

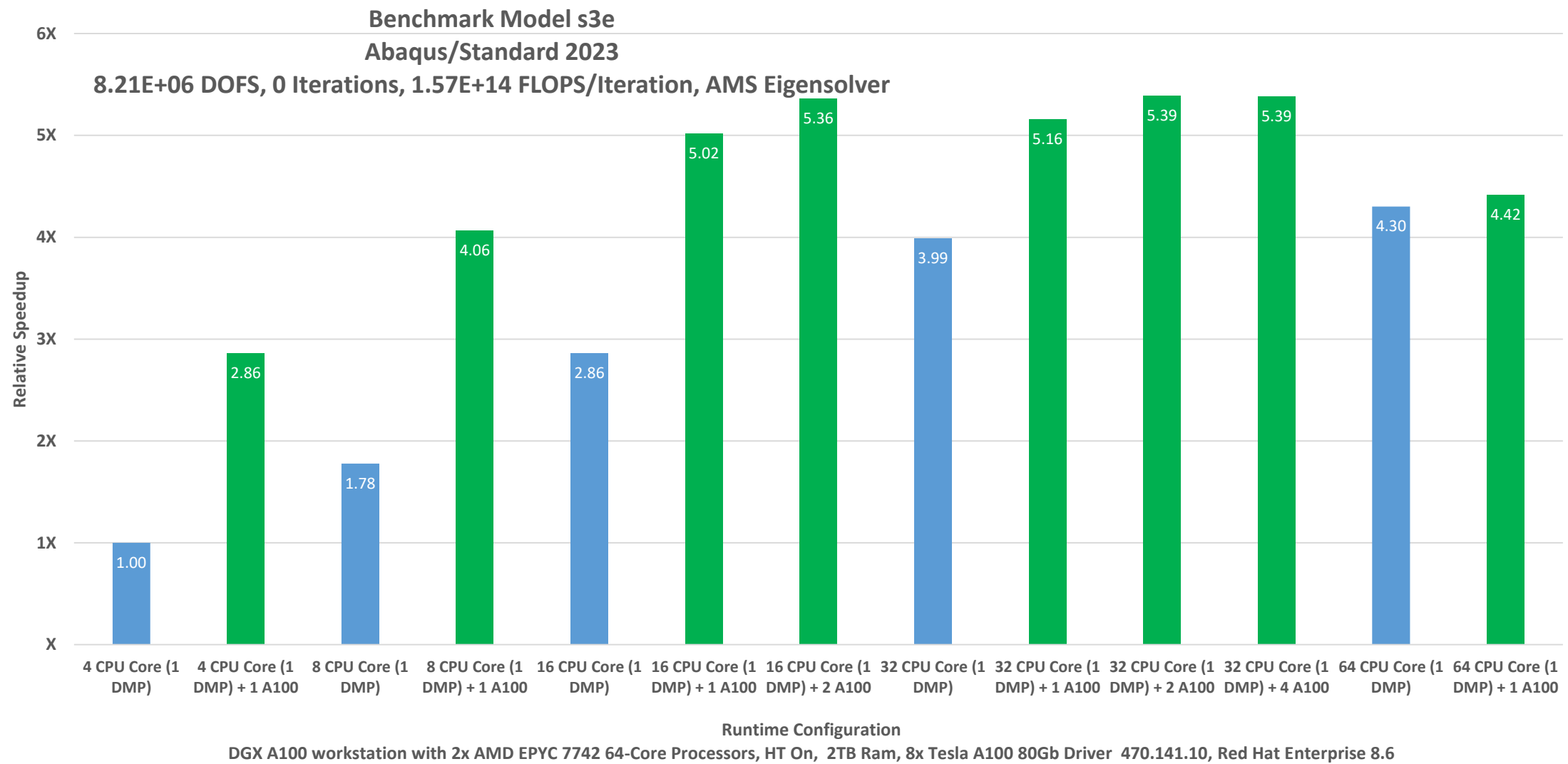
Abaqus/Standard 2023 Benchmarks

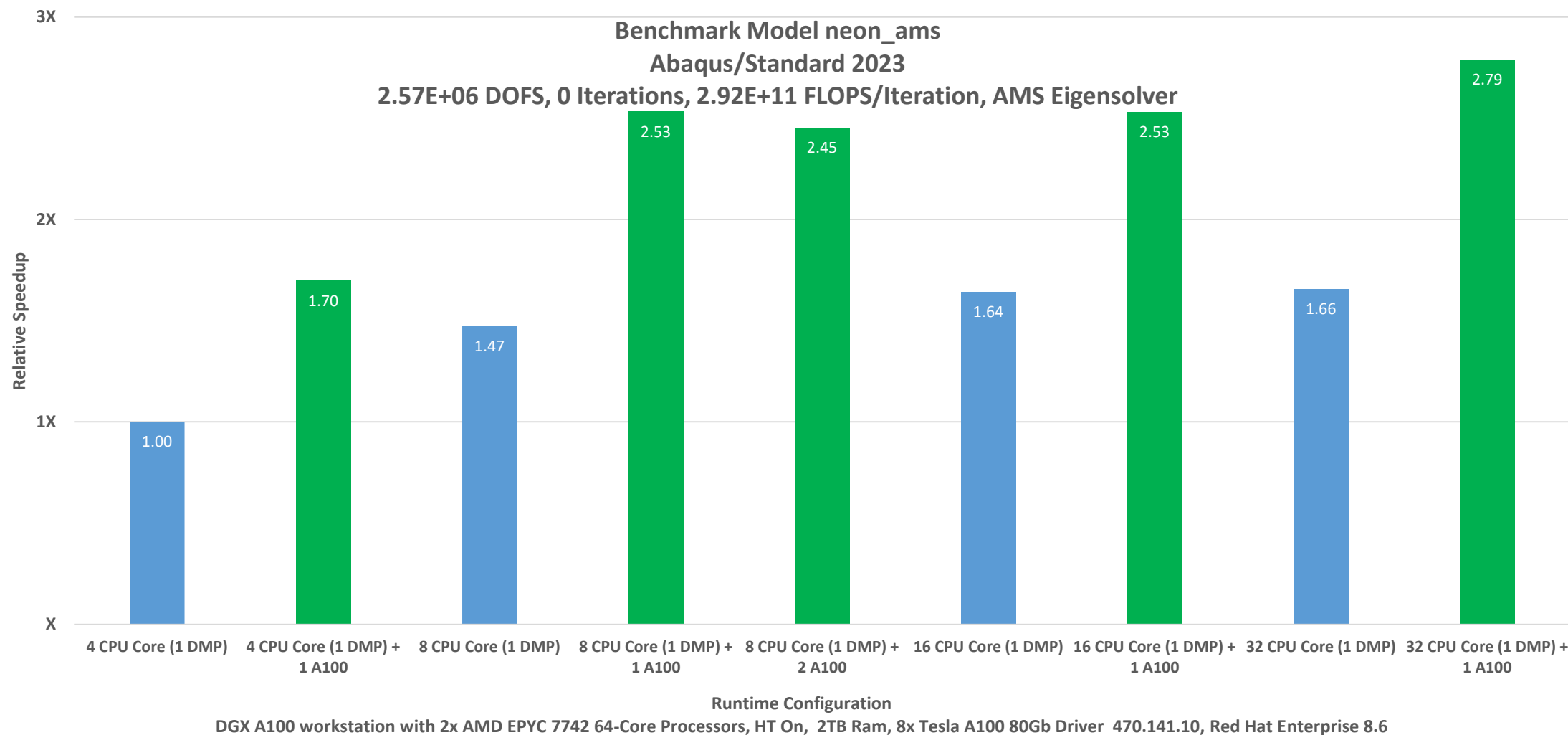
Run on Nvidia DGX A100 machine provided by Nvidia

All charts show scaling of Abaqus/Standard workflows for CPU and
compare with addition of GPU Acceleration

Number of cores for baseline depends on the model

Q4 2022

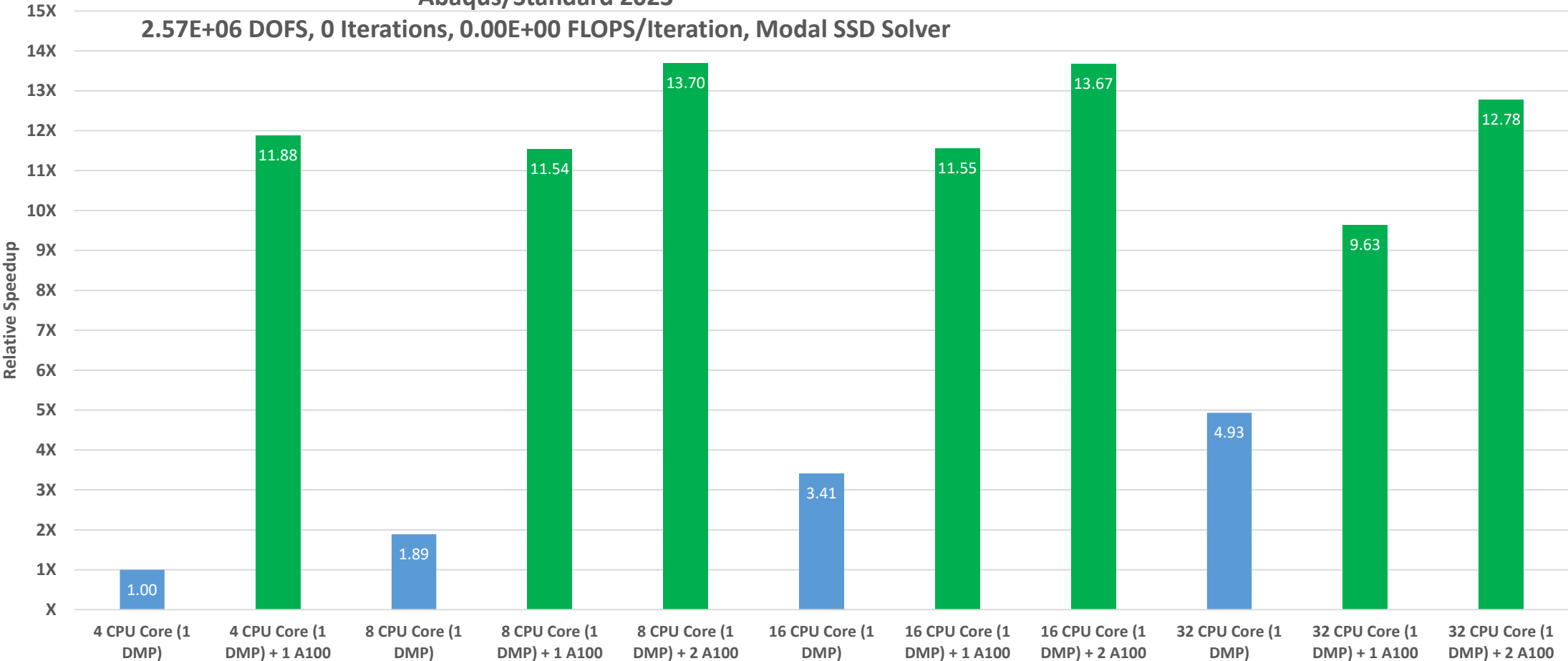




Benchmark Model neon_modal_ssd

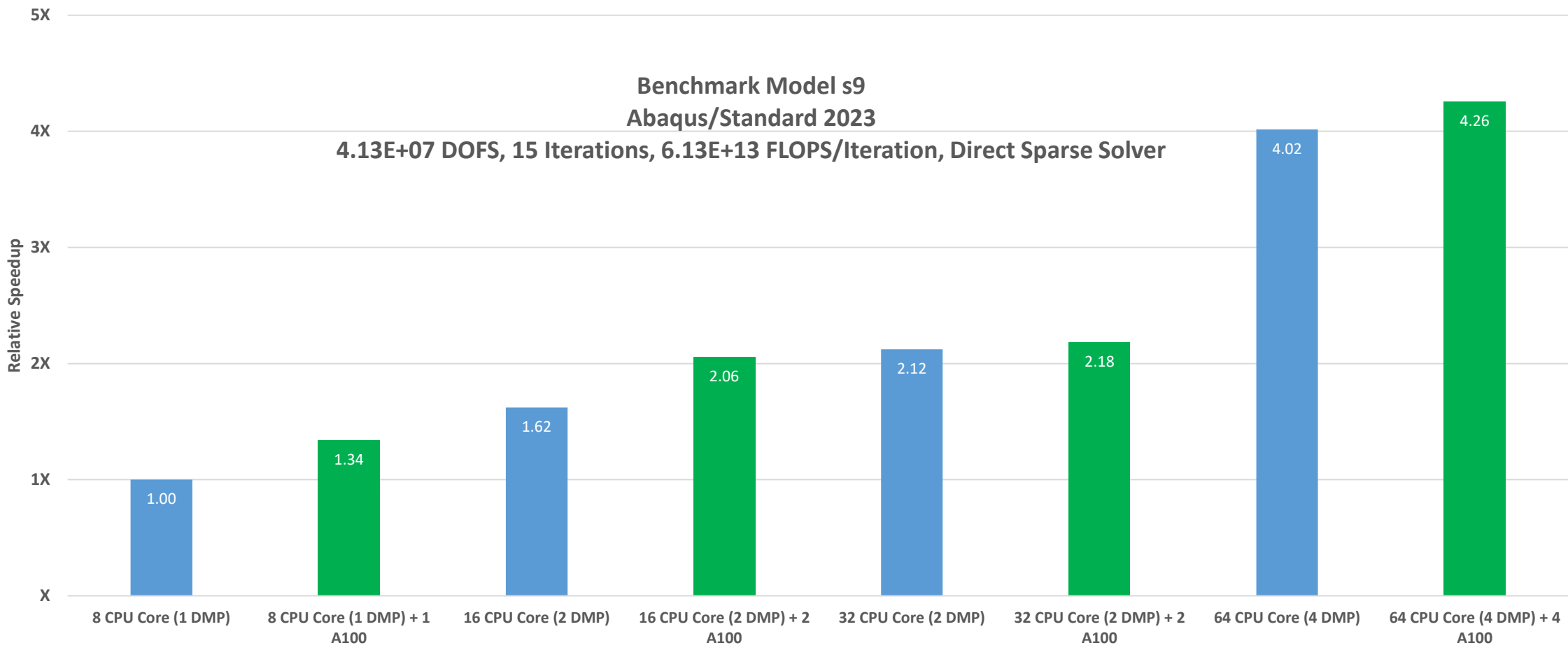
Abaqus/Standard 2023

2.57E+06 DOFS, 0 Iterations, 0.00E+00 FLOPS/Iteration, Modal SSD Solver

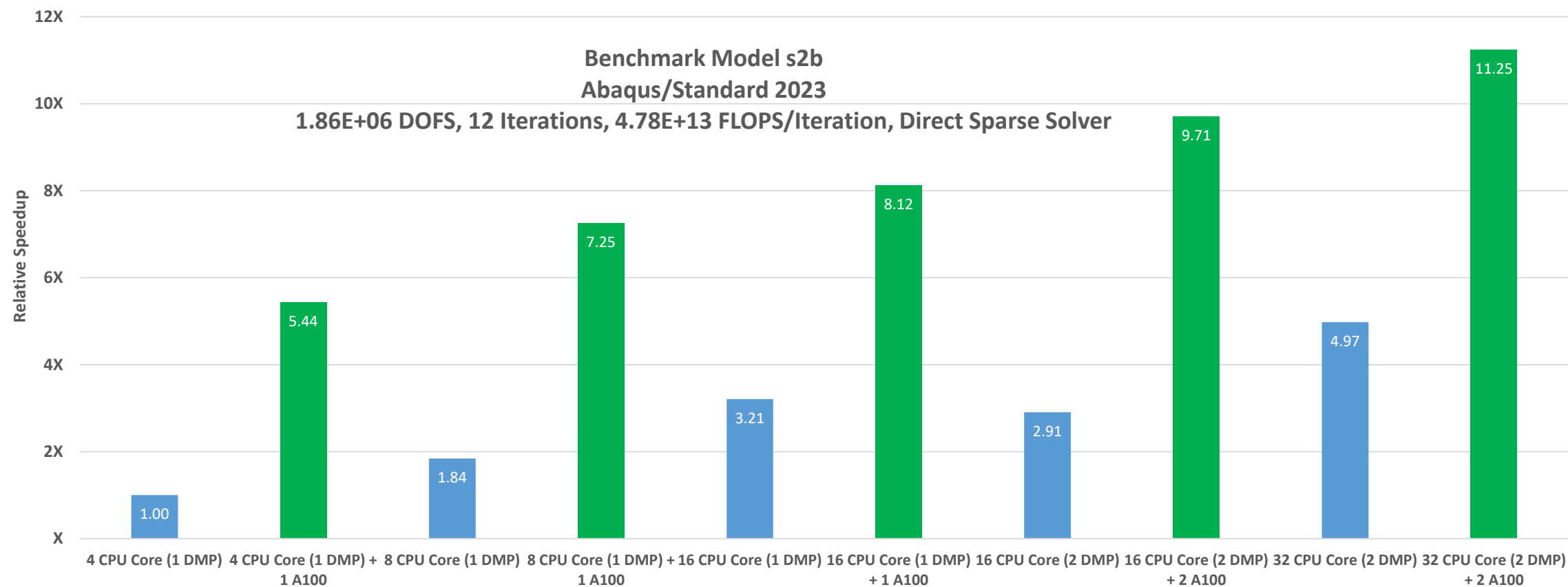


Runtime Configuration

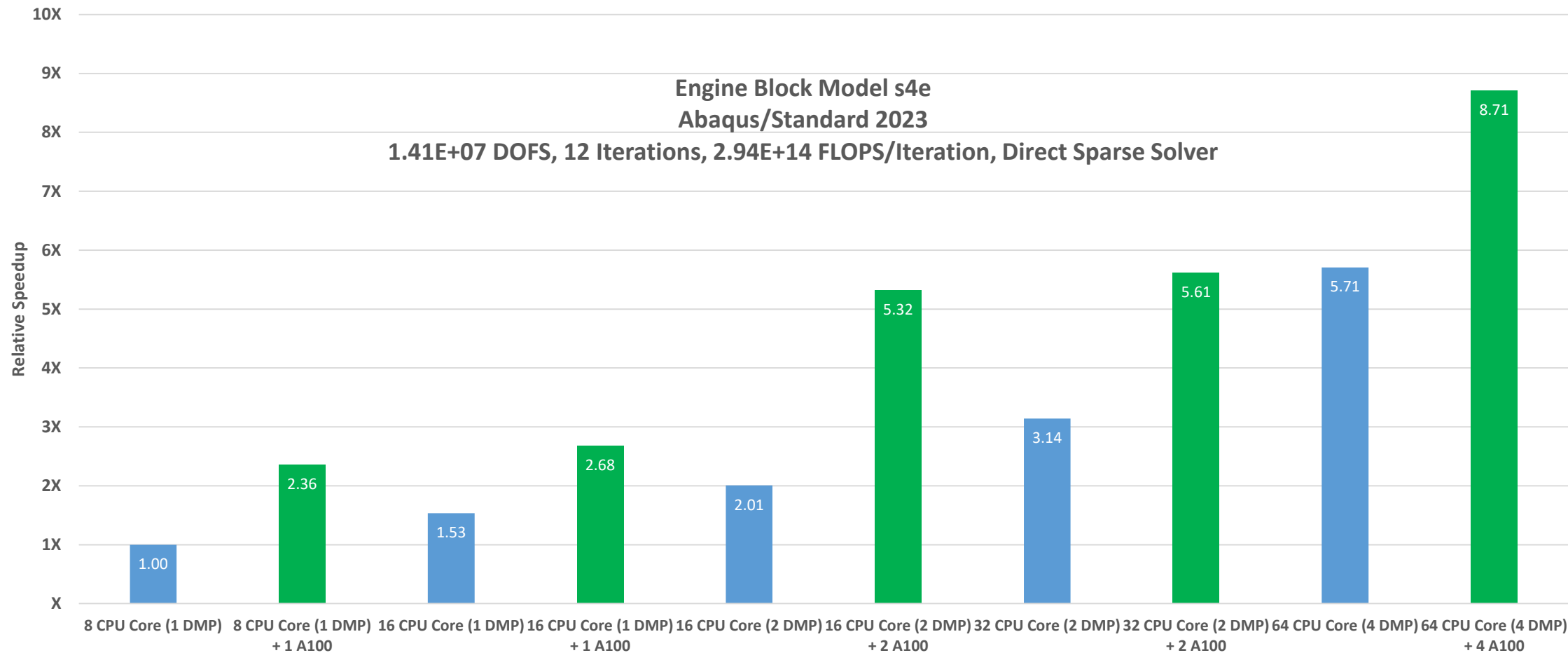
DGX A100 workstation with 2x AMD EPYC 7742 64-Core Processors, HT On, 2TB Ram, 8x Tesla A100 80Gb Driver 470.141.10, Red Hat Enterprise 8.6



Runtime Configuration
DGX A100 workstation with 2x AMD EPYC 7742 64-Core Processors, HT On, 2TB Ram, 8x Tesla A100 80Gb Driver 470.141.10, Red Hat Enterprise 8.6

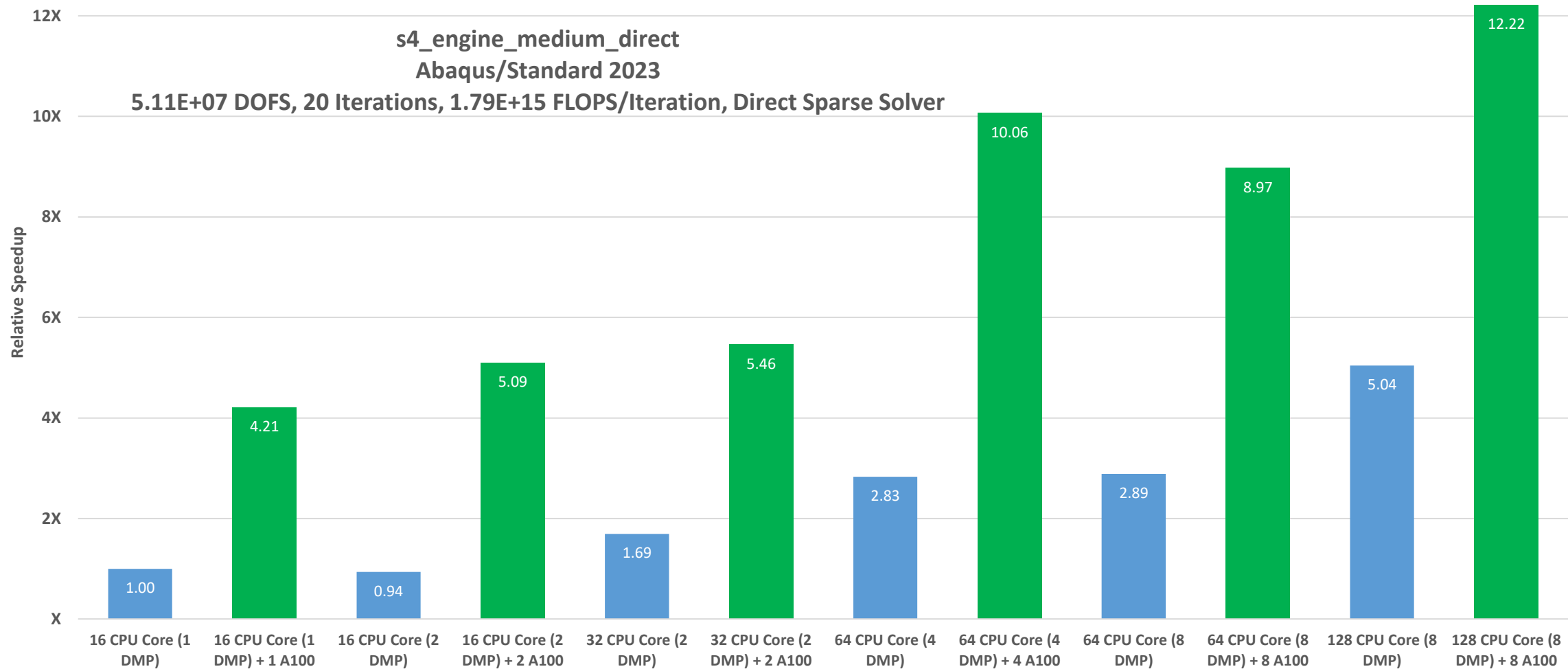


Runtime Configuration
DGX A100 workstation with 2x AMD EPYC 7742 64-Core Processors, HT On, 2TB Ram, 8x Tesla A100 80Gb Driver 470.141.10, Red Hat Enterprise 8.6



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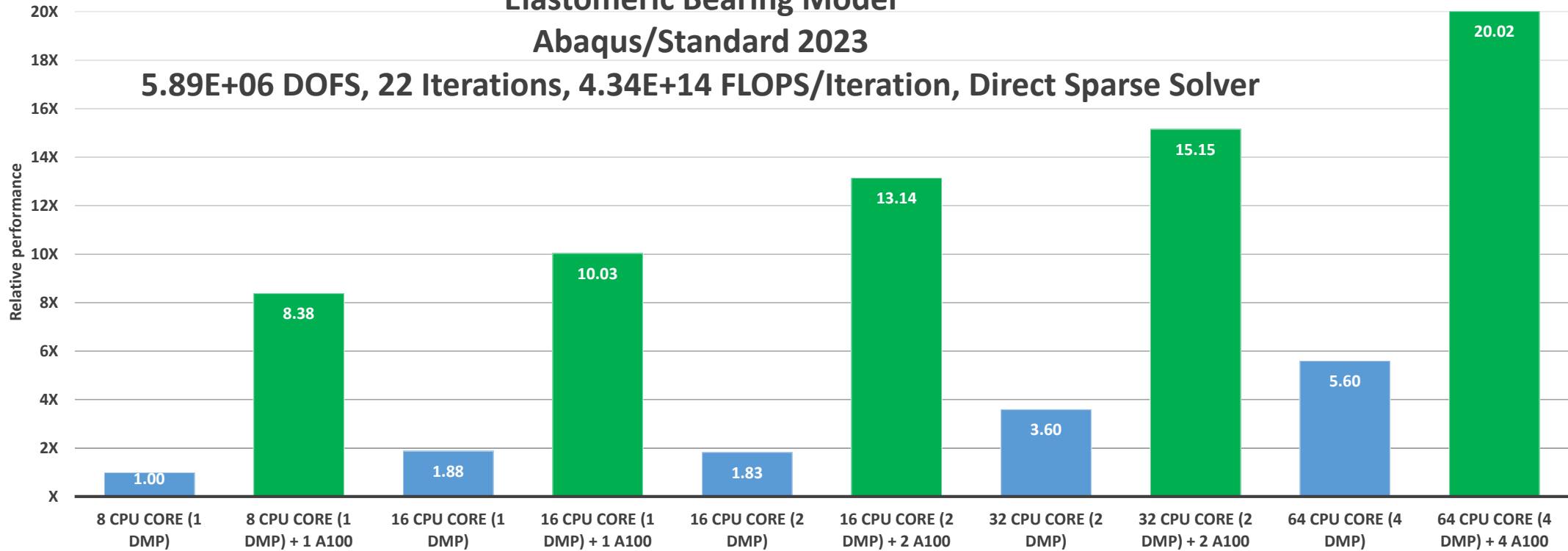


DGX A100 workstation with 2x AMD EPYC 7742 64-Core Processors, HT On, 2TB Ram, 8x Tesla A100 80Gb Driver 470.141.10, Red Hat Enterprise 8.6
5.11E+07 DOFS, 20 Iterations, 1.79E+15 FLOPS/Iteration, Direct Sparse Solver

Elastomeric Bearing Model

Abaqus/Standard 2023

5.89E+06 DOFS, 22 Iterations, 4.34E+14 FLOPS/Iteration, Direct Sparse Solver



Runtime Configuration

DGX A100 workstation with 2x AMD EPYC 7742 64-Core Processors, HT On, 2TB Ram, 8x Tesla A100 80Gb Driver 470.141.10, Red Hat Enterprise 8.6