



Texas Advanced Computing Center's Stampede3 Fueled by the Latest Intel HPC Technologies

3.8X faster
runs of high-performance computing codes on Intel Xeon CPU Max Series.¹

" We believe the high bandwidth memory of The Xeon Max CPU nodes will help deliver better performance than any other CPU that our users have seen before."

Dan Stanzione,
Director, TACC

The Texas Advanced Computing Center (TACC) is a leading supercomputing facility for academic researchers in the U.S. When looking to replace the Stampede2 system, TACC evaluated the performance of scientific codes on the Intel® Xeon® CPU Max Series with High Bandwidth Memory (HBM). To evaluate the performance, TACC used a host of real-world HPC applications that are part of the NSF-funded Characteristic Science Applications (CSA) program and the Weather Research and Forecasting Model (WRF). Assessing 13 of the CSA codes and WRF, TACC's evaluation shows considerable performance boosts using both DDR5 and HBM-only modes of the Intel Xeon CPU Max Series compared to Frontera. Speedup also comes in the form of scientists not needing to spend time on porting codes across different systems and their CPUs.

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¹ For more complete information about performance and benchmark results, visit <https://www.intel.com/content/www/us/en/customer-spotlight/stories/tacc-engineering-research-in-hpc-video.html>