

# AMD EPYC™ 7003 SERIES PROCESSORS

## HIGH PERFORMANCE AND EFFICIENCY FOR MAINSTREAM COMPUTING NEEDS

### AT A GLANCE

With the introduction of new 8- and 16-core AMD EPYC™ 7003 Series processors, we extend the value of our 3rd Gen CPUs including low system-level acquisition cost, excellent price/performance, and high energy efficiency that continues to address mainstream data center computing needs.



### ESTABLISHED MAINSTREAM VALUE

**Extended availability through 2026 lets you the adopt the latest technology when your organization is ready**

**Cost-effective and proven:** Many IT organizations have standardized their data center architecture on cost-effective, proven technologies such as AMD EPYC 7003 Series processors. They may face challenges in choosing how to advance their data centers nondisruptively. Newer generations of server CPUs require DDR5 memory and PCIe® Gen 5 storage and I/O devices. The latest 4th Gen EPYC processors can deliver impressive performance gains, but at the premium of adopting new memory and I/O devices that are still high on the cost curve.

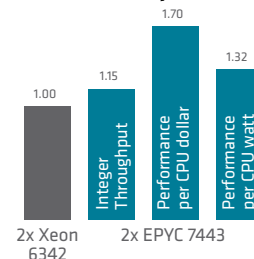
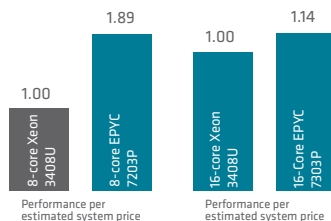
**Workhorse data center portfolio:** AMD EPYC 7003 Series processors have set a standard for performance and efficiency for a generation of mainstream servers with the combination of powerful 'Zen 3' cores, scalability from 8 to 64 cores per processors, up to 8 channels of fast, inexpensive DDR4 memory and up to 128 lanes of high-throughput PCIe Gen 4 I/O. With strong performance across the portfolio and attractive pricing, you can cost-effectively extend the value of your IT infrastructure investment by choosing 3rd Gen AMD EPYC processors.



### PROVEN ENTERPRISE SOLUTIONS

**Extraordinary value, and efficiency for mainstream business-critical applications and enterprise server infrastructure**

**More performance, impressive efficiency and value:** Comparing 2-socket 3rd Gen EPYC processor-powered servers, the 32-core EPYC 7543 delivers 12% faster integer throughput, 24% more performance per CPU watt, and 36% more performance per CPU dollar than a 32-core Intel® Xeon® 8358. [MLN-0988](#) Similarly, a 2-socket server with 24-core EPYC 7443 CPUs delivers 15% more integer throughput, 70% more performance per CPU dollar, and 32% more performance per CPU watt compared to a 2-socket server with 24-core Xeon 6342 CPUs. [MLN-099D](#)



**Gain higher performance per estimated system price than 4th Gen Intel Xeon:** For mainstream 8- and 16-core servers running SPECrate®2017\_int\_base, our 3rd Gen CPUs outperform Intel's 4th Gen CPUs. Comparing single-socket 8-core servers, you gain ~89% better performance per estimated system price when choosing an 8-core 3rd Gen AMD EPYC 7203P versus an 8-core 4th Gen Intel Xeon Bronze 3408U CPU. [MLN-201](#) Comparing single-socket 16-core servers, a 3rd Gen AMD EPYC 7303P delivers ~14% more performance per estimated system price than a 16-core Intel Xeon Gold 6426Y CPU. [MLN-207](#)



### WIDELY DEPLOYED

**Extensive array of proven enterprise solutions offered and supported by industry-leading server vendors**

Solutions based on 3rd Gen EPYC processors are widely deployed across leading enterprises, government, academic institutions, and the proven enterprise solutions offered by server vendors and supported by cloud service providers. They are a solid choice for mainstream business applications, data management, virtual desktop, and Internet infrastructure applications.

# AMD EPYC™ 7003 SERIES PROCESSORS

| MODEL  | CORES | THREADS | BASE FREQ. (GHZ) | UP TO MAX BOOST FREQ. (GHZ) <sup>a</sup> | TDP (W) | L3 CACHE (MB) | DDR CHANNELS | UP TO MAX DDR MT/S. (1DPC) | PER-SOCKET THEORETICAL MEMORY BANDWIDTH (GB/S) | PCIe® GEN 4 LANES | 2P/1P |
|--|-------|---------|------------------|--|---------|---------------|--------------|----------------------------|--|-------------------|-------|
| 7763   | 64    | 128     | 2.45             | 3.50                                     | 280     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7713   | 64    | 128     | 2.00             | 3.675                                    | 225     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7713P  |       |         |                  |  |         |               |              |                            |  |                   | 1P    |
| 7663   | 56    | 112     | 2.00             | 3.50                                     | 240     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7663P  |       |         |                  |  |         |               |              |                            |  |                   | 1P    |
| 7643   | 48    | 96      | 2.30             | 3.60                                     | 225     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7643P  |       |         |                  |  |         |               |              |                            |  |                   | 1P    |
| 7543   | 32    | 64      | 2.80             | 3.70                                     | 225     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7543P  |       |         |                  |  |         |               |              |                            |  |                   | 1P    |
| 7513   | 32    | 64      | 2.60             | 3.65                                     | 200     | 128           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7453   | 28    | 56      | 2.75             | 3.45                                     | 225     | 64            | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7443   | 24    | 48      | 2.85             | 4.00                                     | 200     | 128           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7443P  |       |         |                  |  |         |               |              |                            |  |                   | 1P    |
| 7413   | 24    | 48      | 2.65             | 3.60                                     | 180     | 128           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7343   | 16    | 32      | 3.20             | 3.90                                     | 190     | 128           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7313   | 16    | 32      | 3.00             | 3.70                                     | 155     | 128           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7313P  |       |         |                  |  |         |               |              |                            |  |                   | 1P    |
| 7303   | 16    | 32      | 2.40             | 3.40                                     | 130     | 64            | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7303P  |       |         |                  |  |         |               |              |                            |  |                   | 1P    |
| 7203   | 8     | 16      | 2.80             | 3.40                                     | 120     | 64            | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7203P  |       |         |                  |  |         |               |              |                            |  |                   | 1P    |
| AMD EPYC 7003 PROCESSORS WITH AMD 3D V-CACHE™  |       |         |                  |  |         |               |              |                            |  |                   |       |
| 7773X  | 64    | 128     | 2.20             | 3.50                                     | 280     | 768           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7573X  | 32    | 64      | 2.80             | 3.60                                     | 280     | 768           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7473X  | 24    | 48      | 2.80             | 3.70                                     | 240     | 768           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 7373X  | 16    | 32      | 3.05             | 3.80                                     | 240     | 768           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| HIGH-FREQUENCY AMD EPYC 7003 SERIES PROCESSORS |       |         |                  |  |         |               |              |                            |  |                   |       |
| 75F3   | 32    | 64      | 2.95             | 4.00                                     | 280     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 74F3   | 24    | 48      | 3.20             | 4.00                                     | 240     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 73F3   | 16    | 32      | 3.50             | 4.00                                     | 240     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |
| 72F3   | 8     | 16      | 3.70             | 4.10                                     | 180     | 256           | 8            | 3200                       | 204.8  | 128               | 2P/1P |

a. Maximum boost for AMD EPYC processors is the maximum frequency achievable by any single core on the processor under normal operating conditions for server systems. EPYC-18.

## FOOTNOTES

1. AMD Infinity Guard features vary by EPYC processor generations. Infinity Guard 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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