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<sup>1</sup> SP5-130: Mechanical® Release 2022 R2 test cases benchmark comparison based on AMD measurements as of 10/19/2022. Configurations: 2x 32-core Intel Xeon Platinum 8362 vs. vs. 2x 32-core EPYC 9374F for ~1.5x the rating performance. System Configurations: 2P AMD EPYC 9374F (32 cores/socket, 64 cores/node); 1.5 TB (24x) Dual-Rank DDR5-4800 64GB DIMMs, 1DIMM per channel; 1 x 256 GB SATA (OS) | 1 x 1 TB NVMe (data); BIOS Version 1002, SMT=off, Determinism=performance, NPS=4, TDP/ PPT=400; RHEL 8.6; OS settings: Clear caches before every run, NUMA balancing 0, randomize\_va\_space 0 vs. 2P Intel Xeon Platinum 8362 (32 cores/socket, 64 cores/node); 1 TB (16x) Dual-Rank DDR4-3200 64GB DIMMs, 1DIMM per channel; 1 x 256 GB SATA (OS) | 1 x 1 TB NVMe (data); BIOS Version 1.6.5, SMT=off, HPC Profile; OS settings: Clear caches before every run, NUMA balancing 0, randomize\_va\_space 0. Results may vary based on factors such as software version, hardware configurations and BIOS version and settings.

<sup>2</sup> SP5-112: LS-DYNA® Version 2021 R1 Nonlinear FEA benchmark comparison based on AMD measurements as of 09/18/2022. Tests run: obd10m, car2car, obd10m-short, ls-3cars and ls-neon. System Configurations: 2P AMD EPYC 9374F (32 cores/socket, 64 cores/node); 1.5 TB (24x) Dual-Rank DDR5-4800 64GB DIMMs, 1DIMM per channel; 1 x 256 GB SATA (OS) | 1 x 1 TB NVMe (data); BIOS Version 1002C, SMT=off, Determinism=performance, NPS=4, TDP/PPT=400 versus 2P Intel Xeon Platinum 8362 (32 cores/socket, 64 cores/node); 1 TB (16x) Dual-Rank DDR4-3200 64GB DIMMs, 1DIMM per channel; 1 x 256 GB SATA (OS) | 1 x 1 TB NVMe (data); BIOS Version 1.6.5, SMT=off, HPC Profile. Common: RHEL 8.6 OS settings: Clear caches before every run, NUMA balancing 0, randomize\_va\_space 0. Results may vary due to factors including system configurations, software versions and BIOS settings.

<sup>3</sup> SP5-116: CFX 2022 R2 Solver, Nonlinear CFD benchmark comparison based on AMD measurements as of 9/16/22. Tests used: cfx\_100, cfx\_50, cfx\_10, cfx\_Imans, cfx\_pump. Configurations: 2P AMD EPYC 9374F (32 cores/socket, 64 cores/node); 1.5 TB (24x) Dual-Rank DDR5-4800 64GB DIMMs, 1DIMM per channel; 1 x 256 GB SATA (OS) | 1 x 1 TB NVMe (data); BIOS Version 1002C, SMT=off, Determinism=performance, NPS=4, TDP/ PPT=400 versus 2P Intel Xeon Platinum 8362 (32 cores/socket, 64 cores/node); 1 TB (16x) Dual-Rank DDR4-3200 64GB DIMMs, 1DIMM per channel; 1 x 256 GB SATA (OS) | 1 x 1 TB NVMe (data); BIOS Version 1.6.5, SMT=off, HPC Profile. Common: RHEL 8.6 OS settings: Clear caches before every run, NUMA balancing 0, randomize\_va\_space 0. Results may vary due to factors including system configurations, software versions and BIOS settings.

<sup>4</sup>SP5-035A: Fluent® Release 2022 R2 test cases benchmark comparison based on AMD measurements as of 10/19/2022. Configurations: 2x 32-core Intel Xeon Platinum 8362 vs. vs. 2x 32-core EPYC 9374F for ~1.75x the rating performance. Results may vary.

<sup>&</sup>lt;sup>5</sup> https://www.amd.com/system/files/documents/epyc-9004-pb-ansys-generational.pdf