



## GPU Accelerator and co-processor Capabilities \*

### Release 17.2

\* 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.

**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.

| Manufacturer | Product Series | Card / GPU | Platform: | ANSYS Mechanical APDL | ANSYS Fluent | ANSYS Polyflow | ANSYS EMIT | ANSYS HFSS | ANSYS ICEPAK | ANSYS Maxwell | ANSYS Savant | Tested Operating System Version |                                |                                |
|--------------|----------------|------------|-----------|-----------------------|--------------|----------------|------------|------------|--------------|---------------|--------------|---------------------------------|--------------------------------|--------------------------------|
| Intel        | Xeon Phi       | 3120       | Linux:    | ✓                     |              |                |            |            |              |               |              | Red Hat 6.5, 6.6; SLES/SLED 11  |                                |                                |
|              |                |            | Windows:  | ✓                     |              |                |            |            |              |               |              |                                 | Windows 7, 8.1, 10             |                                |
|              |                | 5110       | Linux:    | ✓                     |              |                |            |            |              |               |              |                                 | Red Hat 6.5, 6.6; SLES/SLED 11 |                                |
|              |                |            | Windows:  | ✓                     |              |                |            |            |              |               |              |                                 | Windows 7, 8.1, 10             |                                |
|              |                | 7120       | Linux:    | ✓                     |              |                |            |            |              |               |              |                                 |                                | Red Hat 6.5, 6.6; SLES/SLED 11 |
|              |                |            | Windows:  | ✓                     |              |                |            |            |              |               |              |                                 |                                | Windows 7, 8.1, 10             |



| Manufacturer | Product Series | Card / GPU | Platform: | ANSYS Mechanical APDL | ANSYS Fluent | ANSYS Polyflow | ANSYS EMIT | ANSYS HFSS | ANSYS ICEPAK | ANSYS Maxwell | ANSYS Savant | Tested Operating System Version |   |
|--------------|----------------|------------|-----------|-----------------------|--------------|----------------|------------|------------|--------------|---------------|--------------|---------------------------------|---|
|              | Tesla          | K40        | Linux:    |                       |              |                | ✓          |            |              |               | ✓            |                                 |   |
|              |                |            | Windows:  |                       |              |                | ✓          | ✓          |              | ✓             | ✓            |                                 |   |
|              |                | K40c       | Linux:    | ✓                     |              |                |            |            |              |               |              |                                 |   |
|              |                |            | Windows:  | ✓                     |              | ✓              |            |            |              |               |              |                                 |   |
|              |                | K40m       | Linux:    |                       | ✓            | ✓              |            |            |              | ✓             |              |                                 |   |
|              |                |            | Windows:  |                       | ✓            | ✓              |            |            |              | ✓             |              |                                 |   |
|              | K80            | Linux:     | ✓         | ✓                     | ✓            |                |            |            |              |               |              |                                 |   |
|              |                | Windows:   | ✓         |                       |              |                |            |            |              |               |              |                                 |   |
|              | GeForce        | GTX 470    | Linux:    |                       |              |                |            |            |              |               |              |                                 |   |
|              |                |            | Windows:  |                       |              |                |            |            |              |               |              | ✓                               |   |
|              |                | GTX 580    | Linux:    |                       |              |                |            |            |              |               |              |                                 |   |
|              |                |            | Windows:  |                       |              |                |            |            |              |               |              |                                 | ✓ |
|              |                | GTX 680    | Linux:    |                       |              |                |            |            |              |               |              |                                 |   |
|              |                |            | Windows:  |                       |              |                |            |            |              |               |              |                                 | ✓ |
| GTX 750M     |                | Linux:     |           |                       |              |                |            |            |              |               |              |                                 |   |
|              |                | Windows:   |           |                       |              |                |            |            |              |               |              | ✓                               |   |
| GTX 760M     | Linux:         |            |           |                       |              |                |            |            |              |               |              |                                 |   |
|              | Windows:       |            |           |                       |              |                |            |            |              |               | ✓            |                                 |   |
| GTX 780      | Linux:         |            |           |                       |              |                |            |            |              |               |              |                                 |   |
|              | Windows:       |            |           |                       |              |                |            |            |              |               | ✓            |                                 |   |
| GTX 980      | Linux:         |            |           |                       |              |                |            |            |              |               |              |                                 |   |
|              | Windows:       |            |           |                       |              |                |            |            |              |               | ✓            |                                 |   |

**Manufacturer Support:**

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

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