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# AMD EPYC™ Processors Accelerate High Performance Computing Capability in Perlmutter Supercomputer

— *New system will enable next-gen research on clean energy, climate and more for the National Energy Research Scientific Computing Center* —

SANTA CLARA, Calif., May 27, 2021 (GLOBE NEWSWIRE) -- [AMD](#) (NASDAQ: AMD) today joined the National Energy Research Scientific Computing Center (NERSC), Lawrence Berkeley National Laboratory (Berkeley Lab) and others in unveiling the new *Perlmutter* supercomputer powered by [AMD EPYC™ 7003 Series processors](#).

The new supercomputer at Berkeley Lab will provide four times the computational power currently available at NERSC, making it among the fastest supercomputers in the world for scientific simulation, data analysis and artificial intelligence (AI). In development since 2019, the new system takes advantage of the industry-leading HPC workload performance<sup>1</sup> offered by the new 3<sup>rd</sup> Gen AMD EPYC processors to facilitate faster and advanced research in climate, clean energy, semiconductors, microelectronics and quantum information science.

“AMD is extremely proud to work with our strategic partners to push the boundaries of HPC in areas including scientific and environmental research, medical advancements and artificial intelligence,” said Forrest Norrod, senior vice president and general manager, Data Center and Embedded Solutions Business Group. “The new *Perlmutter* supercomputer from NERSC, will drive the next wave of critical discoveries that help to solve the world’s biggest challenges.”

“Our work with key partners like AMD enables us to significantly increase our computing power and broaden our spectrum of scientific capabilities,” said NERSC Director Sudip Dosanjh. “*Perlmutter* will enable a larger range of applications than previous NERSC systems and is the first NERSC supercomputer designed from the start to meet the needs of both simulation and data analysis.”

*Perlmutter*, named in honor of Nobel Prize-winning astrophysicist Saul Perlmutter, is being delivered in two phases. Phase 1 is now being deployed and features 1,536 nodes, each with one AMD EPYC 7763 processor and four NVIDIA NVlink-connected A100 Tensor Core GPUs. Phase 1 also includes a 35 PB all-flash Lustre file system that will provide very high-bandwidth storage. Expected later this year, phase 2 will add another 3,072 CPU-only nodes, each with two AMD EPYC 7763 processors and 512 GB of memory per node.

## Supporting Resources

- Learn more about AMD EPYC Processors [here](#)

- See more about [Perlmutter](#)
- Read more about [AMD Exascale Computing Technologies](#)
- See demos, videos and more about the [AMD EPYC 7003 series processors](#)
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## About AMD

For more than 50 years AMD has driven innovation in high-performance computing, graphics and visualization technologies — the building blocks for gaming, immersive platforms and the datacenter. Hundreds of millions of consumers, leading Fortune 500 businesses and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work and play. AMD employees around the world are focused on building great products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) [website](#), [blog](#), [Facebook](#) and [Twitter](#) pages.

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<sup>1</sup> MLN-086: Based on SPECrate®\_fp\_base of 4/14/2021, 2x AMD EPYC™ 7763 scored 651 <http://spec.org/cpu2017/results/res2021q1/cpu2017-20210219-24944.html>; 2x Intel® Xeon® Platinum 8380 scored 472 <https://spec.org/cpu2017/results/res2021q2/cpu2017-20210330-25515.html>. SPEC®, SPECrate® and SPEC CPU® are registered trademarks of the Standard Performance Evaluation Corporation. See [www.spec.org](http://www.spec.org) for more information.

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