# Hardware Notes - Creo 7.0

Parametric, Direct, Layout, Schematics, Options Modeler, Simulate

Last updated: October 20, 2022

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	Platform Support		
Partner	Operating System	Operating System levels	
	Windows 11 Pro <sup>2,3</sup> Windows 11 Pro for Workstations <sup>2,3</sup> Windows 11 Enterprise <sup>2,3</sup>	Version 21H2	
Microsoft	Windows 10 Pro 64-bit Edition <sup>2</sup> Windows 10 Pro for Workstations 64-bit Edition <sup>2</sup> Windows 10 Enterprise 64-bit Edition <sup>2</sup>	Version 20H2 Version 21H1 Version 21H2	
	Windows Server 2022 <sup>1,4</sup>	Base OS	
	Windows Server 2019 <sup>1</sup>	Base OS	
	Windows Server 2016 <sup>1</sup>	Base OS	
NOTES			

- 1. Windows Server 2016, 2019 and 2022 are supported in Batch Mode only and are not supported on Creo Schematics.
- 2. PTC has not tested and does not support the Resilient File System (ReFS) with Creo.
- 3. Creo 7.0.8.0 is the minimum supported Creo 7.0 release on Windows 11, IPv6 support is pending.
- 4. Creo 7.0.10.0 is the minimum supported Creo 7.0 release on Windows Server 2022.

	System Requirements		
	Operating System	Recommended amount	
Main Memory (RAM)	Windows 10 64-bit	4GB or higher	
	Windows Server 2016, 2019	4GB or higher	
Internal Browser Support	One of the following:  Embedded Chromium Browser (Default on Creo 7.0.7.0 and higher)  Microsoft Internet Explorer 11.0		
Browser Support for PTC Creo 7.0 Help Center	PTC Creo Help supports Internet Explorer 9.0 ar later. The Help Center opens in your default brow		
Monitor	1280 x 1024 (or higher) resolution support with 24-bit or greater color. High DPI and Dual Monitors Supported.		
Network	Microsoft TCP/IP Ethernet Network Adapter		
Mouse	Microsoft-approved 3-button mouse		
File systems	NTFS - Universal Naming Convention (UNC) <sup>1</sup>		
Misc.	DVD drive		
CPU	For Generative Design, the following CPUs are r Intel – Haswell and newer microarchite AMD – Piledriver and newer microarch	ecture (mid-2013 and newer)	
NOTES			

## **Graphics Information**

For 3D-hardware acceleration, an OpenGL graphics card must be used that has been tested in a PTC-certified configuration. To ensure the compatibility of a graphics driver with Creo 7.0, a PTC certified or supported hardware configuration is recommended. Graphics cards that support at least OpenGL 4.0 are recommended for Creo 7.0.

PTC recognizes that customers can benefit from using latest graphics driver and performance optimizations and improvements made by PTC's Graphics Hardware Partners. With new workstations being continuously certified by PTC, the most current graphics drivers used in the certification process can now be re-applied to previously certified configurations, as long as the configuration belongs to the same combination of workstation and graphics hardware families.

### **Certified and Supported Graphics Cards (GPUs)**

PTC provides Customer Support for all certified and supported graphics cards. Graphics cards are part of a fully-certified or supported configuration (such as a workstation model, operating system, graphics card, graphics card driver).

PTC does not certify or support graphic cards independently from the configurations in which they are certified or supported. Refer to the official PTC Platform Support web page for specific hardware partners and available configurations.

Additional certified and supported workstation hardware information will be added to the PTC <u>Platform Support</u> web page as our hardware partners complete certifications in preparation for production Creo 7.0 shipment.

Creo Simulation Live, Creo Generative Topology Optimization and Creo Render Studio have additional graphics card and related memory requirements. Please check your hardware compatibility for these applications using the PTCHardwareCheck tool available for download at <a href="https://example.com/PTC.com/">PTC.COM</a>.

Workstation Vendor	Certified and Supported Graphics Cards			
	AMD (ATI)	NVIDIA	INTEL	
Acer	No	Yes	No	
<u>Amazon</u>	Yes	Yes	No	
Asus	No	Yes	No	
Boxx	No	Yes	No	
<u>Dell</u>	Yes	Yes	No	
<u>Fujitsu</u>	No	Yes	No	
<u>HP</u>	Yes	Yes	No	
<u>Lenovo</u>	Yes	Yes	No	
<u>Microsoft</u>	Yes	Yes	Yes	
<u>Supermicro</u>	No	Yes	No	

# **Supported Peripherals and Accessories**

## 3D Controllers for Creo 7.0

Please refer to <a href="http://www.3dconnexion.com/service/drivers.html">http://www.3dconnexion.com/service/drivers.html</a> for specific driver information. Using the latest driver provided by 3DConnexion is fully supported by PTC.

Device	3DxSoftware version	Status
SpaceMouse® Enterprise	10.4.9 or later	<u>Certified</u>
SpacePilot® Pro	10.4.9 or later	<u>Certified</u>
SpaceMouse® Pro Wireless	10.4.9 or later	<u>Certified</u>
SpaceMouse® Pro	10.4.9 or later	<u>Certified</u>
SpaceMouse® Wireless	10.4.9 or later	Certified
SpaceNavigator® for Notebooks	10.4.9 or later	Certified
SpaceNavigator®	10.4.9 or later	Certified
CadMouse	10.4.9 or later	Certified

#### **Plotters and Printers**

Creo 7.0 supports HPGL, HPGL/2 and PostScript standard plotting formats. In addition, Creo 7.0 supports the Microsoft Print Manager.

#### **Emulation**

Various manufacturers produce printers and plotters that may be compatible with or emulate a device that use a format which is supported by PTC. Most devices are not specifically tested by PTC and therefore, may not produce correct plotted output. PTC Technical Support will attempt to provide support for any printer which is using a standard supported format, but only to the extent of verifying the output to a previously tested and readily available printer. Any support pertaining to the correctness of emulation can only be made by the manufacturers of the device in question, and not by PTC.

The Microsoft Printer Manager creates an emulation of what appears on the screen and attempts to print this. Since this emulation is between the Print Manager driver and the printer/plotter driver, quality and results may vary.

# **Supported MCAD Systems**

You can integrate several MCAD systems with Creo 7.0

Platforms	Creo Elements/Direct (all languages)	CATIA (English only)	Unigraphics (English only)
64-bit Windows 10.0	18.1	n/a	NX7

#### **Supported Finite Element Solvers**

You can integrate several Finite Element Solvers with Creo 7.0 for use in FEM mode. The following table lists the supported Finite Element Solvers and platforms.

Platforms	NASTRAN	ANSYS
64-bit Windows 10.0	2012	18.0

# **Platform Support for Data Exchange**

Processor	Format	Import / Export	Platform Windows 64-bit
	Image Formats		
ВМР	*.bmp – Edit via Image Editor, used in style feature as trace sketch, export parts and assemblies via Distributed Pro/BATCH	I/E	Yes

HDR	EPS	*.eps – Save a Copy of parts and assemblies, export parts and assemblies via Distributed Pro/BATCH	Е	Yes
JPEG   1.jpg - Edit via Image Editor, used in style feature as trace sketch, 3eve a Copy of parts and assemblies export parts, assembles and drawings to Distributed POPATCH	GIF	*.gif – import via Image Editor, used in style feature as trace sketch	ı	Yes
and assemblies, export parts, assemblies and drawings via Distributed Pro/BATCH  "pdf - Save a Copy of parts, assemblies and drawings, export parts and assemblies via bistributed Pro/BATCH  Picture  "pic - Save a Copy of parts, assemblies and drawings  "png - Edit via Image Editor, used in style feature as trace sketch  "pt Yes  PTC Guin Tonture  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "pt Yes  PTC Deal  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "pt Yes  PTC Deal  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "pt Yes  PTC Deal  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "pt Yes  RGB  "ngb - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch, used as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Edit via Image Editor, used in style feature as trace sketch  "t.vt - Ed	HDR	*.hdr – import via Image Editor	ı	Yes
Distributed ProBATCH	JPEG		I/E	Yes
PNG	PDF		Е	Yes
PTC Bumpmap	Picture	*.pic – Save a Copy of parts, assemblies and drawings	Е	Yes
PTC Clor Texture         *tx4 — Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           PTC Decal         *tx3 — Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           PTC Image         *imf — Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           RGB         *tripb — Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           RGB         *tripb — Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           Session Texture         *mem — Import via Image Editor, used in style feature as trace sketch         I/E         Yes           Shaded Image         *shd — Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           ShlIMA-SEIX         *pic — Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           TIFF         *tif — Edit via Image Editor, used in style feature as trace sketch, Save a Copy of parts, assemblies and drawings, export parts and assemblies via Distributed Pro/BATCH         Yes           *UP Formats           *Life Via Via Image Editor, used in style feature as trace sketch         I/E         Yes           *CGM         *Life Via	PNG	*.png – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes
PTC Decal	PTC Bumpmap	*.tx1 – Edit via Image Editor	I/E	Yes
PTC Image         *.imf - Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           RCB         *.rgb - Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           RLA         *.rla - Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           Session Texture         *.mem - Import via Image Editor         1         Yes           Session Texture         *.mem - Import via Image Editor         1         Yes           Shaded Image         *.sha - Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           TGA         *.tga - Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           TIFF         *.tif - Edit via Image Editor, used in style feature as trace sketch         I/E         Yes           TEGIT Via Image Editor, used in style feature as trace sketch         I/E         Yes           TEGIT Via Image Editor, used in style feature as trace sketch         I/E         Yes           TEGIT Via Image Editor, used in style feature as trace sketch         I/E         Yes           TEGIT Via Image Editor, used in style feature as trace sketch         I/E         Yes           TEGIT Via Image Editor, used in style feature as trace sketch         I/E         <	PTC Color Texture	*.tx4 - Edit via Image Editor, used in style feature as trace sketch	I/E	Yes
RGB	PTC Decal	*.tx3 - Edit via Image Editor, used in style feature as trace sketch	I/E	Yes
RLA	PTC Image	*.imf – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes
Session Texture	RGB	*.rgb – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes
Shaded Image   *.shd - Edit via Image Editor, Save a Copy of parts and assemblies   I/E   Yes	RLA	*.rla - Edit via Image Editor, used in style feature as trace sketch	I/E	Yes
SHIMA-SEIKI   *.pic - Edit via Image Editor, used in style feature as trace sketch   I/E   Yes   TGA   *.tga - Edit via Image Editor, used in style feature as trace sketch   I/E   Yes   Yes   TIFF   *.tff - Edit via Image Editor, used in style feature as trace sketch, Save a Copy of parts, assemblies and drawings, export parts and assemblies via Distributed Pro/BATCH   I/E   Yes	Session Texture	*.mem – Import via Image Editor	ı	Yes
Tigh	Shaded Image	*.shd – Edit via Image Editor, Save a Copy of parts and assemblies	I/E	Yes
TifF	SHIMA-SEIKI	*.pic – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes
Adobe   Illustrator	TGA	*.tga – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes
Adobe   Illustrator	TIFF		I/E	Yes
CGM		2D Formats		
DWG	Adobe Illustrator	*.ai	I	Yes
Vest	CGM	*.cgm	I/E	Yes
IGES	DWG	*.dwg	I/E	Yes
S.* - Format generated by UNIX on export	DXF	*.dxf	I/E	Yes
*.she - Format generated by Windows on export	IGES	*.igs	I/E	Yes
PDF	Medusa	*.she – Format generated by Windows on export	I/E	Yes
*.ed (structure) & *.pit (drawing)	PDF	\ 1 /	Е	Yes
*.step - (import)  *.step - (import)  *.tsh	Creo View	*.edz (compressed structure and drawings) *.pvs (structure) & *.plt (drawing)	Е	Yes
ACIS	STEP		I/E	Yes
ACIS	Stheno	*.tsh	I/E	Yes
Autodesk Inventor  *.iam, *.ipt  CATIA V4  *.model – (import/export) *.exp, *.session – (import) Requires PTC Creo CATIA V4 Collaboration Extension license for export and update  CATIA V5  *.CATPart *.CATProduct *.cgr - Facet Only Requires PTC Creo CATIA V5 Collaboration Extension license for export and update  DWG  *.dwg – import with embedded ACIS, export facet geometry  DXF  *.dxf – import with embedded ACIS, export facet geometry  J/E  Yes  Granite  *.g  JT  *.jt Requires Interface for JT license  IBL  *.ibl  I Yes  ICEM  *.igs – (import/export)		3D Formats		
Autodesk Inventor  *.iam, *.ipt  CATIA V4  *.model – (import/export) *.exp, *.session – (import) Requires PTC Creo CATIA V4 Collaboration Extension license for export and update  CATIA V5  *.CATPart *.CATProduct *.cgr - Facet Only Requires PTC Creo CATIA V5 Collaboration Extension license for export and update  DWG  *.dwg – import with embedded ACIS, export facet geometry  DXF  *.dxf – import with embedded ACIS, export facet geometry  J/E  Yes  Granite  *.g  JT  *.jt Requires Interface for JT license  IBL  *.ibl  I Yes  ICEM  *.igs – (import/export)	ACIS	*.acs	I/E	Yes
CATIA V4  *.model – (import/export) *.exp, *.session – (import) Requires PTC Creo CATIA V4 Collaboration Extension license for export and update  CATIA V5  *.CATPart *.CATProduct *.cgr - Facet Only Requires PTC Creo CATIA V5 Collaboration Extension license for export and update  DWG  *.dwg – import with embedded ACIS, export facet geometry  DXF  *.dxf – import with embedded ACIS, export facet geometry  I/E  Yes  Trit Requires Interface for JT license  BL  *.ibl  1 Yes  ICEM  *.igs – (import/export)	Autodesk Inventor			
*.CATProduct *.cgr - Facet Only Requires PTC Creo CATIA V5 Collaboration Extension license for export and update  DWG	CATIA V4	*.model – (import/export) *.exp, *.session – (import)	I/E	
DXF	CATIA V5	*.CATProduct *.cgr - Facet Only Requires PTC Creo CATIA V5 Collaboration Extension license for export and update	I/E	Yes
Granite	DWG			Yes
T	DXF	*.dxf – import with embedded ACIS, export facet geometry		
Requires Interface for JT license			I/E	Yes
ICEM         *.icm         I         Yes           IGES         *.igs – (import/export)         I/F         Yes	JT		I/E	Yes
IGES *.igs – (import/export)	IBL	*.ibl	I	Yes
	ICEM	*.icm		Yes
	IGES		I/E	Yes

Optegra visualize   *.gbf Facet Only   E	Yes
* x_t - (export)	
Points *.pts	Yes
Creo View  *.ed (structure) & *.ol (models) *.pvs (structure) & *.ol (models) *.pvs (structure) & *.ol (models) *.pvz (packaged structure and models)  Render  *.slp – Facet Only  Rhino *.3dm I SolidEdge *.par, *.asm. I SolidWorks *.sldprt, *.sldasm.  STEP  *.stp – (import/export) *.step – (import)  STL  *.stl – Facet Only  I/E  STL  *.stl – Facet Only  I/E  U3D  *.u3d  E  Unigraphics  *.prt (UG format) Requires PTC Creo UG/NX Collaboration Extension license for export and update  VDA  *.vda  VRML  *.wrl – Facet Only  Wavefront  *.obj  ECAD Formats  Allegro  *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries	Yes
*.edz (compressed structure and models) *.pvs (structure) & *.ol (models) *.pvz (packaged structure and models)  Render *.slp – Facet Only E Rhino *.3dm I SolidEdge *.par, *.asm.  SolidWorks *.sldprt, *.sldasm.  STEP *.stp – (import/export) *.stsp – (import)  STL *.stl – Facet Only I/E  U3D *.u3d E Unigraphics *.prt (UG format) Requires PTC Creo UG/NX Collaboration Extension license for export and update  VDA *.vda VRML *.wrl – Facet Only I/E  Wavefront *.obj I  ECAD Formats  Allegro *.mdb – For board outline files *.mdc – For component placement files *.mdc – For footprint files, such as the ones in component outline libraries	Yes
Rhino *.3dm   I   SolidEdge *.par, *.asm.   I   SolidWorks *.sldprt, *.sldasm.   I/E   STEP *.stp - (import/export)   I/E   STL *.stl - Facet Only   I/E   U3D *.u3d   E   Unigraphics *.prt (UG format)   Requires PTC Creo UG/NX Collaboration Extension license for export and update   I/E   VDA *.vda   I/E   VRML *.wrl - Facet Only   I/E   Wavefront *.obj   I    ECAD Formats  Allegro *.mdb - For board outline files *.mdc - For component placement files *.mdc - For footprint files, such as the ones in component outline libraries   I/E	Yes
SolidEdge *.par, *.asm.   I   SolidWorks *.sldprt, *.sldasm.   I/E   STEP *.stp - (import/export)   I/E   STL *.stl - Facet Only   I/E   U3D *.u3d   E   Unigraphics *.prt (UG format)   Requires PTC Creo UG/NX Collaboration Extension license for export and update   VDA *.vda   I/E   VRML *.wrl - Facet Only   I/E   Wavefront *.obj   I    ECAD Formats  Allegro *.mdb - For board outline files *.mdc - For component placement files *.mdf - For footprint files, such as the ones in component outline libraries   I/E	Yes
SolidWorks *.sldprt, *.sldasm.   I/E   STEP	Yes
STEP *.stp - (import/export)	Yes
*.step – (import)  STL *.stl – Facet Only I/E  U3D *.u3d E  Unigraphics *.prt (UG format) Requires PTC Creo UG/NX Collaboration Extension license for export and update  VDA *.vda I/E  VRML *.wrl – Facet Only I/E  Wavefront *.obj I   ECAD Formats  Allegro *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries	Yes
U3D *.u3d E Unigraphics *.prt (UG format) Requires PTC Creo UG/NX Collaboration Extension license for export and update  VDA *.vda I/E  VRML *.wrl – Facet Only I/E  Wavefront *.obj I   ECAD Formats  Allegro *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries	Yes
Unigraphics *.prt (UG format) Requires PTC Creo UG/NX Collaboration Extension license for export and update  VDA *.vda   I/E  VRML *.wrl – Facet Only   I/E  Wavefront *.obj   I   ECAD Formats  Allegro *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries   I/E	Yes
Requires PTC Creo UG/NX Collaboration Extension license for export and update  VDA *.vda   I/E  VRML *.wrl – Facet Only   I/E  Wavefront *.obj   I   ECAD Formats  Allegro *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries   I/E	Yes
VRML *.wrl – Facet Only I/E  Wavefront *.obj I   ECAD Formats  Allegro *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries	Yes
Wavefront *.obj I  ECAD Formats  Allegro *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries	Yes
Allegro *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries	Yes
Allegro  *.mdb – For board outline files  *.mdc – For component placement files  *.mdf – For footprint files, such as the ones in component outline libraries	Yes
*.mdc – For component placement files  *.mdf – For footprint files, such as the ones in component outline libraries	
	Yes
DAZIX  *.edn – Neutral file of the board outline and component placement. Dazix refers to this as a core file.  *.edp – Profile file that contains component outlines. Dazix refers to this as a library file	Yes
EDMD *.idx I/E	Yes
IDF *.emn – (import/export) *.emp – library file (import)	Yes
Neutral *.nwf I/E	Yes
Creo Schematics *.xml	Yes
Visula *.evs I/E	Yes

NOTES

Object Linking and Embedding (OLE) may provide additional format support but is dependent on operating system, installed software components, and third-party support for OLE.