AMD RYZEN™ 3000 AND 5000 SERIES PROCESSORS

AMD RYZEN PERFORMANCE FOR DEDICATED HOSTING SERVERS

AT A GLANCE

AMD Ryzen™ 3000 and 5000 series processors are a perfect match for dedicated hosting environments. AMD Ryzen processor–powered servers offer high clock speeds, high core counts, and power efficiency that can accelerate time to profit for hosters. End customers enjoy high performance and low latency for e-commerce, code-development, cloud gaming, content-creation, and virtual private server (VPS) workloads.

LEADERSHIP PERFORMANCE

High core counts and frequencies open the door to high performance

Dedicated hosting customers rely on high performance to get the job done. And AMD Ryzen processors deliver. These processors offer up to 16 high-performance cores for powerful parallel processing. High frequencies of up to 4.9GHz help to ensure low-latency responses for applications like cloud gaming.[1] High-speed input/output (I/O) enables fast storage.

SERVER-GRADE PLATFORMS

Error correcting code (ECC) and baseboard management controller (BMC) capabilities for 24/7 operations

AMD Ryzen processors provide support for an ECC-enabled memory subsystem that can automatically correct data errors to protect your customers' systems from potential crashes or inadvertent changes to data. Customers can remotely manage servers with BMC and iKVM (remote control capabilities for keyboard, video, and mouse). Both standard and density-optimized rackmount platform options are available from ASRock® Rack and GIGABYTE™ Technology.

LOW TOTAL COST OF OWNERSHIP (TCO)

Low infrastructure costs help hosters monetize assets faster

AMD Ryzen processors help enable a low-cost infrastructure for outstanding performance-per-dollar. An innovative chiplet processor design helps improve efficiency, which, in turn, can lower operating expenses (OPEX) and accelerate the time to profit of your dedicated server offerings.

SMALL FOOTPRINT

Power-efficient servers optimize hoster rack space

Based on the same advanced architecture as AMD EPYC™ server processors, AMD Ryzen processors offer endless possibilities. Processor thermal design power (TDP) as low as 65W helps to reduce power usage, support sustainability efforts, and optimize rack utilization.

BUILT-IN SECURITY FEATURES

A modern, multi-layered approach helps protect sensitive data

Dedicated hosting customers can benefit from the security capabilities that come from the integrated AMD Secure Processor, an AES-128 encryption key for enhanced memory protection, and NIST SP 800-90 compliance.

AMD RYZEN™ 3000 AND 5000 SERIES PROCESSORS

MODEL	OPN	CORES/ THREADS	BASE FREQ. (GHZ)	UP TO MAX. BOOST FREQ. (GHZ)[1]	TDP (W)	PCIe® SUPPORT[2]	L3 CACHE (MB)
AMD Ryzen 9 5950X	100-000000059A	16/32	3.4	4.9	105	Gen 4	64
AMD Ryzen 9 5900X	100-000000061A	12/24	3.7	4.8	105	Gen 4	64
AMD Ryzen 7 5800X	100-000000063A	8/16	3.8	4.7	105	Gen 4	32
AMD Ryzen™ 7 5700X	100-000000926A	8/16	3.4	4.6	65	Gen 4	32
AMD Ryzen 5 5600X	100-000000065A	6/12	3.7	4.6	65	Gen 4	32
AMD Ryzen 5 5600	100-000000927A	6/12	3.5	4.4	65	Gen 4	32
AMD Ryzen 5 5500	100-0000000457A	6/12	3.6	4.2	65	Gen 4	16
AMD Ryzen 9 3950X	100-000000051A	16/32	3.5	4.7	105	Gen 4	64
AMD Ryzen 9 3900X	100-000000023A	12/24	3.8	4.6	105	Gen 4	64
AMD Ryzen 9 3900	100-000000070A	12/24	3.1	4.3	65	Gen 4	64
AMD Ryzen 9 PRO 3900	100-000000072A	12/24	3.1	4.3	65	Gen 4	64
AMD Ryzen 7 3800X	100-000000025A	8/16	3.9	4.5	105	Gen 4	32
AMD Ryzen 7 3700X	100-000000071A	8/16	3.6	4.4	65	Gen 4	32
AMD Ryzen 7 PRO 3700	100-000000073A	8/16	3.6	4.4	65	Gen 4	32
AMD Ryzen 5 3600X	100-000000022A	6/12	3.8	4.4	95	Gen 4	32
AMD Ryzen 5 3600	100-000000031A	6/12	3.6	4.2	65	Gen 4	32

RESOURCES

AMD Ryzen Solutions for Dedicated Hosting: www.amd.com/en/solutions/hosting
ASRock Rack Solutions using AMD Ryzen Processors: www.asrockrack.com/general/products.asp#AMD

FOOTNOTES

1. Maximum boost for AMD Ryzen processors is the maximum frequency achievable by a single core on the processor running a bursty single-threaded workload. Maximum boost will vary based on several factors, including, but not limited to: thermal paste, system cooling, motherboard design and BIOS, the latest AMD chipset driver, and the latest OS updates. Learn more.
2. Specific PCIe generation and number of lanes on the AMD Ryzen™ processor–based platforms can vary depending on each motherboard design and chipset implementation.