

Hardware Notes - Creo 2.0

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

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- [Platform Support](#)
- [System Requirements](#)
- [Graphics Information](#)
- [Certified and Supported Graphics Cards](#)
- [Desktop Virtualization Environment Support](#)
- [Supported Peripherals and Accessories](#)
- [Supported MCAD Systems](#)
- [Supported Finite Element Solvers](#)
- [Platform Support for Data Exchange](#)

Platform Support		
Partner	Operating System	Operating System levels
Microsoft	Windows 10 Professional 64-bit Edition ⁵ Windows 10 Enterprise 64-bit Edition ⁵ Windows 10 Enterprise 2015 LTSC 64-bit Edition ⁵	Anniversary Edition (1607) Creators (1703) ⁶ Fall Creators (1709)
	Windows Server 2012 R2 64-bit Standard Edition ^{1&2}	Base OS
	Windows Server 2008 R2 64-bit Edition ²	Base OS
	Windows 8.1 32 and 64-bit Edition ³ Windows 8.1 Pro 32 and 64-bit Edition ³	Base OS, Update (KB 2919355)
	Windows 8 32 and 64-bit Edition ⁴ Windows 8 Pro 32 and 64-bit Edition ⁴	Base OS
	Windows 7 Professional 32 and 64-bit Edition Windows 7 Ultimate 32 and 64-bit Edition Windows 7 Enterprise 32 and 64-bit Edition	Base OS, Service Pack 1
	Windows XP Professional x64 Edition	Base OS, Service Pack 2
	Windows XP Professional Edition;	Base OS, Service Pack 1, 2 and 3
NOTES		
1. Windows Server 2012 R2 is supported on Creo 2.0 M150 and later.		
2. Windows Server 2008 and 2012 are supported in Batch Mode only, and are NOT supported for Creo Schematics.		
3. Windows 8.1 is supported on Creo 2.0 M100 and later.		
4. Windows 8 is supported on Creo 2.0 M030 and later.		
5. Windows 10 is supported on Creo 2.0 M190 and later.		
6. The Creators update requires the latest Microsoft Windows 10 cumulative update. Please refer to this PTC Technical Support Article for more information.		

Windows 10 Creators Update (1703) may cause blue screen system shut down with Creo Parametric 2.0

The recent Windows 10 Creators Update (1703) has introduced an issue that may result in a blue screen system shut down when launching or working with Creo Parametric 2.0. PTC is working in tandem with Microsoft to address this issue.

PTC recommends that Creo 2.0 users do not install Windows 10 Creators Update (1703) until the issue is resolved. More information can be found in the following article, including possible workarounds:

[After Windows 10 upgrade 1703 Creators Update, getting error "UNEXPECTED_KERNEL_MODE_TRAP" and blue screen resulting in system exit with Creo Parametric 3.0](#)

System Requirements		
Main Memory (RAM)	Operating System	Recommended amount
	Windows 10 64-bit	4GB or higher
	Windows Server 2012 R2	4GB or higher
	Windows Server 2008 R2	4GB or higher
	Windows 8 and 8.1 64-bit	4GB or higher
	Windows 8 and 8.1 32-bit	3GB ¹
	Windows 7 64-bit	4GB or higher
	Windows 7 32-bit	3GB ¹
	Windows XP x64 (64-bit)	3GB or higher
	Windows XP (32-bit)	3GB ²
Internal Browser Support	One of the following: <ul style="list-style-type: none">• Microsoft Internet Explorer 11.0⁴• Microsoft Internet Explorer 10.0³• Microsoft Internet Explorer 9.0• Microsoft Internet Explorer 8.0• Microsoft Internet Explorer 7.0• Microsoft Internet Explorer 6.0 (SP1 or later) Mozilla based browser (embedded with Creo 2.0)	
Monitor	1280 x 1024 (or higher) resolution support with 24-bit or greater color	
Network	Microsoft TCP/IP Ethernet Network Adapter	
Mouse	Microsoft-approved 3-button mouse	
File systems	NTFS - Universal Naming Convention (UNC) ⁵	
Misc.	DVD drive	
NOTES		
1. 32-bit operating systems can physically allocate only 3GB of RAM. RAM greater than 3GB (if installed) will remain un-utilized.		
2. For Windows XP you must enable the /3GB switch in order to utilize up to 3GB.		
3. IE 10.0 is supported on Creo 2.0 M080 and later.		
4. IE 11.0 is supported on Creo 2.0 M100 and later on Windows 7, 8.1 and 10.		
5. PTC does not test any specific technologies which provide UNC support (Samba, DFS, WebDAV, NAS appliances, etc.)		

Limitations of 32-bit Windows platforms

Due to the inherent hardware memory limitations of 32-bit platforms, PTC will no longer offer technical support for “out of memory conditions” on 32-bit hardware for Creo 2.0 in cases where /3GB switch is utilized. Customers planning on upgrading to Creo 2.0 must carefully examine whether their current 32-bit hardware will be adequate for their large assembly needs and consider switching to 64-bit hardware.

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 2.0, a PTC certified or supported hardware configuration is recommended. Graphics cards that support at least OpenGL 3.1 are recommended for Creo 2.0.

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.

For users of Direct3D on Windows 7, the March 2009 or later release of the DirectX 10.0 End User Run Time libraries must be installed. Additionally, Medium to High-End graphics cards that fully support Direct3D 10.0 are recommended for adequate performance. Visit the Microsoft website for more information about downloading and installing Direct3D.

Dual Monitor Support

Limited dual monitor support is provided in Creo 2.0. PTC has successfully performed limited testing of some graphics card models from AMD and NVIDIA that support dual monitor capabilities. If your graphics card is certified for Creo 2.0 and provides dual monitor support**, PTC expects that it will run in this mode without issue. PTC will provide limited support to resolve issues arising when running in dual monitor mode, however, the entire solution will not be submitted for formal certification as a complete configuration.

Note: In the event that dual monitor mode fails, we advise use of Span mode as a workaround.

**Consult with AMD, NVIDIA, or the hardware platform partner to confirm the availability of this functionality with a given graphics card that has been certified with Creo 2.0.

Certified and Supported Graphics Cards

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 [Platform Support](#) web page as our hardware partners complete certifications in preparation for production Creo 2.0 shipment.

Workstation Vendor	Certified and Supported Graphics Cards		
	AMD (ATI)	NVIDIA	INTEL
Dell	Yes	Yes	No
Cisco	Currently none available	Yes	No
Fujitsu	Yes	Yes	No
HP	Yes	Yes	Yes
HPE	No	No	Yes
IBM	Currently none available	Yes	No
Lenovo	Yes	Yes	Yes
Microsoft	Currently none available	Currently none available	Yes
Toshiba	Currently none available	Yes	No

Desktop Virtualization Environment Support

PTC has certified the following PTC Creo Applications to work in Virtualized Desktop Environments:-

- PTC Creo 2.0 Parametric M060 and later
- PTC Creo 2.0 Direct M060 and later
- PTC Creo 2.0 Layout M060 and later
- PTC Creo 2.0 Simulate M060 and later
- PTC Creo 2.0 Options Modeler M060 and later

Refer to the official PTC [Platform Support](#) web page for specific hardware partners and available configurations.

Supported Peripherals and Accessories

3D Controllers for Creo 2.0		
Please refer to http://www.3dconnexion.com/service/drivers.html for specific driver information. Using the latest driver provided by 3DConnexion is fully supported by PTC.		
Device	3DxSoftware version	Status
SpaceExplorer	3.16.1	Certified
SpaceMouse Pro	3.16.1	Certified
SpaceNavigator	3.16.1	Certified
SpaceNavigator for Notebooks	3.16.1	Certified
SpacePilot Pro	3.16.1	Certified
Plotters and Printers		
Creo 2.0 supports HPGL, HPGL/2 and PostScript standard plotting formats. In addition, Creo 2.0 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 2.0

Platforms	Creo Elements/Direct (all languages)	CATIA (English only)	Unigraphics (English only)
32-bit Windows XP, Windows 7	18.1	n/a	NX7
64-bit Windows XP, Windows 7	18.1	n/a	NX7

Supported Finite Element Solvers

You can integrate several Finite Element Solvers with Creo 2.0 for use in FEM mode. The following table lists the supported Finite Element Solvers and platforms.

Platforms	NASTRAN	ANSYS
32-bit Windows XP, Windows 7	2012	14.5*
64-bit Windows XP, Windows 7	2012	14.5*
NOTES		
*ANSYS 13.0 supported for Creo 2.0 F000-M040. ANSYS 14.5 supported for Creo 2.0 M050 and later.		

Platform Support for Data Exchange

Processor	Format	Import / Export	Platform	
			Windows 32-bit	Windows 64-bit
Image Formats				
BMP	*.bmp – Edit via Image Editor, used in style feature as trace sketch, export parts and assemblies via Distributed Pro/BATCH	I/E	Yes	Yes
EPS	*.eps – Save a Copy of parts and assemblies, export parts and assemblies via Distributed Pro/BATCH	E	Yes	Yes
GIF	*.gif – import via Image Editor, used in style feature as trace sketch	I	Yes	Yes
HDR	*.hdr – import via Image Editor	I	Yes	Yes
JPEG	*.jpg – Edit via Image Editor, used in style feature as trace sketch, Save a Copy of parts and assemblies, export parts, assemblies and drawings via Distributed Pro/BATCH	I/E	Yes	Yes
PDF	*.pdf – Save a Copy of parts, assemblies and drawings, export parts and assemblies via Distributed Pro/BATCH	E	Yes	Yes
Picture	*.pic – Save a Copy of parts, assemblies and drawings	E	Yes	Yes
PNG	*.png – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	Yes
PTC Bumpmap	*.tx1 – Edit via Image Editor	I/E	Yes	Yes
PTC Color Texture	*.tx4 – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	Yes
PTC Decal	*.tx3 – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	Yes
PTC Image	*.imf – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	Yes
RGB	*.rgb – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	Yes
RLA	*.rla - Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	Yes
Session Texture	*.mem – Import via Image Editor	I	Yes	Yes
Shaded Image	*.shd – Edit via Image Editor, Save a Copy of parts and assemblies	I/E	Yes	Yes
SHIMA-SEIKI	*.pic – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	Yes
TGA	*.tga – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	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	I/E	Yes	Yes
2D Formats				
Adobe Illustrator	*.ai	I	Yes	Yes
CGM	*.cgm	I/E	Yes	Yes
DWG	*.dwg	I/E	Yes	Yes
DXF	*.dxf	I/E	Yes	Yes
IGES	*.igs	I/E	Yes	Yes
Medusa	s.* – Format generated by UNIX on export *.she – Format generated by Windows on export *.asc – (import)	I/E	Yes	Yes
PDF	*.pdf – Direct drawing export	E	Yes	Yes
Creo View	*.ed (structure) & *.plt (drawing) *.edz (compressed structure and drawings) *.pvs (structure) & *.plt (drawing) *.pvz (packaged structure and drawings)	E	Yes	Yes
STEP	*.stp – (import/export) *.step – (import)	I/E	Yes	Yes
Stheno	*.tsh	I/E	Yes	Yes

3D Formats				
ACIS	*.acs	I/E	Yes	Yes
Autodesk Inventor	*.iam, *.ipt Requires installation of and licensing for Autodesk Inventor	I	Yes	Yes
CATIA V4	*.model – (import/export) *.exp, *.session – (import) Requires Interface for CATIA II license	I/E	Yes	No
CATIA V5	*.CATPart *.CATProduct *.cgr - Facet Only Requires Interface for CATIA V5 license	I/E	Yes	Yes
DWG	*.dwg – with embedded ACIS	I	Yes	Yes
DXF	*.dxf – with embedded ACIS	I	Yes	Yes
Granite	*.g	I/E	Yes	Yes
JT	*.jt Requires Interface for JT license	I/E	Yes	Yes
IBL	*.ibl	I	Yes	Yes
ICEM	*.icm	I	Yes	Yes
IGES	*.igs – (import/export) *.iges – (import)	I/E	Yes	Yes
Neutral	*.neu	I/E	Yes	Yes
Optegra visualize	*.gbf Facet Only	E	Yes	Yes
Parasolid 3D	*.xmt, *.xmt_txt, *.x_t, *.xmt_neu, *.x_n *.xmt_bin, *.x_b – (import) *.x_t – (export)	I/E	Yes	Yes
PDF	*.pdf – Direct model export	E	Yes	Yes
Points	*.pts	I	Yes	Yes
Creo Elements/View & Creo View	*.ed (structure) & *.ol (models) *.edz (compressed structure and models) *.pvs (structure) & *.ol (models) *.pvz (packaged structure and models)	I/E	Yes	Yes
Render	*.slp – Facet Only	E	Yes	Yes
Rhino	*.3dm	I	Yes	Yes
SolidWorks	*.sldprt, *.sldasm Requires installation of SolidWorks or SolidWorks Explorer and a license of SolidWorks.	I	Yes	Yes
STEP	*.stp – (import/export) *.step – (import)	I/E	Yes	Yes
STL	*.stl – Facet Only	I/E	Yes	Yes
U3D	*.u3d	E	Yes	Yes
Unigraphics	*.prt (UG format) Requires UG license and installation	I/E	Yes	Yes
VDA	*.vda	I/E	Yes	Yes
VRML	*.wrl – Facet Only	I/E	Yes	Yes
Wavefront	*.obj	I	Yes	Yes
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	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	I/E	Yes	Yes
EDMD	*.idx	I/E	Yes	Yes
IDF	*.emn – (import/export) *.emp – library file (import)	I/E	Yes	Yes
Neutral	*.nwf	I/E	Yes	Yes
Creo Schematics	*.xml	I	Yes	Yes
Visula	*.evs	I/E	Yes	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.				

