

FULL SPEED AHEAD OF THE COMPETITION

Accelerate your database and analytics
to win the data race

AMD 



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Today, the faster a company can turn data into insights, the stronger their competitive advantage. Businesses are investing in advanced server solutions to accelerate transactions, expedite product development, and improve employee productivity.

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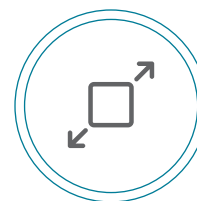
WHY YOUR DATABASE AND DATA ANALYTICS MATTER MORE THAN EVER

Companies are struggling to keep pace with the constant influx of data generated by everything from retail transactions to industrial sensors. The reality is that the speed at which a company can process transactions and convert data into action can either propel it ahead of its competitors or cause it to lag far behind.





THE CHALLENGES



INABILITY TO SCALE

Legacy servers typically can't scale quickly enough to handle nonstop data growth.



SHRINKING IT BUDGETS

IT is struggling to reduce operational budgets and stay within resource constraints.



NEW SECURITY THREATS

Increasingly sophisticated attacks can prey on the vulnerabilities of aging IT infrastructure.



THE SOLUTION: MODERN HIGH-PERFORMANCE DATABASE SOLUTIONS

Competitive businesses are investing in modern high-performance database solutions for cost-effective agility and scale, accelerated performance, and the latest security advancements. The outcomes include expedited product development, better customer experience, and greater employee productivity.



HOW TO OPTIMIZE YOUR DATA MANAGEMENT AND ANALYTICS

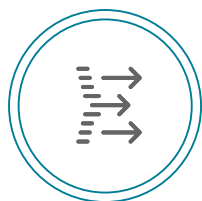
To achieve optimal performance and scalability for your database, consider solutions with the right level of processing power.





CHOOSE A DATABASE SOLUTION WITH THE RIGHT PROCESSOR

A database solution with a powerful CPU can help increase application performance, accelerating customer transactions and improving real-time business decision-making. Consider the following before making your final selection.



HIGH PERFORMANCE

Can it improve the performance of your database applications?

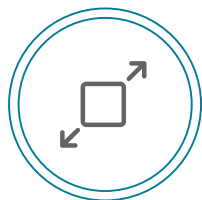
Examine performance benchmarks.



SECURITY FEATURES

Does it offer advanced data protection?

Find out if there are security features built into the hardware.



QUICK SCALABILITY

What is its capability to scale?

Explore on-premises and cloud solutions.



EASY INTEGRATION

Is it proven to work with your existing IT solutions?

Explore hardware and software certifications.



COST EFFICIENCIES

What is the total cost of ownership?

Review case studies.



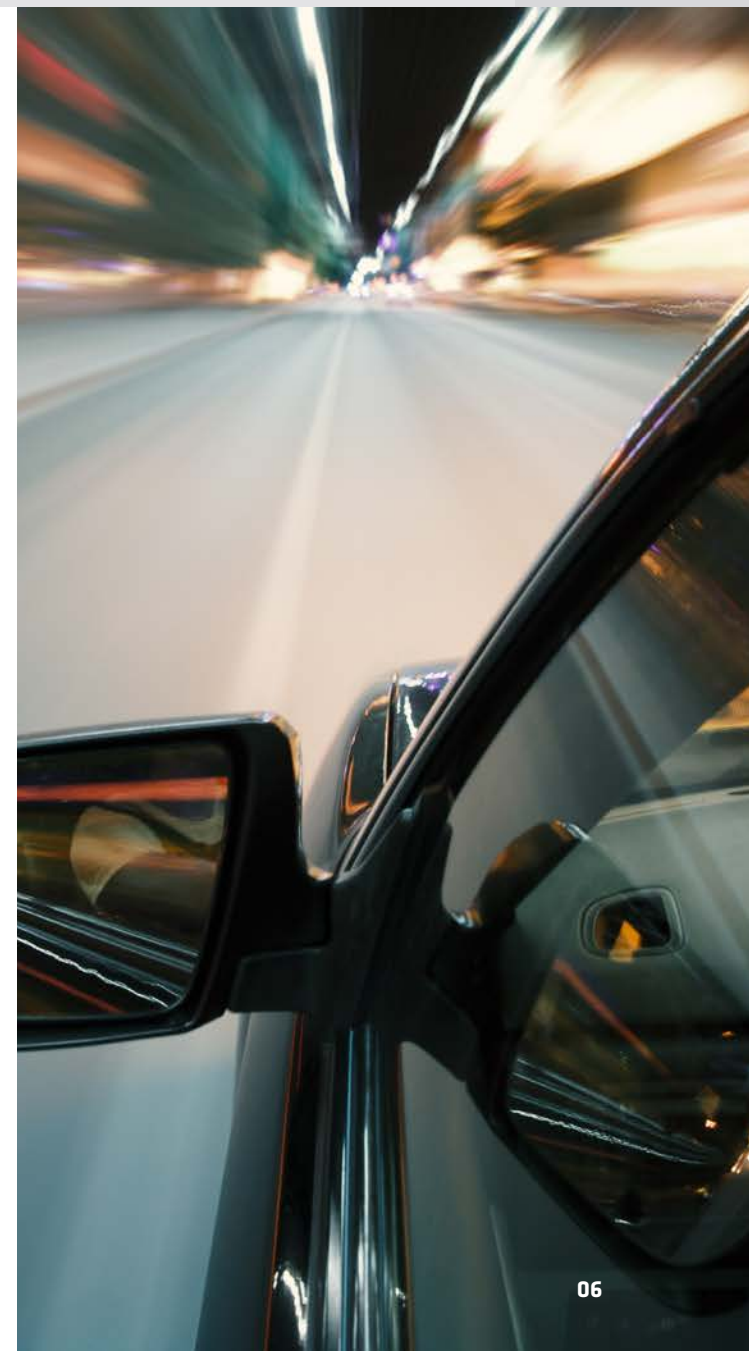
GAIN A COMPETITIVE ADVANTAGE WITH AMD EPYC™ PROCESSORS



1

Industry-leading Performance

AMD EPYC™ processors are high-performing options for databases and analytics challenging the data center economics status quo. For example, a two-socket AMD EPYC™ 7763 using Microsoft SQL Server® 2019 delivers 14% higher performance than a four-socket Intel® Xeon® Platinum 8280M processor-based solution.¹ For big data solutions, AMD EPYC™ can enable fast analytics and accelerate your business-critical insight with 60% higher performance on a one-socket solution compared to a two-socket “Cascade Lake Refresh” competitive solution.² Overall, AMD EPYC™ processors can deliver better performance across the most popular applications.





2

Maximize Your IT Investment

Realize the value of your IT investment quicker and lower your total cost of ownership with superior database performance. You can achieve up to an estimated 35% lower four-year total cost of ownership with servers powered by 3rd Gen AMD EPYC™ processors versus comparable 2nd Gen Intel® Xeon® processors.³ AMD gives you the freedom to choose between richly featured single-socket or two-socket servers, making AMD EPYC™ a great choice for maximizing performance per server while helping to minimize costs.

With the superior performance of AMD EPYC™ processors, your one- or two-socket servers can accomplish what our competitors can only deliver with two- and four-socket, respectively. Get 21% better price/performance with a two-socket Microsoft SQL Server® SQL solution powered by 3rd Gen AMD EPYC™ processors and 61% improvement on a NoSQL four-socket solution, than with servers based on 2nd Gen Intel® Xeon®.^{1,2}



3

AMD Infinity Guard

AMD EPYC™ processors are designed with a sophisticated suite of security features called AMD Infinity Guard.⁴ Built-in at the silicon level, it offers the advanced capabilities required to help business and cloud providers defend against internal and external threats – all with minor impact to system performance.

AMD Secure Processor

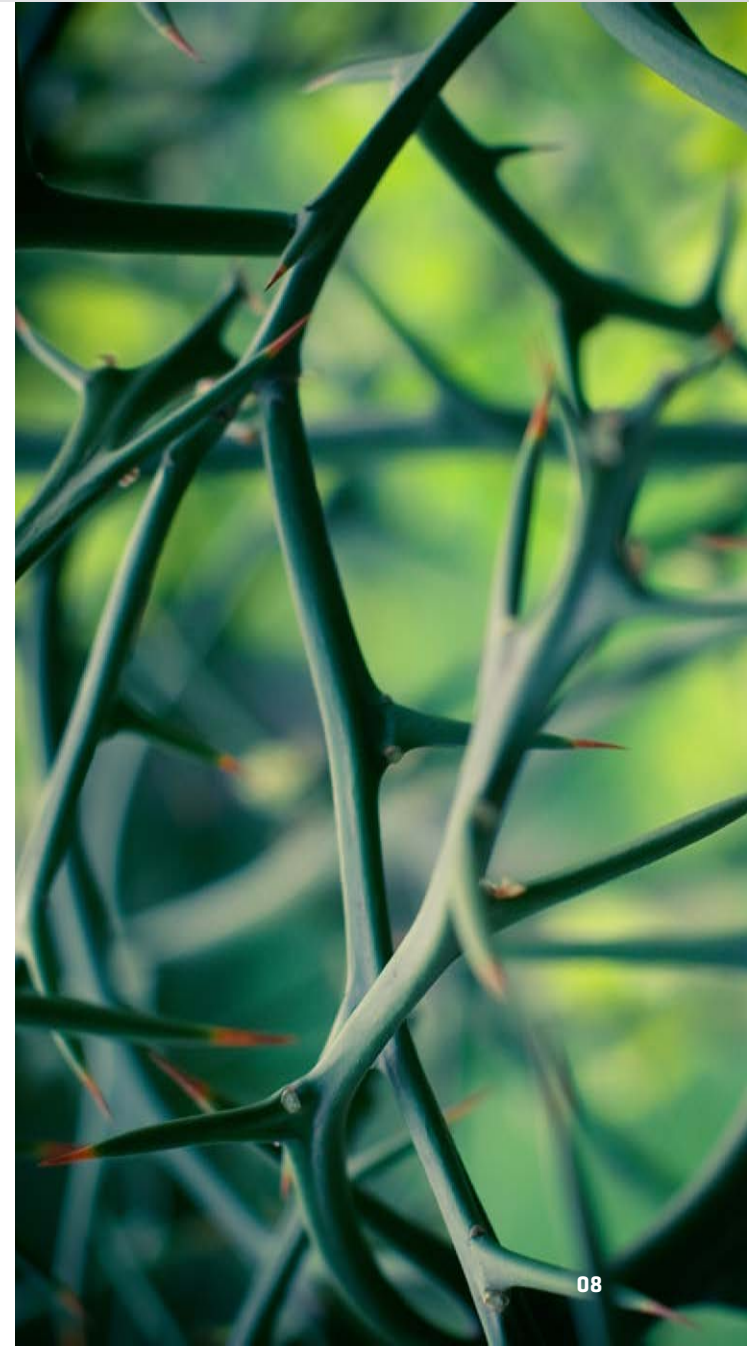
Provides a foundation for platform security, helping to protect against malicious firmware and BIOS modification.

Secure Memory Encryption

Helps defend against cold boot and physical attacks with full system memory encryption.

Secure Encrypted Virtualization

Encrypts and isolates VMs with one of up to 509 unique encryption keys known only to the processor. Only with AMD.





DATABASE AND DATA ANALYTICS SOLUTIONS POWERED BY AMD EPYC™ PROCESSORS

Server solutions powered by AMD EPYC™ processors have broad ecosystem support across major providers, as well as software certifications. Find the ideal solution from your preferred OEM or solution provider.



WHY AMD

We are the recognized market leader in CPU technology at a time when many businesses are modernizing their data centers. That's a responsibility we take seriously. It's why AMD is strengthening its commitment to drive data center innovation now and far into the future. Our solutions are backed by long-term roadmaps for continuous technological advancement and ongoing optimization of your IT investment.

AMD is the ideal partner today and tomorrow. We deliver more choice and outstanding value for your database with future-ready solutions that offer high performance, easy scalability, and enhanced security features. Learn more about AMD EPYC™ for your database.

[LEARN MORE](#)

- [LEARN MORE ABOUT AMD INFINITY GUARD](#)
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¹ TPC Benchmark™ H QphH@10000GB non-clustered comparison based on highest system results published as of 03/12/2021. Configurations: 2x AMD EPYC 7763 (1,883,497 QphH@10000GB, \$0.56/QphH@10000GB, <http://www.tpc.org/3351>, available 4/19/2021) versus 4x Intel Xeon Platinum 8280M (1,651,514 QphH@10000GB, \$0.71/QphH@10000GB, <http://www.tpc.org/3337>, available 4/2/2019) for 14% higher [1.14x the] query performance at 21% better price/performance. MLN-068

² TPC Benchmark Express™ HSph@3TB comparison based on highest system results published as of 03/12/2021. Configurations: 17-node, 1x AMD EPYC 75F3 (34.52 HSph@3TB, \$35,615.50/HSph@3TB, <http://www.tpc.org/5548>, available 3/15/2021, Framework 1 MapReduce) versus 17-node, 2x Intel Xeon Gold 6262V (21.52 HSph@3TB, \$91,276.91/HSph@3TB, <http://www.tpc.org/5544>, available 11/09/2020, Framework 2 Spark) for 60% higher [1.6x the] Hadoop Sort throughput performance at 61% better price/performance. MLN-069K

³ Estimate to deliver 250000 of integer performance based on SPECrate®2017_int_base performance. See <https://www.amd.com/en/claims/epyc#-faq-MLNTCO-001>

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>. GD-183

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