



GPU Accelerator and co-processor Capabilities *

Release 18.1

* Used in support of the CPU to process certain calculations and key solver computations for faster performance during a solution.

- Acceleration can be used for both shared-memory parallel processing (shared-memory ANSYS) and distributed-memory parallel processing (Distributed ANSYS).
- Acceleration is available for both Windows and Linux.

Support by Application

ANSYS Mechanical APDL supports all NVIDIA Tesla series cards and the following Quadro series cards: M6000, K6000, K5200, K5000, GP100, P5000, P6000. Additionally, ANSYS Mechanical APDL supports the following Intel Xeon Phi co-processor cards: 3120, 5110 and 7120. When using the sparse solver or eigensolvers based on the sparse solver with NVIDIA cards additional considerations apply (please consult the ANSYS installation guide for details).

ANSYS Fluent supports NVIDIA's CUDA-enabled Tesla and Quadro series workstation and server cards.

ANSYS Polyflow supports all NVIDIA Tesla series cards and the following Quadro series cards: M6000, K6000, K5200, K5000, GP100, P6000, P5000.

ANSYS EMIT supports NVIDIA Tesla P series, Tesla K Series, Quadro M series, GeForce GTX Series and GeForce GT Series.

ANSYS HFSS supports NVIDIA Tesla P series, C20-Series, Tesla K Series, Quadro K Series (K5000 and above).

ANSYS ICEPAK supports NVIDIA's CUDA-enabled Tesla and Quadro series workstation and server cards.

ANSYS Maxwell supports NVIDIA Tesla P series, C20-Series, Tesla K Series, Quadro K Series (K5000 and above).

ANSYS Savant supports NVIDIA Tesla P series, Tesla K Series, Quadro M Series, GeForce GTX Series and GeForce GT Series.

Tested Configurations

- Check marks indicate software and hardware configurations successfully tested by ANSYS.

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Tested Operating System Version	
ANSYS Mechanical APDL	Intel	Xeon Phi	5110P	Windows x64	Windows Server 2012	
			7120A	Linux x64	Red Hat 6.8	
	NVIDIA	Quadro	GP100	Windows x64	Windows 7	
			Tesla	C2070	Linux x64	Red Hat 6.8
				C2075	Windows x64	Windows 7
				M2075	Linux x64	Red Hat 6.8
				P100	Linux x64	CentOS 7.2
ANSYS Fluent	NVIDIA	Quadro	K5000	Windows x64	Windows 7	
		Tesla	C2075	Windows x64	Windows 7	
	K40m		Windows x64	Windows 10		
			Linux x64	SLES 12 SP1		
	K80		Linux x64	Red Hat 7.2		
	M2075		Windows x64	Windows 7		
	P100	Linux x64	SLES 11 SP3			

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Tested Operating System Version
ANSYS Polyflow	NVIDIA	Quadro	K5000	Linux x64	Red Hat 6.8
		Tesla	K20c	Windows x64	Windows 7
			K40c	Windows x64	Windows 7
			K80	Linux x64	Red Hat 7.2
ANSYS EMIT	NVIDIA	Quadro	M4000	Windows x64	Windows 10
				Linux x64	SLES 11 SP3
		M5000	Linux x64	CentOS 7.2	
	Tesla	K20c	Windows x64	Windows 7	
		K40c	Windows x64	Windows 7	
		P100	Windows x64	Windows Server 2012 R2	
GeForce	GT 755M	Windows x64	Windows 8.1		
ANSYS HFSS	NVIDIA	Quadro	GP100	Windows x64	Windows 7
			K5200	Windows x64	Windows 7
		Tesla	C2075	Windows x64	Windows 7
			K20	Windows x64	Windows 7
			K20c	Windows x64	Windows 7
		K20m	Linux x64	Red Hat 6.7	
		K40c	Windows x64	Windows 7	
		K80	Windows x64	Windows 8.1	
			Linux x64	Red Hat 6.7	
P100	Windows x64	Windows 8.1			
ANSYS ICEPAK	NVIDIA	Quadro	6000	Windows x64	Windows 7
		Tesla	K40m	Windows x64	Windows 10
			K80	Windows x64	Windows 8.1
		Linux x64		Red Hat 7.2	
		M2075		Windows x64	Windows 7
P100	Windows x64	SLES 11 SP3			

Application	Manufacturer	Product Series	Card / GPU	Tested Platform	Tested Operating System Version
ANSYS Maxwell	NVIDIA	Quadro	GP100	Windows x64	Windows 7
			K5200	Windows x64	Windows 7
		Tesla	C2075	Windows x64	Windows 7
			K20	Windows x64	Windows 7
			K20c	Windows x64	Windows 7
			K20m	Linux x64	Red Hat 6.7
			K40c	Windows x64	Windows 7
			K80	Windows x64	Windows 8.1
		Linux x64		Red Hat 6.7	
		P100	Windows x64	Windows 8.1	
ANSYS Savant	NVIDIA	Quadro	M4000	Windows x64	Windows 10
				Linux x64	SLES 11 SP3
			M5000	Linux x64	CentOS 7.2
		Tesla	K20c	Windows x64	Windows 7
			K40c	Windows x64	Windows 7
		P100	Windows x64	Windows Server 2012 R2	
		GeForce	GTX 755M	Windows x64	Windows 8.1

Manufacturer Support:

Intel: <http://www.intel.com/content/www/us/en/homepage.html>

NVIDIA: <http://www.nvidia.com/object/gpu-applications.html>