Dell Precision Workstation Product Recommendations
Ansys Mechanical

DELL Technologies

Entry
Precision 5860 Tower

For the professional who works on light to moderately complex part design and medium assemblies, pre and posting processing and runs simple and FEA analyses on CPU. 1 HPC Pack for utilization of up to 12 cores.

- Intel® Xeon® W5-2465X (33.75 MB cache, 16 cores, 32 threads, 3.1 GHz to 4.7 GHz Turbo, 200 W)
- 128GB, 8x16GB, DDR5, 4800MHz, RDIMM ECC Memory
- NVIDIA® RTX™ A2000, 12 GB GDDR6, 4 mDP to DP adapters or AMD Radeon Pro WX 5100, 8GB, 4DP
- 1 TB, M.2, PCIe NVMe, SSD, Class 40 + M.2 1TB PCIe NVMe Class 40 Solid State Drive
- Windows 10/11 Pro or Windows 10/11 Pro for Workstations
- 3 Years ProSupport with Next Business Day Onsite Service

Customize & Buy

Standard
Precision 5860 Tower

For the professional who works on moderately complex part designs, including tool and die design, large assemblies, pre and posting processing and runs 1-2 complex simultaneous simulation tasks on CPU. 1 HPC Pack for utilization of up to 12 cores.

- Intel® Xeon® W7-2475X (37.5 MB cache, 20 cores, 40 threads, 2.6 GHz to 4.8 GHz Turbo, 225 W)
- 256GB, 8x32GB, DDR5, 4800MHz, RDIMM ECC Memory
- NVIDIA® RTX™ A4500, 20 GB GDDR6, 4 DP or AMD Radeon Pro W6600, 8 GB GDDR6, 4 DP
- 1 TB, M.2, PCIe NVMe, SSD, Class 40 + M.2 1TB PCIe NVMe Class 40 Solid State Drive
- Windows 10/11 Pro or Windows 10/11 Pro for Workstations
- 3 Years ProSupport with Next Business Day Onsite Service

Customize & Buy

Advanced
Precision 7865 Tower

For the professional who works on light to moderately complex part design, large assemblies, pre and posting processing and runs 1-3 complex simultaneous simulation tasks on CPU. 2 HPC Packs for utilization of up to 36 cores.

- AMD Ryzen Threadripper PRO 5975WX (128 MB cache, 32 cores, 64 threads, 3.6GHz to 4.5GHz, 280 W)
- 512GB, 8x64GB, DDR4, 3200MHz, RDIMM ECC Memory
- NVIDIA® RTX™ A5500, 24 GB GDDR6, 4 DP or AMD Radeon Pro W6800, 32 GB GDDR6, 6 mDP
- 1 TB, M.2, PCIe NVMe, SSD, Class 40 + Dell Ultra-Speed Drive Quad PCIe SSD x16 card 2 M.2 1TB PCIe NVMe Class 50 Solid State Drive
- Windows 10/11 Pro or Windows 10/11 Pro for Workstations
- 3 Years ProSupport with Next Business Day Onsite Service

Customize & Buy

Ultimate
Precision 7960 Tower

For the professional who works on complex part design, large assemblies, pre and posting processing and runs 1-3 complex simultaneous simulation tasks on CPU / GPU and wants maximum system expandability and GPU compute

- Intel® Xeon® W9-3495X (105MB Cache, 56 cores, 112 threads, 1.9GHz to 4.8GHz Turbo 350W)
- 768GB, 12x64 GB, DDR5, 4800MHz, RDIMM ECC Memory
- NVIDIA® RTX™ A6000, 48 GB GDDR6, 4 DP, 7960T or AMD Graphics None *
- 1TB, M.2, PCIe NVMe, SSD, Class 40 + M.2 1TB PCIe NVMe Class 50 Solid State Drive
- Windows 10/11 Pro or Windows 10/11 Pro for Workstations
- 3 Years ProSupport with Next Business Day Onsite Service

Customize & Buy

Guidelines: CPU core scaling is good and generally more cores and higher base clock speed will perform better. 4-8 GB RAM per core is ideal and filling all memory channels in a balanced configuration for high bandwidth is recommended. GPU acceleration is supported, better double precision floating point performance and large VRAM capacity will provide faster results. Fast SSD storage is recommended. More info on HPC licensing **The Value of High-Performance Computing for Simulation**

Entry
Precision 5570

For the professional who works on light to moderately complex part design and medium assemblies, pre and post processing and runs simple FEA analyses. No HPC pack for utilization of up to 4 cores.

- Intel® Core™ i7-12700H, vPro® Essentials (24MB, 14 core 20 thread, 2.30-4.70GHz Turbo, 45W)
- 32 GB, 2 x 16 GB, DDR5, 4800 MHz
- NVIDIA RTX A2000, 8 GB DDR6
- 512 GB, M.2 2280, Gen 4 PCIe x4 NVMe, SSD
- 15.6" Ultrasharp UHD+ HDR400, 3840x2400,Touch, w/Prem Panel Guar, 100% Adobe, LBL w/ IR Cam
- Windows 10/11 Pro or Windows 10/11 Pro for Workstations
- 3 Years ProSupport with Next Business Day Onsite Service

Customize & Buy

Standard
Precision 5770

For the professional who works on moderately complex part designs, including tool and die design, large assemblies, pre and post processing and runs medium FEA analyses. No HPC pack for utilization of up to 4 cores.

- Intel® Core™ i7-12800H, vPro® (24MB cache, 14 core, 20 thread, 2.40 to 4.80 GHz Turbo, 45W)
- 64 GB, 2 x 32 GB, DDR5, 4800 MHz
- NVIDIA RTX A3000, 12 GB DDR6
- 1 TB, M.2 2280, Gen 4 PCIe x4 NVMe, SSD
- 17" UHD+ touch, 3840 x 2400, 60Hz, 500 nits WLED, 100% sRGB, Low BL w/ IR Cam
- Windows 10/11 Pro or Windows 10/11 Pro for Workstations
- 3 Years ProSupport with Next Business Day Onsite Service

Customize & Buy

Advanced
Precision 7680

For the professional who works on light to moderately complex part design, large assemblies, pre and post processing and runs complex FEA analyses. No HPC pack for utilization of up to 4 cores.

- Intel® Core™ i7-13850HX (30MB Cache, 28 Threads, 20 Cores (8P+12E) up to 5.3GHz, 55w, vPro)
- 64GB, 2x32GB 5200MHz SODIMM, non-ECC
- NVIDIA RTX™ 5000 Ada 16GB GDDR6
- 512 GB, M.2 2280, Gen 4 PCIe x4 NVMe, SSD
- 16-inch, OLED UHD+ 3840 x 2400, 60 Hz, Anti-Glare, Touch, 100% DCIP3, 400 Nits, IR Cam/Mic WLAN
- Windows 10/11 Pro or Windows 10/11 Pro for Workstations
- 3 Years ProSupport with Next Business Day Onsite Service

Customize & Buy

Ultimate
Precision 7780

For the professional who works on light to moderately complex part design, large assemblies, pre and post processing and runs complex FEA analyses. 1 HPC Pack for utilization of up to 12 cores.

- Intel® Core™ i9-13950HX (36MB Cache, 32 Threads, 24 Cores (8P+16E) up to 5.5GHz, 55w, vPro)
- 128GB, 1x128GB 3600MHz CAMM, non-ECC
- NVIDIA RTX™ 5000 Ada 16GB GDDR6
- 1 TB, M.2 2280, Gen 4 PCIe x4 NVMe, SSD + Additional M.2 2280 1 TB, Gen 4 PCIe x4 NVMe, Solid State Drive
- 17" UHD 3840x2160 WLED WVA, 120Hz, anti-glare, non-touch, 99% DCI-P3, 500 nits, IR Camera, with Mic
- Windows 10/11 Pro or Windows 10/11 Pro for Workstations
- 3 Years ProSupport with Next Business Day Onsite Service

Customize & Buy

Guidelines: CPU core scaling is good and generally more cores and higher base clock speed will perform better. 4-8 GB RAM per core is ideal and filling all memory channels in a balanced configuration for high bandwidth is recommended. GPU acceleration is supported, better double precision floating point performance and large VRAM capacity will provide faster results. Fast SSD storage is recommended. More info on HPC licensing **The Value of High-Performance Computing for Simulation**

Please read the use case descriptions thoroughly to identify the appropriate recommendation for your usage. Recommendations are starting points and your requirements may vary. For more information see - **Precision Workstations**, **Dell Precision Engineering and Manufacturing Quick Reference Guide**, **Dell Precision Certifications**