3Shape PC Catalog

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Changes in this version of the PC catalog

Changes include:

- HP Z240, Config 1 discontinued

- Hp Z240, Config 3 discontinued

- HP 800 G3 Discontinued

- HP Z2 Ultra added

- HP Z2 High Performance added

- Hp 800 G4 Standard added

- Changes in minimum PC requirements chart

- General formatting updates

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.

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.

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, TRIOS® 3, TRIOS® 3 Wireless. 3Shape cannot guarantee proper operation of a TRIOS® Scanner on PCs that are not listed in this PC list.

If the system does <u>not</u> 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".

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.

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.

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.

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.

List of specific PCs

Use the table below to select a PC that will work on a specific combination of 3Shape products.

	3Shape Software					May be delivered by	
	TRIOS®	TRIOS® Design Studio	Ortho System	Implant Studio[7]	Dental System	3Shape	3Shape reseller
Dell Precision 15 3Shape item no: 20000204 Dell ProSupport: 3 Years Onsite service Display: 15.6 inch UHD (3840 x 2160) with touch Processor: Intel® Core™ i7-8850H (or more) Memory: 32 GB (or more) DDR4, 2666 MHz Disk: 1TB SSD (or more) Graphics card: NVIDIA® Quadro P1000 (4 GB) Keyboard: Regional, depending on availability Operating system: Windows 8.1 Pro or Windows 10 Pro Dim.: 357mm (14") x 235mm (9.3") x 17mm (0.7") Weight: 1.8 Kg (4.0 lbs.)	✓ (1)	✓	✓ (2)	✓	(✓) (2,3)	✓	✓
Dell Alienware 15 3Shape item no: 20000201 Dell ProSupport: 3 Years Onsite service Display: 15,6" FHD (1920 x 1080) (or more) Processor: Intel® Core™ i7-8750H or i9-8950HK Memory: 16GB (or more) DDR4, 2666 MHz (or more) Disk: 1TB SSD boot disk (or more) (additional spinning disk optional) Graphics card: NVIDIA® GeForce® GTX 1060OC (6GB), 1070 (8GB) or 1080 Keyboard: Regional, depending on availability Operating system: Windows 10 Pro Dim.: 305mm (12.0") x 389mm (15.3") x 25mm (1.0") Weight: 3.5 Kg (7.7 lbs.)	✓ (1)	✓	✓ (2)	✓	(✓) (2,3)	✓	✓

	3Shape Software					May be delivered by	
	TRIOS®	TRIOS® Design Studio	Ortho System	Implant Studio [7]	Dental System	3Shape	3Shape reseller
Dell Alienware 17 3Shape item no: 20000202 Dell ProSupport:3 Years Onsite service Display: 17.3" FHD (1920 x 1080) (or more) Processor: Intel® Core™ i7-8750H or i9-8950HK Memory: 16GB (or more) DDR4, 2666 MHz (or more) Disk: 1TB SSD boot disk (or more) (additional spinning disk optional) Graphics card: NVIDIA® GeForce® GTX 1060OC (6GB), 1070 (8GB) or 1080 Keyboard: Regional, depending on availability Operating system: Windows 10 Pro Dim.: 332mm (13.1") x 424mm (16.7") x 30mm (1.2") Weight: 4.4 Kg (9.7 lbs.)	✔ (1)	✔	✔ (2)	✔	(✔) (2,3)	✔	✔
HP Zbook 17 G3 Workstation (not sold by 3Shape) 3 Years Onsite service Display: 17.3" FHD (1920x1080) (or more) Processor: Intel Core i7-6820HQ Memory: 16GB (or more) DDR4, 2133MHz Disk: 512GB SSD (or more) Graphics card: NVIDIA® Quadro® M4000M (4GB) Keyboard: Regional, depending on availability Operating system: Windows 8.1 Pro or Windows 10 Pro Dim.: 420mm (16.5") x 280mm (11.0") x 30mm (1.1") Weight: 3.5 Kg (7.7 lbs.)	✔ (1)	✔	✔	✔	(✔) (2,3)	✘	✔

	3Shape Software					May be delivered by	
	TRIOS®	TRIOS® Design Studio	Ortho System	Implant Studio [7]	Dental System	3Shape	3Shape reseller
Apple 15" MacBook Pro [4] (not sold by 3Shape) Apple warranty Display: 15.4" Retina (2880 x 1800) Processor: Intel Core i7 2.7GHz (or more), Turbo Boost up to 3.6GHz Memory: 16 GB (or more) DDR3L, 2133 MHz (or more) Disk: 1TB SSD (or more) Graphics card: AMD Radeon Pro 460 (4 GB) Keyboard: Regional, depending on availability Operating system: Windows 7 Ultimate/Windows 8 Pro/ Windows 10 Pro, 64 bit via bootcamp Dim.: 349mm (13.8") x 241mm (9.5") x 16mm (0.6") Weight: 1.8 Kg (4.0 lbs.) Note for use with wireless scanners the following items(s) are required: USB-C Adapter: Satechi Slim Aluminum Type-c Multiport Adapter (SKU: B01J4BO0X8) Wi-Fi Adapter: Linksys Wi-Fi Micro USB Adapter (SKU: WUSB6100M)	✓ (1)	✓	✓	✗	✗	✗	✓
HP Z2 TWR Ultra NEW 3Shape item no: 20000115 3 Years Onsite service Display: 1920 x 1080 resolution minimum (monitor not incl.) Processor: Intel Core i7-8700 Memory: 32 GB DDR4 Disk: 1TB SSD disk Graphics Card: ASUS GeForce GTX 1060 (6GB VRAM) Operating system: Windows 10 Pro Keyboard: Regional, depending on availability Dim.: 170mm (6.7") x 442mm (17.4") x 399mm (15.7") Mouse: included	✓ (1)	✓	✓ (5)	✓	✓ (5)	✓	✓

	3Shape Software					May be delivered by	
	TRIOS®	TRIOS® Design Studio	Ortho System	Implant Studio [7]	Dental System	3Shape	3Shape reseller
HP Z2 TWR High Performance NEW 3Shape item no: 20000114 3 Years Onsite service Display: 1920 x 1080 resolution minimum (monitor not incl.) Processor: Intel Core i7-8700 Memory: 32 GB DDR4 Disk: 1TB 7200RPM disk Graphics Card: ASUS GeForce GTX 1050ti (4GB) Operating system: Windows 10 Pro Keyboard: Regional, depending on availability Dim.: 170mm (6.7") x 442mm (17.4") x 399mm (15.7") Mouse: included	✗	✗	✓ (5)	✓	✓ (5)	✓	✓
HP 800 G4 Standard NEW 3Shape item no: 20000109 3 Years Onsite service Display: 1920 x1080 resolution minimum (monitor not incl.) Processor: Intel Core i7-8700 Memory: 16 GB DDR4 Disk: 1TB 7200RPM disk Graphics card: ASUS GeForce GTX 1030 (2 GB GDDR5) Extra USB card: 4x USB 3.0, 1xUSB C Operating system: Windows 8.1 Pro or Windows 10 Pro Keyboard: Regional, depending on availability Dim.: 100mm (3.95") x 338mm (14.9") x 308mm (13.3") Mouse: included	✗	✗	✓ (6)	✓	✓ (6)	✓	✓

Notes

1   TRIOS 3 Wireless scanners require Windows 8.1 or Windows 10.
2   Software (Ortho Analyzer 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, the HP Z2 or the HP800 has to 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 E1, E2, E3, E4, D/R850, D/R 900, D/R 900L, D/R 1000, and D/R 2000. Note D/R 850, D/R 900, D/R 900L and D/R 1000 are old only as refurbished models.
6   This PC is sold together with E1, E2, D/R 500, D/R 700, D/R 710, D/R 750, D/R 800, D/R 810. Note D/R 500, D/R 700, D/R 710, D/R 750, D/R 800, and D/R 810 are sold only as refurbished models.
7   Please refer to the recommendation for Implant Studio when looking for specific PC for X1 Viewer.

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.

Minimum PC requirements for 3Shape Software packages

The list below is valid for setups that will not drive a TRIOS® scanner. Setups that do include TRIOS® scanning must employ one of the PCs from the "List of specific PCs". Note that the list below will also cover TRIOS® Design Studio, when the scanning itself is performed at a different PC.

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

		Ortho System	Implant Studio[9]	Design Studio (Design only on this PC)	Dental System [3]	Dental Desktop Server [5]
Processor	Intel Core i5	✓	✗	✗	✓	✗
	Intel Core i7 or equivalent	✓+	✓	✓	✓+	✓
Memory (RAM)	4GB	✗	✗	✗	✗	✗
	8GB	✓	✗	✗	✓ [1]	✗
	16GB	✓+	✓	✓	✓ [1]	✓+
	32 GB	✓+	✓+	✓	✓+ [1]	✓+
Disk	250GB (conventional or SSD)	✓	✗	✗	✓ [2]	✗
	500GB (conventional or SSD)	✓+	✓	✓	✓+ [2]	✗
	1TB (conventional or SSD)	✓+ [2]	✓+	✓+	✓+ [2]	✓+
Graphics card[8]	512MB NVIDIA GeForce, DirectX 10 /11	✗	✗	✗	✓ [3,6,7]	✓
	1GB NVIDIA GeForce, DirectX 10/11	✗	✗	✓	✓ [3,6,7]	✓
	2GB NVIDIA GeForce, DirectX 10/11	✓	✓	✓+	✓ [3,7]	✓
	4GB NVIDIA GeForce, DirectX 10/11	✓	✓+	✓+	✓+ [3,7]	✓
	6GB NVIDIA GeForce, DirectX 10/11	✓	✓+	✓+	✓+ [3,7]	✓
	1GB NVIDIA Quadro, DirectX 10/11	✗	✗	✗	✓ [3,6,7]	✓
	2GB NVIDIA Quadro, DirectX 10/11	✓	✗	✗	✓ [3,7]	✓
	4GB NVIDIA Quadro, DirectX 10/11	✓	✓	✗	✓+ [3,7]	✓
	6GB NVIDIA Quadro, DirectX 10/11	✓	✓	✗	✓+ [3,7]	✓
Operating system	Windows 8 Home (64bit)	✓	✗	✗	✓	✗
	Windows 8.1 Home (64bit)	✓	✓	✓	✓	✓

	Windows 10 Home (64bit)	✓	✓	✓	✓	✓
	Windows 7 PRO (32bit)	✗	✗	✗	✗	✗
	Windows 7 PRO (64bit)	✓+	✓+	✓+	✓	✓
	Windows 8 PRO (64bit)	✓+	✗	✗	✓	✗
	Windows 8.1 PRO (64bit)	✓+	✓+	✓+	✓	✓
	Windows 10 PRO (64bit)	✓+	✓+	✓+	✓+	✓+
	Windows Server 2012	✗	✗	✗	✗	✓
	Windows Server 2016	✗	✗	✗	✗	✓+
Monitor resolution	1280x1024	✓	✗	✗	✗	✓
	1920x1080	✓+	✓	✓	✓	✓
	1920x1200	✓	✓+	✓	✓	✓
Mouse	With wheel button	✓ (4)	✓ (4)	✓	✓ (4)	✓
Hardware type	Regular PC	✓	✓	✓	✓	✓
	Server grade	✗	✗	✗	✗	✓

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. For Dental System scanning use the HP 800 (for D/R 500, D/R 700, D/R 710 (note for D/R 700, D/R 710 only applicable for MK2 models (D/R 700 s/n starting with 'h'), D/R 750, D/R 800, D/R 810, E1 and E2) or the HPZ2 (for D/R 850, D/R 900, D/R 900L, D/R 1000, D/R 2000, E1, E2, E3, and E4). The 3Shape desktop scanner has to be connected to a USB 2.0 port and it should be the only device int 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 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.

6 E4 is not supported with these specifications

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

8 Dental System 2019 with E4 scanner do not work on AMD graphics card.

9 For the minimum PC requirements for X1 Viewer, please refer to the requirements for Implant Studio

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.

Speeds stated below are the effective speeds obtainable on the network
(a 100Mbit network may not yield 100Mbit/s in real life).

Legend		TRIOS	Ortho System	Implant Studio	Design Studio (Design on separate PC)	Dental System	Dental Desktop Server
✓ Sufficient ✓+ Recommended for improved performance (optional) ✗ Not sufficient							
Upload to Internet (Case communication with external partners)	1 Mbit/s	✗	✗	✗	✗	✗	✗
	2 Mbit/s	✓	✓	✓	✓	✓	✓
	5 Mbit/s	✓+	✓+	✓+	✓+	✓+	✓+
	10 Mbit/s	✓+	✓+	✓+	✓+	✓+	✓+
	20 Mbit/s	✓+	✓+	✓+	✓+	✓+	✓+
Download from Internet (Case communication with external partners)	1 Mbit/s	✗	✗	✗	✗	✗	✗
	2 Mbit/s	✓	✓	✓	✓	✓	✓
	5 Mbit/s	✓+	✓+	✓+	✓+	✓+	✓+
	10 Mbit/s	✓+	✓+	✓+	✓+	✓+	✓+
	20 Mbit/s	✓+	✓+	✓+	✓+	✓+	✓+
Internal (Communication in-house)	20 Mbit/s	✗	✗	✗	✗	✗	✗
	50 Mbit/s	✓	✓	✓	✓	✓	✗
	100 Mbit/s	✓+	✓+	✓	✓+	✓+	✓
	1 Gbit/s	✓+	✓+	✓+	✓+	✓+	✓+
Network connection	Wired Ethernet	✓	✓	✓	✓	✓	✓
	Wi-Fi	✓	✓	✓	✓	✓	✗

The effective upload/download speed may be tested using free tools available on the internet, e.g. www.speedtest.net