Changes in this version of the PC catalog

Changes include:

- General formatting and layout updates
- Simplified CPU description
- New Dell Precision 15” laptop added
- New Dell Alienware m15 laptop added
- New Dell Alienware m17 laptop added
- Z2 Ultra configuration changed
- Z2 High Performance configuration changed

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 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”.

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: TRIOS® Wireless scanner requires Windows 8.1 or Windows 10.
This covers PCs available from 3Shape and/or 3Shape reseller. This list covers PCs for the TRIOS® scanner (POD Solution).

<table>
<thead>
<tr>
<th>Dell Precision 15 (SS40) <strong>NEW</strong></th>
<th>3Shape item no: 200000204</th>
<th>Dell ProSupport: 3 Years Onsite service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display: 15.6 inch UHD (3840 x 2160) with touch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processor: Intel® Core™ i7 9th Generation (or better)</td>
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<tr>
<td>Memory: 32 GB (or more) DDR4, 2666 MHz</td>
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<td></td>
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<tr>
<td>Disk: 1TB SSD (or more)</td>
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<td></td>
</tr>
<tr>
<td>Graphics card: NVIDIA® Quadro T1000 (4 GB)</td>
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<td></td>
</tr>
<tr>
<td>Keyboard: Regional, depending on availability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating system: Windows 8.1 Pro or Windows 10 Pro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dim.: 357mm (14&quot;) x 235mm (9.3&quot;) x 17mm (0.7&quot;)</td>
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<tr>
<td>Weight: 1.8 Kg (4.0 lbs.)</td>
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<table>
<thead>
<tr>
<th>Dell Alienware 15 (m15) <strong>NEW</strong></th>
<th>3Shape item no: 200000201</th>
<th>Dell ProSupport: 3 Years Onsite service</th>
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</thead>
<tbody>
<tr>
<td>Display: 15.6” FHD (1920 x 1080)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processor: Intel® Core™ i7 9th Generation (or better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory: 16GB DDR4, 2666 MHz (or more)</td>
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<tr>
<td>Disk: 1TB SSD boot disk (or more) (additional spinning disk optional)</td>
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<tr>
<td>Graphics card: NVIDIA® GeForce® RTX2060OC (6GB)</td>
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<tr>
<td>Keyboard: Regional, depending on availability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating system: Windows 10 Pro</td>
<td></td>
<td></td>
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<tr>
<td>Dim.: 357mm (14&quot;) x 235mm (9.3&quot;) x 17mm (0.7&quot;)</td>
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<tr>
<td>Weight: 2.2 Kg (4.8 lbs.)</td>
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<table>
<thead>
<tr>
<th>Dell Alienware 17 (m17) <strong>NEW</strong></th>
<th>3Shape item no: 200000202</th>
<th>Dell ProSupport: 3 Years Onsite service</th>
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</thead>
<tbody>
<tr>
<td>Display: 17.3” FHD (1920 x 1080)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processor: Intel® Core™ i7 9th Generation (or better)</td>
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</tr>
<tr>
<td>Memory: 16GB (or more) DDR4, 2666 MHz (or more)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disk: 1TB SSD boot disk (or more) (additional spinning disk optional)</td>
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<td></td>
</tr>
<tr>
<td>Graphics card: NVIDIA® GeForce® RTX2060OC (6GB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keyboard: Regional, depending on availability</td>
<td></td>
<td></td>
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<tr>
<td>Operating system: Windows 10 Pro</td>
<td></td>
<td></td>
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<tr>
<td>Dim: 410mm (16.14&quot;) x 292mm (11.5&quot;) x 21.76mm (0.86&quot;)</td>
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<tr>
<td>Weight: 2.63 Kg (5.79 lbs.)</td>
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<tr>
<td>HP Z2 TWR Ultra</td>
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</tr>
<tr>
<td>3Shape item no: TRIOS: 20000115</td>
<td>3Shape item no: LAB: 20000117</td>
<td>3 Years Onsite service</td>
</tr>
<tr>
<td>Operating system: Windows 10 Pro</td>
<td>Keyboard: Regional, depending on availability</td>
<td>Dim.: 170mm (6.7&quot;) x 442mm (17.4&quot;) x 399mm (15.7&quot;)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HP Z2 TWR High Performance</th>
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</tr>
</thead>
<tbody>
<tr>
<td>3Shape item no: 20000114</td>
<td>3 Years Onsite service</td>
<td>Display: 1920 x 1080 resolution minimum (monitor not incl.)</td>
<td>Processor: Intel Core i7 8th Generation (or better)</td>
<td>Memory: 32 GB DDR4</td>
<td>Disk: 1TB 7200RPM disk</td>
<td>Graphics Card: ASUS GeForce GTX 1650 (4GB)</td>
<td></td>
</tr>
<tr>
<td>Operating system: Windows 10 Pro</td>
<td>Keyboard: Regional, depending on availability</td>
<td>Dim.: 170mm (6.7&quot;) x 442mm (17.4&quot;) x 399mm (15.7&quot;)</td>
<td>Mouse: included</td>
<td></td>
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<table>
<thead>
<tr>
<th>HP 800 G4 Standard</th>
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</tr>
</thead>
<tbody>
<tr>
<td>3Shape item no: 20000109</td>
<td>3 Years Onsite service</td>
<td>Display: 1920 x 1080 resolution minimum (monitor not incl.)</td>
<td>Processor: Intel Core i7-8700</td>
<td>Memory: 16 GB DDR4</td>
<td>Disk: 1TB 7200RPM disk</td>
<td>Graphics Card: ASUS GeForce GTX 1030 (2 GB GDDR5)</td>
<td></td>
</tr>
<tr>
<td>Extra USB card: 4x USB 3.0, 1x USB C</td>
<td>Operating system: Windows 8.1 Pro or Windows 10 Pro</td>
<td>Keyboard: Regional, depending on availability</td>
<td>Dim.: 100mm (3.95&quot;) x 338mm (14.9&quot;) x 308mm (13.3&quot;)</td>
<td>Mouse: included</td>
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<td></td>
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</tbody>
</table>

**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, we recommend stationary computers (Z2, HP800), 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).
This PC is sold together with E1, E2, E3, E4, D/R 850, 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.

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.

Please refer to the recommendation for Implant Studio when looking for specific PC for X1 Viewer.
All systems including a TRIOS and/or X1 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 the 3Shape catalogue.

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 8th 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

**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 4 GB 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 8th Generation / AMD Ryzen™ 7 3750H or better
- Memory: 32 GB
- Disk: 1 TB SSD or more
- Graphics card: NVIDIA® GTX 1050 4 GB or better
- Operating system: Windows 10 Pro

**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 or Windows Server 2016

**Minimum**
- 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 by multiple users, 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. 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.
Lab PC requirements (self-sourced)

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

<table>
<thead>
<tr>
<th>Legend</th>
<th>Ortho System</th>
<th>Implant Studio&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>Dental System&lt;sup&gt;(2)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
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<tr>
<td>✓*</td>
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<td>✓</td>
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<tr>
<td>✓*</td>
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</tbody>
</table>

**Processor**
- Intel Core i5
- Intel Core i7 or equivalent
- 8GB
- 16GB
- 32 GB

**Memory (RAM)**
- 250GB (conventional or SSD)
- 500GB (conventional or SSD)
- 1TB (conventional or SSD)

**Disk**
- 2GB NVIDIA GeForce
- 4GB NVIDIA GeForce
- 6GB NVIDIA GeForce
- 2GB NVIDIA Quadro
- 4GB NVIDIA Quadro
- 6GB NVIDIA Quadro

**Graphics card<sup>(3)</sup>**
- Recommended Windows 10 PRO (64bit)
- Supported Windows 10 Home (64bit)
- Supported Windows 8.1 PRO (64bit)
- Supported Windows 8.1 Home (64bit)
- Supported Windows Server 2012
- Supported Windows Server 2016

**Operating system**
- Recommended 1920x1080 (Full HD)
- 1920x1200

**Monitor resolution**
- With wheel button

**Notes**
1. For simultaneous scanning and modeling of large cases, 32 GB 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 700 Mk 2 s/n starting with ‘Y’, and D710 MK2 s/n starts with ‘Y’), 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 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. Only Nvidia GeForce and Quadro are currently supported for Dental System.
6. For optimal scanning performance using desktop scanners – Compute capability version greater than 5.0 is needed.
7. Dental System 2019 with E4 scanner do not work on AMD graphics card.
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.

<table>
<thead>
<tr>
<th>Legend</th>
<th>TRIOS</th>
<th>Ortho System</th>
<th>Implant Studio</th>
<th>Design Studio (Design on separate PC)</th>
<th>Dental System</th>
<th>Dental Desktop Server</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

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

- **Internet upload** (Case communication with external partners and online services)
  - Minimum 5 Mbit/s
  - Recommended 25 Mbit/s or faster

- **Internet download** (Case communication with external partners and online services)
  - Minimum 5 Mbit/s
  - Recommended 25 Mbit/s or faster

- **Internal network - wired** (Wired ethernet, Communication in-house between client and server)
  - Recommended 1000BASE-T (1 Gbit/s)

- **Internal network - wireless** (Wi-Fi, Communication in-house between client and server)
  - Recommended 5GHz 802.11AC (100-300Mbit/s)

1. The effective internet upload and download speed may be tested using free tools available on the internet, e.g. 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.