

# NOTHING STACKS UP TO EPYC: AMD EPYC™ 7003 SERIES PROCESSORS, INCLUDING NEW EPYC 7003 PROCESSORS WITH AMD 3D V-CACHE™ TECHNOLOGY

AMD continues to push the boundaries of data center performance, on-premises or in the cloud, helping improve time to value and boost efficiency.

## AT A GLANCE

What could you accomplish with 28 hours in a day? New capabilities in AI, HPC and analytics—and even virtualization and cloud—are driving progress in our rapidly changing world. How could you simultaneously improve performance, manage costs for the long haul and minimize the trade-offs of flexibility, efficiency and security while achieving more, faster? With 3rd Gen AMD EPYC Processors, you can boost performance, agility and innovation to accelerate toward better business outcomes.

**Nothing stacks up to AMD EPYC Processors.**

## TARGET AUDIENCE

CIOs, CTOs

VP of Infrastructure,  
Head of IT Architecture,  
IT Director

Head of HPC,  
HPC architect

Data center architect

Resellers, system integrators and consultants providing advisory or solution services

## SELL IT IN 5 SECONDS



### PERFORMANCE

The AMD EPYC Family of processors bring industry-leading performance with 250+ world records, so you can do more, faster thanks to fast processing and high throughput.<sup>1</sup>



### SECURITY

3rd Gen AMD EPYC Processors include AMD Infinity Guard<sup>2</sup>, which delivers an industry-leading modern hardware-based security feature set to help guard against increasingly sophisticated potential attacks as you boot, execute and process your critical data.



### BUILT FOR SOLUTIONS

3rd Gen AMD EPYC Processors offer performance, efficiency and security features for a broad range of use cases, whether in your data center or in the cloud.

## WHY IS IT A GREAT PRODUCT?

### A PLATFORM YOU CAN RELY ON—BUILT FOR SOLUTIONS, NOT JUST SPECS

Take advantage of innovative, leading-edge AMD processor technology with extended applicability thanks to predictable performance scaling, memory flexibility and CPU options with AMD 3D V-Cache for applications that need gobs of memory close to the core. Upgrade to 3rd Gen AMD EPYC Processor-based servers and enable new capabilities for your business in AI, ML, HPC, advanced data analytics and more.

### EASILY ADOPT A NEWLY FLEXIBLE AND EFFICIENT FOUNDATION

You must be able to scale up your servers quickly to keep up with data growth. Count on 3rd Gen AMD EPYC Processor-based servers to ease scalability and drive exceptional performance—whether on premises or in the cloud. 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

AMD delivers a leading-edge set of modern security features that help your organization take control of security and decrease risks to your most important asset – your data. AMD Infinity Guard offers innovative hardware-based security capabilities, which helps minimize potential attack surfaces as software is booted, executed, and processes your critical data. When enabled, AMD EPYC has features to strengthen VM isolation and data-in use protection, helping you guard your most valuable information while in-use by applications in the public cloud.

### DESIGNED FOR PERFORMANCE THAT REDEFINES YOUR POTENTIAL

Turn to 3rd Gen AMD EPYC Processors for the simple performance, 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.

## HOW DO WE COMPARE TO THE COMPETITION?

### ENTERPRISE:

When comparing 2P servers, AMD EPYC 7763 outperforms Intel® Xeon® Platinum 8380 processor-powered server by 42% on integer<sup>MLN-088B</sup> and 47% on Java®-based server workloads.<sup>MLN-092B</sup>

### HPC PERFORMANCE:

AMD EPYC™ 72F3: The World's Highest Performance-Per-Core Processor for HPC applications.<sup>MLN-058B</sup>

### HPC – COMPUTATIONAL FLUID DYNAMICS:

Get up to 2.18x max (1.88x avg) more Ansys® CFX® CFD simulations done each day with servers based on 2x 32-core EPYC 7573X compared to 2x 32-core Xeon 8362.<sup>MLNX-010A</sup>

### VIRTUALIZED IT:

2P 3rd Gen AMD EPYC 7763 outperforms 2P 3rd Gen Intel Xeon 8380 on matched pair VMmark® 3.1 by 52% and supports 71% more VMs.<sup>MLN-102</sup>

### VDI:

Get up to ~2.1x the “maximum knowledge worker” desktop sessions while meeting Login VSI™ rating of “very good” QoS response times, when comparing 2P servers with AMD EPYC 7763 vs Intel Xeon Gold 6258R.<sup>MLN-004</sup>

### DATABASE:

A 2P AMD EPYC 7763 powered server delivers 72% more SQL Server® OLTP transactions than a 2P Intel Xeon 8280 powered server.<sup>MLN-091</sup>

### DATA ANALYTICS:

A 1P AMD EPYC 75F3 powered server provides 127% more TPC Express Benchmark™ HS v2 HSph @ 3 TB MapReduce framework and 72% better price/performance than a 2P Intel Xeon Gold 6262V powered server.<sup>MLN-070</sup>

### EFFICIENT PERFORMANCE:

A 2x AMD EPYC 7763 powered server is 74% more energy efficient running SPECpower\_ssj®2008 than a 2x 3rd Gen Intel® Xeon® Platinum 8380 powered server.<sup>MLN-094A</sup>

## READY TO MAKE THE SWITCH? NOTHING STACKS UP TO AMD EPYC PROCESSORS

### SALES CONTACT

[AMD Server Expert](#) or  
[explore.amd.com/  
server-request/request](#)

### ADDITIONAL RESOURCES

AMD Partner Hub at [amd.com/partner](#)  
AMD EPYC Processor Selector Tools at [amd.com/en/processors/epyc-tools](#)  
AMD EPYC Technical Briefs at [amd.com/en/processors/server-tech-docs/search](#)  
AMD EPYC [Customer Success Stories](#)

For details on the footnotes used in this document, visit [amd.com/en/claims/epyc](#) and [amd.com/en/claims/epyc3x](#).

- 1 As of 3/21/22. For a full list of World Records for the AMD EPYC family of processors see [amd.com/worldrecords](#)
- 2 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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