GPU Compute Capabilities
Release 2025 R1

The cards listed below have been tested by Ansys, Inc. to verify support of the GPU solvers. Compute capabilities are available for both Windows and Linux and support most NVIDIA Tesla and NVIDIA Quadro series GPUs.

The following applies to fully resident GPU solvers, see the *GPU Accelerator Capabilities* table for CPU-based solvers that use GPU to accelerate the solution.

Specific to Fluent:
- Compute capabilities can be used for both shared-memory parallel processing and distributed-memory parallel processing.
- Support for AMD Instinct™ MI200 and MI300 Series accelerators

Specific to Speos:
- Speos is best optimized on RTX GPUs because it supports RT-core acceleration.

Specific to Rocky:
- Rocky does not support cluster computing.
- Compute capability of 6.0 or higher. Cards with a CUDA compute capability as low as 3.5 might still work with Rocky but are not guaranteed.
- Rocky supports NVIDIA's CUDA-enabled workstation (computing or gaming) CUDA version 11.7 toolkit or higher, at least 4 GB memory, and fast double-precision for DEM simulations and single-precision for SPH simulations.

Cards Tested

The performance benefit of using a GPU Accelerator will depend on the card selected and the overall system configuration.

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Tested Operating System Version	Notes
Fluent GPU Solver	AMD	Instinct	MI210	Linux x64	Red Hat 9.4	
					Ubuntu 20.04	
	NVIDIA		A40	Linux x64	Red Hat 9.3	
			A100	Linux	Red Hat 9.3	
					Rocky 8.10	
			H100	Linux	Rocky 8.10	
			L40	Windows x64	Windows 10 Server	
				Linux x64	Red Hat 8.9	
			RTX A4000	Linux x64	Red Hat 8.9	
			RTX A5000	Windows x64	Windows 11	
			RTX A6000	Windows x64	Windows Server 2019, Windows Server 2022	
				Linux x64	Red Hat 8.6, 8.7, 8.9, and 9.3	
					Rocky 8.9, 9.3	
					SLES 15.5	
			RTX A6000 Ada	Windows x64	Windows 11	
				Linux x64	Rocky 9.3	
					Ubuntu 20.04	
					SLES 15.5	

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Testing Operating System Version	Notes
Fluent GPU Solver	NVIDIA	Quadro	GV100	Linux x64	Red Hat 8.10	
			RTX 6000	Windows	Windows 11	
				Linux	SLES 15.5	

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Tested Operating System Version	Notes
Lumerical	NVIDIA	Quadro	A10G	Windows x64		
			A30	Windows x64		
			A100	Windows x64		
			A100	Linux x64	Red Hat 7.0	
					Red Hat 8.0	
					Red Hat 9.0	
					Rocky 8.0	
					Rocky 8.0	
					Rocky 9.0	
			A800	Windows x64		
			H100	Windows x64		
			P4000	Windows x64		
			V400	Windows x64		
		Quadro RTX	A4000	Windows x64		
				Linux x64	Red Hat 7.0	
					Red Hat 8.0	
					Red Hat 9.0	
					Rocky 8.0	
					Rocky 8.0	
					Rocky 9.0	
			A4000 Ada	Windows x64		
			5000 Laptop	Windows x64		
			A5500	Windows x64		

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Tested Operating System	Notes
Rocky	NVIDIA	Quadro	A30	Linux x64	Rocky 8.10	
			A100	Windows x64	Windows Server 2019	
				Linux x64	Rocky 8.10	
			H100	Windows x64	Windows 10	
			L40	Linux x64	Linux 8.10	
			T4	Windows x64	Windows Server 2019	
			V100	Windows x64	Windows Server 2019	
		Quadro RTX	A4000	Windows x64	Windows 10	

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Tested Operating System	Notes
Speos GPU Solver	NVIDIA	Grid	P40-8Q	Windows x64	Windows 11	
		Quadro	GV100	Windows x64	Windows 11	
				Linux x64	Rec Hat 8.8	
					Red Hat 9.4	
			P6000	Windows x64	Windows Server 2019	
		Quadro RTX	A4000	Windows x64	Windows 10	
			A5000	Windows x64	Windows 10	
					Windows 11	
			A5500	Windows x64	Windows 11	
			4000	Windows x64	Windows 10	
				Linux x64	Red Hat 8.8	
			4000 Ada	Windows x64	Windows 11	
			5000	Windows x64	Windows 11	
			5000 Ada	Windows x64	Windows 10	
			6000	Windows x64	Windows 10	
					Windows 11	
			8000P-8Q	Windows x64	Windows 11	

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Tested Operating System	Notes
Speos HPC	NVIDIA	Quadro	GV100	Linux x64	Red Hat 8.8	
		Quadro RTX	A4000	Windows x64	Windows Server 2019	
			A5000	Windows x64	Windows 11	
			A6000	Linux x64	Red Hat 8.10	
					Red Hat 9.3	
					Ubuntu 20.04	
			4000	Linux x64	Red Hat 8.8	
					Red Hat 8.10	
			4000 Ada	Windows x64	Windows 11	
				Linux x64	Red Hat 9.4	
			6000	Windows x64	Windows 11	
			6000 Ada	Windows x64	Windows 11	