

# 3Shape PC Catalog

Version 21.4

Valid August 15<sup>th</sup> 2021



# Changes in this version of the PC catalog

Changes from 21.2 to 21.4 include:

- Removal of Dell Precision Workstation 15' and 17' (Item #: 20000211, 20000212 ) Dell Precision 15' (5550) Tech Specs. and HP Zbook (G7) (Item #: 20000204 and 20000208)
- Addition of new portfolio of laptops to include 3Shape PC Support
- Lenovo Thinkstation specs were updated to reflect the current portfolio

This document is subject to change without notice.

All removed and previously approved PC's can be found in the Legacy PC Catalog on the [Partner Portal](#).

# Before reading the PC catalog please complete reading all six points as they contain vital information about PC selection

The purpose of the PC catalog is to inform resellers about which PCs can be used with different 3Shape products. It is not intended for use as end-user information.

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**1 The importance of the PC**

The PC is an important part of the overall 3Shape system. It is the engine on which the software is run, and consequently the software puts some requirements on the PC. Selecting the correct PC will ensure a good user experience and effective workflow for the user. This document outlines how to determine which PC to use for a given 3Shape system or combination of systems. If a combination of 3Shape systems is used, make sure all systems installed on the PC, are updated to the latest version.

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**2 Selecting a PC**

If the system includes TRIOS scanning, a PC from the “List of specific PCs” must be used in order to guarantee proper operation. PCs approved for TRIOS scanning will support the following scanners: TRIOS standard, TRIOS color, TRIOS3, TRIOS3 Wireless, and TRIOS 4. 3Shape cannot guarantee proper operation of a TRIOS Scanner on PCs that are not listed in this PC list.

If the system does not include TRIOS scanning, it is also possible to select a PC that complies with the specifications listed in the section “Minimum PC requirements for 3Shape Software packages”.

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**3 Ordering a PC**

For ordering information on the PCs delivered by 3Shape, locate the 3Shape item number under the PC name. Only resellers may order PCs directly from 3Shape. Not all PCs are available from 3Shape.

All PC’s, delivered by resellers, are subject to the local availability from the PC manufacturer. Not all models may be available from the PC manufacturer in all regions. Not all models may be available from each reseller.

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**4 PC Configuration**

Some PCs allow for variation of specific parameters within some certain limits. In these cases, the variations allowed are denoted by the terms ‘or’/ ‘or more’.

The specific PC configuration available from 3Shape will depend on the availability from the PC manufacturers at the date of order. 3Shape will, upon request, inform of the specific PC configuration as delivered by 3Shape.

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**5 Service and Support on PCs**

All end-user service and support on PCs, delivered by 3Shape, are provided by the PC manufacturer, not 3Shape. Please check at the local PC manufacturer for detailed information about service and support terms.

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**6 Windows edition**

3Shape develops and test the systems for Windows Pro version as this contains several benefits over the Home version. The Pro version will enable the PC to be part of a corporate domain, whereas the Home version will not. For Windows 10, only the Pro version will allow full control of Windows updates. For full information please refer to the ‘PC setup guide for TRIOS’ document. 3Shape products will in general also work on Windows Home edition, but only the Windows Pro version is tested on a regular basis, why 3Shape clearly recommends Windows Pro. Important note: TRIOS3 Wireless scanner requires Windows 8.1 or Windows 10.

# PCs available from 3Shape

This covers PCs available from 3Shape and/or s 3Shape reseller. This list covers PCs for the TRIOS® scanner (POD Solution).



**Sales Item: 20000214 - HP Zbook with 3 Year Support**

**HP ZBook 15 (G7)**

Display: 15.6 inch FHD (1920x1080)  
 Processor: Intel® Core™ i7-10850H  
 Memory: 16 GB DDR4 3200  
 Disk: 256GB SSD  
 Graphics card: NVIDIA® Quadro T1000 (4 GB)  
 Keyboard: Regional, depending on availability  
 Operating system: Windows 10 Pro  
 Dim.: 14.15" x 9.21" x 0.9"; 359.4mm x 233.9mm x 22.8mm  
 Weight: 1.9 Kg (4.2 lbs.)



**Sales Item: 20000213 - Dell Precision with Touchscreen with 3 Year Support**

**Dell Precision Workstation 15 (7560)**

Display: 15.6" FHD (1920x1080) Touchscreen  
 Processor: Intel Core i7- 11850H  
 Memory: 32GB DDR4  
 Disk: 1TB SSD  
 Graphics card: NVIDIA RTX A3000 w/6 GB GDDR6  
 Keyboard: Regional, depending on availability  
 Operating system: Windows 10 Pro  
 Dim: 14.1" x 9.5" x .98"-1.08"; 360mm x 242mm x 25-27.63mm  
 Weight: 2.49 kg (5.5 lbs)

	3Shape Software					May be delivered by	
	TRIOS (POD Solution)	TRIOS Design Studio	Ortho System	Implant Studio <sup>(7)</sup>	Dental System	3Shape	3Shape reseller
<p><b>HP ZBook 15 (G7)</b>                      Display: 15.6 inch FHD (1920x1080)                      Processor: Intel® Core™ i7-10850H                      Memory: 16 GB DDR4 3200                      Disk: 256GB SSD                      Graphics card: NVIDIA® Quadro T1000 (4 GB)                      Keyboard: Regional, depending on availability                      Operating system: Windows 10 Pro                      Dim.: 14.15" x 9.21" x 0.9"; 359.4mm x 233.9mm x 22.8mm                      Weight: 1.9 Kg (4.2 lbs.)</p>	✓	✓ <sup>(8)</sup>	✓ <sup>(8)</sup>	(✓) <sup>(8)</sup>	(✓) <sup>(2,3)</sup>	✓	✓
<p><b>Dell Precision Workstation 15 (7560)</b>                      Display: 15.6" FHD (1920x1080) Touchscreen                      Processor: Intel Core i7- 11850H                      Memory: 32GB DDR4                      Disk: 1TB SSD                      Graphics card: NVIDIA RTX A3000 w/6 GB GDDR6                      Keyboard: Regional, depending on availability                      Operating system: Windows 10 Pro                      Dim: 14.1" x 9.5" x .98"-1.08"; 360mm x 242mm x 25-27.63mm                      Weight: 2.49 kg (5.5 lbs)</p>	✓ <sup>(1)</sup>	✓	✓ <sup>(2)</sup>	✓	(✓) <sup>(2,3)</sup>	✓	✓

# PCs available from 3Shape

This covers PCs available from 3Shape and/or s3Shape reseller. This list covers PCs for the LAB<sup>®</sup> scanners and the Ultra PC Approved for TRIOS use with Pod configurations.



**Lenovo ThinkStation P340 - Ultra PC**  
 3Shape item no for TRIOS Pod: 20000128  
 3Shape item no for LAB: 20000127  
 3 Years Onsite service

Display: 1920 x 1080 resolution minimum (monitor not incl.)  
 Processor: Intel i7-10700  
 Memory: 64GB RAM  
 Disk: 1TB NVMe M.2 SSD  
 Graphics Card: NVIDIA Quadro P2200 5GB  
 Operating system: Windows 10 Pro  
 Keyboard: Regional, depending on availability  
 Dim.: 165mm (6.5") x 376mm (14.8") x 328mm (12.9")  
 Mouse: included



**Lenovo ThinkStation P340 - High Performance PC**  
 3Shape item no: 20000126  
 3 Years Onsite service

Display: 1920 x 1080 resolution minimum (monitor not incl.)  
 Processor: Intel i7-10700  
 Memory: 32 GB RAM  
 Disk: 512GB NVMe M.2 SSD  
 Graphics Card: NVIDIA Quadro P1000 4GB  
 Operating system: Windows 10 Pro  
 Keyboard: Regional, depending on availability  
 Dim.: 165mm (6.5") x 376mm (14.8") x 328mm (12.9")  
 Mouse: included



**Lenovo ThinkCentre M70t - Standard PC**  
 3Shape item no: 20000125  
 3 Years Onsite service

Display: 1920 x 1080 resolution minimum (monitor not incl.)  
 Processor: Intel i5-10400  
 Memory: 16GB RAM  
 Disk: 512GB NVMe M.2 SSD  
 Graphics card: NVIDIA Quadro P620 2GB  
 Operating system: Windows 10 Pro  
 Keyboard: Regional, depending on availability  
 Dim.: 145mm (5.7") x 296 mm (11.7") x 346mm (13.6")  
 Mouse: included

	3Shape Software					May be delivered by	
	TRIOS (POD Solution)	TRIOS Design Studio	Ortho System	Implant Studio <sup>(1)</sup>	Dental System	3Shape	3Shape reseller
 <p><b>Lenovo ThinkStation P340 - Ultra PC</b>                      3Shape item no for TRIOS Pod: 20000128                      3Shape item no for LAB: 20000127                      3 Years Onsite service</p> <p>Display: 1920 x 1080 resolution minimum (monitor not incl.)                      Processor: Intel i7-10700                      Memory: 64GB RAM                      Disk: 1TB NVMe M.2 SSD                      Graphics Card: NVIDIA Quadro P2200 5GB                      Operating system: Windows 10 Pro                      Keyboard: Regional, depending on availability                      Dim.: 165mm (6.5") x 376mm (14.8") x 328mm (12.9")                      Mouse: included</p>	✓ <sup>(1)</sup>	✓	✓ <sup>(5)</sup>	✓	✓ <sup>(5)</sup>	✓	✓
 <p><b>Lenovo ThinkStation P340 - High Performance PC</b>                      3Shape item no: 20000126                      3 Years Onsite service</p> <p>Display: 1920 x 1080 resolution minimum (monitor not incl.)                      Processor: Intel i7-10700                      Memory: 32 GB RAM                      Disk: 512GB NVMe M.2 SSD                      Graphics Card: NVIDIA Quadro P1000 4GB                      Operating system: Windows 10 Pro                      Keyboard: Regional, depending on availability                      Dim.: 165mm (6.5") x 376mm (14.8") x 328mm (12.9")                      Mouse: included</p>	✗	✓	✓ <sup>(5)</sup>	✓	✓ <sup>(5)</sup>	✓	✓
 <p><b>Lenovo ThinkCentre M70t - Standard PC</b>                      3Shape item no: 20000125                      3 Years Onsite service</p> <p>Display: 1920 x 1080 resolution minimum (monitor not incl.)                      Processor: Intel i5-10400                      Memory: 16GB RAM                      Disk: 512GB NVMe M.2 SSD                      Graphics card: NVIDIA Quadro P620 2GB                      Operating system: Windows 10 Pro                      Keyboard: Regional, depending on availability                      Dim.: 145mm (5.7") x 296 mm (11.7") x 346mm (13.6")                      Mouse: included</p>	✗	✗	✓ <sup>(6)</sup>	✗	✓ <sup>(6)</sup>	✓	✓

**Notes**

- 1 TRIOS 3 Wireless scanners require Windows 8.1 or Windows 10.
- 2 Software (Studio/Clinic Apps or Dental System) will not be installed from factory. Reseller must install the software.
- 3 PC is approved for Dental System design station only. For Dental System scanning, we recommend stationary computers (P340/M720), but all laptop models can also be used.
- 4 In order to run 3Shape products on Apple computers, Windows need to be installed which therefore requires more setup for the reseller (requires Bootcamp, see instructions on Apple's website).
- 5 This PC is sold together with E3, E4, and D/R 2000. Note that PCs for all refurbished models are subject to change and may not be the same as for new units.
- 6 This PC is sold together with E1 and E2. Note that PCs for all refurbished models are subject to change and may not be the same as for new units.
- 7 Please refer to the recommendation for Implant Studio when looking for specific PC for X1 Viewer.
- 8 Only recommended for use as a client in aof Client Server setup.

# All systems including a TRIOS must be delivered to end users with a configured PC

3Shape provides fully functional computer with TRIOS software installed. Alternatively, Reseller purchases, configures and delivers fully functional computer with TRIOS software installed. Please note! Distributor may be required to exchange some parts (e.g. RAM, disk, etc.), depending on the available configurations by the computer supplier. All specifications are subject to change without notice.

## PC setup guide

The user experience (especially when using TRIOS) depends to a very large degree on the proper configuration of the PC used. To ensure proper setup of the PCs, 3Shape provides a document intended for distributors of TRIOS®. It describes all steps required to set up a new PC to enable fast and accurate scans with the TRIOS POD systems (cart systems are delivered fully configured). The document may be found on the 3Shape support site. The document is subject to change.

# Clinic Software PC Requirements (self-sourced)

This covers requirements for PCs not purchased through 3Shape.

The specifications below are not valid for operating a TRIOS scanner, please refer to the PCs available from 3Shape.

## Studio App PC

TRIOS Design Studio, Implant Studio, Splint Studio, Excitement Apps

### Desktop Recommended

Resolution:	Full HD (1920 x 1080)
Processor:	Intel® Core™ i7 8 <sup>th</sup> Generation or AMD Ryzen™ 7 2700 or better
Memory:	32 GB
Disk:	1 TB SSD (or more)
Graphics card:	NVIDIA® GTX 1060 6 GB or better
Operating system:	Windows 10 Pro
Optional:	Touch screen 3DConnexion Space Mouse Pro



Studio App PC

### Desktop Minimum

Resolution:	Full HD (1920 x 1080)
Processor:	Intel® Core™ i5-8400 / AMD Ryzen™ 5 2600 or better
Memory:	16 GB
Disk:	512 GB SSD (or more)
Graphics card:	NVIDIA® GTX 1050 4GB or better
Operating system:	Windows 10 Pro
Optional:	Touch screen 3DConnexion Space Mouse Pro

### Laptop Recommended

Resolution:	Full HD (1920 x 1080) with touch
Processor:	Intel® Core™ i7 8 <sup>th</sup> Generation / AMD Ryzen™ 7 3750H or better
Memory:	32 GB
Disk:	1 TB SSD
Graphics card:	NVIDIA® GTX 1050 4 GB or better
Operating system:	Windows 10 Pro



Studio App PC

## Dental Desktop Server PC

### Recommended

Processor:	Intel® Core™ or Xeon™ / AMD Ryzen™ or Epyc™ 8 Cores at 2.1 Ghz or more
Memory:	16 GB or more
Diskspace:	1 TB SSD or more (2TB or more for X1)
Operating system:	Windows 10 Pro, Windows Server 2016 or Windows Server 2019
SQL Server:	Microsoft SQL 2021 Express SP1 (default), Microsoft SQL Server 2016 or Microsoft SQL Server 2019 <sup>(2)</sup>



Dental Desktop Server PC

### Minimum<sup>(1)</sup>

Processor:	Intel® Core™ or Xeon™ / AMD Ryzen™ or Epyc™ 4 Cores at 2.1 Ghz or more
Memory:	16 GB
Diskspace:	1 TB SSD or more (2TB or more for X1)
Operating system:	Windows 10 Pro or Windows Server 2012 R2

- 1 The minimum PC requirements for Dental Desktop Server are for a setup with no more than 10 clients, and where the server will not be used as an active workstation. Please see "Network speed requirements" for requirements to network bandwidth and connection for the server PC. If the Dental Desktop Server PC will be used for TRIOS scanning, the PC needs to be selected from the List of approved PC's. If the Dental Desktop Server PC will be used as a workstation for Implant- or Design Studio, the PC needs to fulfill the minimum PC requirements for the selected 3Shape product. For more information on client-server setup please refer to the TRIOS Info Pack: Client-Server setup.
- 2 If you plan to connect to your own (existing) database instead of installing the included SQL Express Server, please check requirements for instance and database settings in the Dental Desktop SQL Server Guide.






# Lab PC requirements (self-sourced)

This covers requirements for PCs not purchased through the 3Shape catalogue.

## Legend

- ✓ Sufficient
- ✓+ Recommended for improved performance (optional)
- ✗ Not sufficient

		Ortho System 	Implant Studio 	Dental System <sup>(3)</sup> 
<b>Processor</b>	Intel Core i5	✓	✗	✓
	Intel Core i7 or equivalent	✓+	✓	✓+
<b>Memory (RAM)</b>	8GB	✓	✗	✓ <sup>(1)</sup>
	16GB	✓+	✓	✓ <sup>(1)</sup>
	32 GB	✓+	✓+	✓+ <sup>(1)</sup>
<b>Disk</b>	250GB (conventional or SSD)	✓	✗	✓ <sup>(2)</sup>
	500GB (conventional or SSD)	✓+	✓	✓+ <sup>(2)</sup>
	1TB (conventional or SSD)	✓+ <sup>(2)</sup>	✓+	✓+ <sup>(2)</sup>
<b>Graphics card<sup>(6)</sup></b>	2GB NVIDIA GeForce	✓	✓	✓ <sup>(3,5)</sup>
	4GB NVIDIA GeForce	✓	✓+	✓+ <sup>(3,5)</sup>
	6GB NVIDIA GeForce	✓	✓+	✓+ <sup>(3,5)</sup>
	2GB NVIDIA Quadro	✓	✗	✓ <sup>(3,5)</sup>
	4GB NVIDIA Quadro	✓	✓	✓+ <sup>(3,5)</sup>
	6GB NVIDIA Quadro	✓	✓	✓+ <sup>(3,5)</sup>
<b>Operating system</b>	Recommended Windows 10 PRO (64bit)	✓+	✓+	✓+
	Supported Windows 10 Home (64bit) Windows 8.1 PRO (64bit) Windows 8.1 Home (64bit) Windows Server 2019	✓	✓	✓
	Supported Windows Server 2012 Windows Server 2016	✗	✗	✗
<b>Monitor resolution</b>	Recommended 1920x1080 (Full HD)	✓+	✓	✓
	1920x1200	✓	✓+	✓
<b>Mouse</b>	With wheel button	✓ <sup>(4)</sup>	✓ <sup>(4)</sup>	✓ <sup>(4)</sup>

## Notes

1 For simultaneous scanning and modeling of large cases, 32GB RAM is recommended.

2 1TB recommended if used as a stand-alone system or a server with the order folder.

3 Specs listed applies to Dental System design station only.

Please check the serial number of older Scanner types before ordering PC. PCs do not support D250, D500, D640s and D700 with serial numbers starting with CXXXXXXX and D710 starting with DXXXXXXX. All D8XX, D9XX, D1000, D2000, E scanners and D7XX scanners with serial numbers HXXXXXXX and IXXXXXXX are compatible with the PCs.

The 3Shape desktop scanner has to be connected to a USB 2.0 port and it should be the only device in the USB host controller unless otherwise recommended by 3Shape for specific PCs. It is recommended to connect keyboard, mouse, dongle and other peripherals to free USB 3.0 port when available 3Shape lab scanners do not work on shared USB connections.

4 3DConnexion Space Mouse Pro recommended for improved performance.

5 For optimal scanning performance using desktop scanners - Compute capability version greater than 5.0 is needed.

6 Only Nvidia Geforce and Quadro are currently supported for Dental System.

# Hardware Requirements for Windows Server 2019

Item	Minimum Requirements*	Recommended
RAM	4GB	16GB (for Enterprise SQL server)
CPU	2 cores processor	4 cores processor (for Enterprise SQL server)
Available HDD Space	256GB	2TB (RAID 0 or RAID 0+1)
Network	Network Internet connection, at least 100 MB/s	Network Internet connection, at least 1 GB/s

# Network speed requirements

The speed of the Ethernet is important as it will impact the user experience.  
The faster network, the smoother user experience.

The faster connection the faster sending and receive of an order.  
A typical TRIOS® order of 30Mb will take approx. 30 seconds to transmit on a 10Mbit/s line.

## Legend

- ✓ Sufficient
- ✓+ Recommended for improved performance (optional)
- ✗ Not sufficient

		 TRIOS	 Ortho System	 Implant Studio	 Design Studio (Design on separate PC)	 Dental System	Dental Desktop Server
<b>Internet upload</b> <sup>(1)</sup> (Case communication with external partners and online services)	Minimum 5 Mbit/s	✓	✓	✓	✓	✓	✓
	Recommended 25 Mbit/s or faster	✓+	✓+	✓+	✓+	✓+	✓+
<b>Internet download</b> <sup>(1)</sup> (Case communication with external partners and online services)	Minimum 5 Mbit/s	✓	✓	✓	✓	✓	✓
	Recommended 25 Mbit/s or faster	✓+	✓+	✓+	✓+	✓+	✓+
<b>Internal network - wired</b> (Wired ethernet, Communication in-house between client and server)	Recommended 1000BASE-T (1 Gbit/s)	✓+	✓+	✓+	✓+	✓+	✓+
<b>Internal network - wireless</b> (Wi-Fi, Communication in-house between client and server)	Recommended 5Ghz 802.11AC (100-300Mbit/s)	✓ (2,3)	✓ (2)	✓ (2,3)	✓ (2,3)	✓ (3)	✗ <small>(All units in a client server setup must be wired)</small>

- 1 The effective internet upload and download speed may be tested using free tools available on the internet, e.g. [www.speedtest.net](http://www.speedtest.net)
- 2 The minimum effective upload and download speed between wireless client and dental desktop server: **50 Mbit/s** (effective speed)
- 3 Wired network connection recommended for dedicated design stations for TRIOS Design Studio, Implant Studio and Dental System.