

NVIDIA® QUADRO® & TESLA™ ACCELERATE SIMULIA'S Abaqus

TWICE THE DESIGN CANDIDATES. HIGHER PRODUCT QUALITY. SIMULIA'S Abaqus 6.11 WITH NVIDIA GPUs.

With SIMULIA's Abaqus 6.11 and NVIDIA® professional GPUs, you can:

- > Improve product quality by running 2x more design simulations
- > Accelerate time-to-market by reducing engineering cycles

Run simulations with higher-fidelity models while maintaining practical solution times

How much more could you accomplish if simulation times could be reduced from one day to just a few hours? As an engineer, you depend on SIMULIA's Abaqus to design high-quality products efficiently. To get the most out of SIMULIA's Abaqus 6.11, simply upgrade your Quadro GPU or add a Tesla GPU to your workstation and instantly unlock the highest levels of Abaqus simulation performance.

RECOMMENDED WORKSTATION CONFIGURATION

Performance System:

- > 1 x Quadro 6000 GPU (Abaqus + Graphics)
- > Single Xeon 3.0GHz Quad Core
- > 32GB DDR3 Memory¹

Price-Performance System:

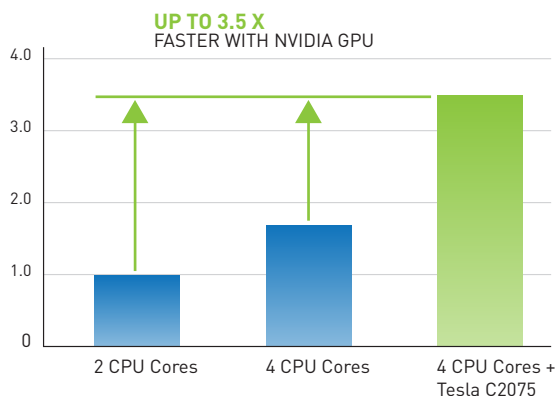
- > 1 x Quadro 4000 GPU (Graphics)
- > 1 x Tesla C2075 GPU (Abaqus)
- > Dual Xeon 3.0GHz Quad Core
- > 32 - 48GB DDR3 Memory¹

Maximum Performance:

- > 1 x Quadro 6000 GPU (Abaqus + Graphics)
- > 1 x Tesla C2075 GPU (Abaqus)
- > Dual Xeon 3.0 GHz Quad-Core
- > 48 - 64GB DDR3 Memory

IMPROVE SIMULATION PERFORMANCE WITH GPUS

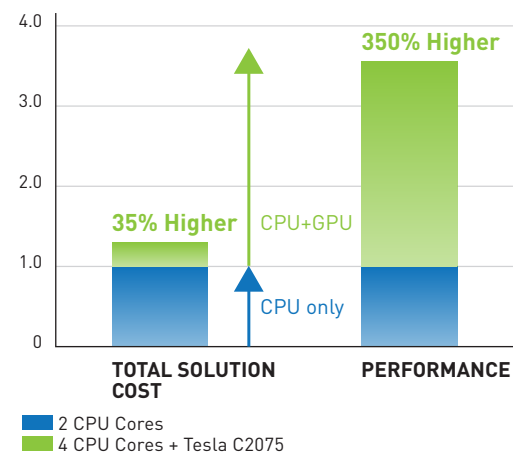
Relative Performance Scale vs Two CPU Cores



Benchmark: s4b Model- Engine Geometry, 5M DOF, Static nonlinear, Direct Sparse
CPU: Hex-core Westmere 5680 at 3.33 GHz

MAKE ENGINEERING MORE PRODUCTIVE WITH GPUS

Relative Cost and Performance Benefit



Cost analysis includes Abaqus licensing and workstation
2 CPU Cores run with 6 Tokens
4 CPU Cores and Tesla C2075 run with 9 Tokens

Benefits of NVIDIA GPUs

Configure your workstation into a personal supercomputer by adding an NVIDIA professional GPU. GPUs can free up your second CPU socket so you can keep using your workstation more effectively for pre- and post-processing and interactive tasks.

SIMULIA's Abaqus offers GPU acceleration for:

- > Direct sparse solvers
- > Windows and Linux 64-bit operating systems
- > Benefits solver dominated models >1M degrees of freedom

What are NVIDIA GPUs?

NVIDIA Quadro and Tesla GPUs have hundreds of computational cores to accelerate the most demanding workloads. As parallel processors, GPUs manage the mathematical Abaqus operations more efficiently than CPUs.

Abaqus 6.11 GPU License

To unlock the GPU feature in Abaqus 6.11, you must have the base license and an additional token, the same token that unlocks an additional CPU core. For more information, please contact your SIMULIA representative or email cae@nvidia.com.

NVIDIA for Abaqus:

www.nvidia.com/abacus

Where to Buy a GPU Workstation:

www.nvidia.com/teslawtb

www.nvidia.com/workstationwtb

SIMULIA Abaqus Supported NVIDIA GPUs:

Tesla C2050, C2070, C2075, and Quadro 6000

¹32 - 48GB of memory highly recommended to avoid I/O and achieve optimal GPU performance.

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