

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.

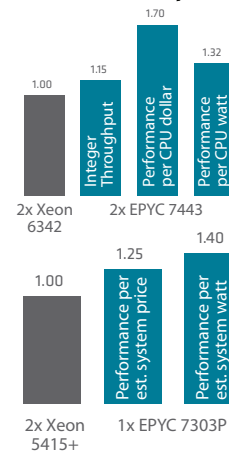


PROVEN ENTERPRISE SOLUTIONS

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](#)

Capitalize on the value of single-socket servers: Comparing servers with 24 total CPU cores, you gain ~47% better performance per estimated system watt and 30% better performance per estimated system price while delivering comparable integer performance when choosing a single-processor 3rd Gen AMD EPYC 7443P versus a 2-socket server with two 4th Gen Intel Xeon Silver 4410Y CPUs. [MLN-204](#) Similarly, comparing servers with 16 total CPU cores, a single-socket AMD EPYC 7303P processor-powered server delivers 25% more performance per estimated system price and 40% better performance per estimated system watt than a 2-socket server with Intel Xeon Gold 5415+ CPUs running SPECrate®2017_int_base. [MLN-206](#)



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) ^a	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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