https://spec.org/cpu2017/results/res2019q4/cpu2017-20190916-18249.pdf>). Environmental impact estimates made leveraging this data, using the Country / Region specific electricity factors from Country Specific Electricity Factors - 2024, and the United States Environmental Protection Agency Greenhouse Gas Equivalencies Calculator.
- AMD Infinity Guard features vary by EPYC™ Processor generations and/or series. 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 <http://www.amd.com/en/products/processors/server/epyc/infinity-guard.html>. (GD-183A)
- SPECpower\_ssj® 2008, SPECrate®2017\_int\_energy\_base, and SPECrate®2017\_fp\_energy\_base based on results published on SPEC's website as of 2/21/24. VMmark® server power-performance / server and storage power-performance (PPKW) based results published at <https://www.vmware.com/products/vmmark/results3x.1.html?sort=score>. The first 105 ranked SPECpower\_ssj®2008 publications with the highest overall efficiency overall\_ssj\_ops/W results were all powered by AMD EPYC processors. For SPECrate®2017 Integer (Energy Base), AMD EPYC CPUs power the first 8 top SPECrate®2017\_int\_energy\_base performance/system W scores. For SPECrate®2017 Floating Point (Energy Base), AMD EPYC CPUs power the first 12 SPECrate®2017\_fp\_energy\_base performance/system W scores. For VMmark® server power-performance (PPKW), have the top 5 results for 2- and 4-socket matched pair results outperforming all other socket results and for VMmark® server and storage power-performance (PPKW), have the top overall score. See <https://www.amd.com/en/claims/epyc4#faq-EPYC-028D> for the full list. For additional information on AMD sustainability goals see: <https://www.amd.com/en/corporate/corporate-responsibility/data-center-sustainability.html>. More information about SPEC® is available at <http://www.spec.org>. SPEC, SPECrate, and SPECpower are registered trademarks of the Standard Performance Evaluation Corporation. VMmark is a registered trademark of VMware in the US or other countries. (EPYC-028D)

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