



GPU Accelerator and co-processor Capabilities *

Release 18.0

* 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. Additionally, ANSYS Mechanical APDL supports the following Intel Xeon Phi co-processor cards: 3120, 5110 and 7120. The Quadro K5000 and K5200 series cards are only recommended for use with the PCG Solver.

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.

ANSYS EMIT supports NVIDIA Tesla K-Series.

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

ANSYS Savant supports NVIDIA Tesla C20-Series, Tesla K-Series, Quadro K-Series, Quadro M-Series, and GeForce GTX 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 | 4000 | Windows x64 | Windows 7 |
| | | | Tesla | C2070 | Linux x64 |
| | | C2075 | Windows x64 | Windows 7 | |
| | | | M2075 | Linux x64 | Red Hat 6.8 |
| ANSYS Fluent | NVIDIA | Tesla | K20Xm | Linux x64 | Red Hat 7.2; SLES 12 SP1 |
| | | | K40m | Windows x64 | Windows 10 |
| | | | Linux x64 | Red Hat 7.2; SLES 12 SP1 | |
| | | | K80 | Linux x64 | Red Hat 7.2 |
| | | | M2075 | Windows x64 | Windows 7 |

| Application | Manufacturer | Product Series | Card / GPU | Tested Platform | Tested Operating System Version |
|-----------------------|--------------|----------------|-------------|-----------------|---------------------------------|
| ANSYS Polyflow | NVIDIA | Quadro | K5000 | Linux x64 | Red Hat 6.7 |
| | | Tesla | K20 | Windows x64 | Windows 7 |
| | | | K80 | Linux x64 | Red Hat 7.2 |
| ANSYS EMIT | NVIDIA | Quadro | M1000M | Windows x64 | Windows 10 |
| | | | M4000 | Windows x64 | Windows 10 |
| | | | | Linux x64 | SLES 11 SP3 |
| | | Tesla | M5000 | Linux x64 | Centos 7.2 |
| | | | K20c | Windows x64 | Windows 7 |
| | | | K40c | Windows x64 | Windows 7 |
| GeForce | GTX 780 | Windows x64 | Windows 8.1 | | |
| ANSYS HFSS | NVIDIA | Quadro | K5200 | Windows x64 | Windows 7 |
| | | Tesla | C2075 | Windows x64 | Windows 7 |
| | | | K20 | Windows x64 | Windows 7 |
| | | K20c | Windows x64 | Windows 7 | |
| | | K40c | Windows x64 | Windows 7 | |
| | | K80 | Windows x64 | Windows 8.1 | |
| | | | Linux x64 | Red Hat 6.7 | |
| ANSYS ICEPAK | NVIDIA | Quadro | 6000 | Windows x64 | Windows 7 |
| | | Tesla | K20c | Windows x64 | Windows Server 2008 |
| ANSYS Maxwell | NVIDIA | Quadro | K5200 | Windows x64 | Windows 7 |
| | | Tesla | C2075 | Windows x64 | Windows 7 |
| | | | K20 | Windows x64 | Windows 7 |
| | | K20c | Windows x64 | Windows 7 | |
| | | K40c | Windows x64 | Windows 7 | |
| | | K80 | Windows x64 | Windows 8.1 | |
| | Linux x64 | Red Hat 6.7 | | | |

| Application | Manufacturer | Product Series | Card / GPU | Tested Platform | Tested Operating System Version | |
|---------------------|--------------|----------------|------------|-----------------|---------------------------------|-------------|
| ANSYS Savant | NVIDIA | Quadro | M4000 | Windows x64 | Windows 10 | |
| | | | | Linux x64 | SLES 11 SP3 | |
| | Tesla | | | M5000 | Linux x64 | Centos 7.2 |
| | | | | K20c | Windows x64 | Windows 7 |
| | | | | K40c | Windows x64 | Windows 7 |
| | | | | GeForce | GT 755M | Windows x64 |
| GTX 780 | 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>