Ensure that your computer/server meets the system requirements detailed below, prior to installing Altium software.

**Altium Designer**

Below are the recommended and minimum system requirements to install and run Altium Designer.

**Recommended System Requirements**

- Windows 7, Windows 8 or Windows 10 (32-bit or 64-bit)
- Intel® Core™ i5 processor or equivalent
- 8GB RAM
- 10GB hard disk space (Install + User Files)
- NVIDIA® GeForce® GT 640 series or AMD® Radeon® HD 7770, 1024MB (or more) graphics card or better, supporting DirectX 9.0c and Shader model 3 (or later)
- Dual monitors with at least 1680x1050 (widescreen) or 1600x1200 (4:3) screen resolution
- USB2.0 port if connecting to 3D Mouse, a NanoBoard-NB2 or a NanoBoard-3000
- 3D mouse for 3D PCB design, such as the Space Navigator
- DVD-Drive
- Adobe® Reader® (8 or later)
- Internet Connection
- Up to date Web browser
- Microsoft Excel (required for Bill of Materials templates)

**Minimum System Requirements**

- Windows 7 32-bit
- Intel® Core™ i3 processor or equivalent
- 4GB RAM
- 3.5GB hard disk space (Install + User Files)
- Intel integrated graphics HD4000 or equivalent, supporting DirectX 9.0c and Shader model 3 (or later)
- Main monitor 1280x1024 screen resolution at no greater than 100% DPI scaling
  - Strongly recommended: second monitor with minimum 1280x1024 resolution at 100% DPI scaling
- USB2.0 port (if connecting to a Nanoboard-NB2 or NanoBoard-3000)
- DVD-Drive
- Adobe® Reader® (8 or later)
- Internet Connection
• Up to date Web browser
• Microsoft Excel (required for Bill of Materials templates)

**DPI Scaling Support**

The following table shows the maximum DPI Scaling supported, based on the vertical resolution of the monitor being used.

<table>
<thead>
<tr>
<th>Monitor Vertical Resolution (pixels)</th>
<th>Maximum DPI Scaling Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>1024 to 1200</td>
<td>100%</td>
</tr>
<tr>
<td>1600</td>
<td>125%</td>
</tr>
<tr>
<td>1800</td>
<td>200%</td>
</tr>
<tr>
<td>2K and above</td>
<td>250%</td>
</tr>
</tbody>
</table>

**Other Considerations**

**The Size of the Design**

The system requirements detailed above are for a medium-sized PCB design, for example up to 1000 components and up to 1000 nets. If your designs have a larger number of components and/or nets, then consider upgrading the processor family (for example, upgrade an i5 to an i7).

**The Importance of a Good Graphics Card**

Graphics cards are a critical hardware element that can have a large impact on both the performance and stability of systems. Choose the right hardware requirements necessary to achieve stunning results, make the whole system more responsive and ‘feel’ better, and remove distractions to design caused by lags in the GUI. Altium PCB editor has been optimized for use with DirectX 9.0c, and requires a graphics card that supports this. Altium has chosen DirectX rather than OpenGL for its graphics engine, which has become the preferred standard for gaming graphics cards. An advantage of this choice is the fact that gaming cards are often significantly cheaper than workstation cards of equivalent performance. We therefore strongly recommend the use of a gaming card instead of a workstation card.

The need for a high-performance graphics card is directly related to the amount of use of the 3D PCB capabilities. For example, a Core i7 processor with on-chip integrated HD4000 graphics will be more than adequate if you only require occasional use of the 3D PCB capabilities. If you intend to make extensive use of the 3D PCB features, for computationally intensive tasks such as 3D video or interactive presentations, then it is recommended to use a dedicated gaming graphics card in combination with a 3D mouse, such as the Space Navigator.

**Altium Vault**

Below are the recommended and minimum system requirements to install and run an Altium Vault. Note that these recommendations are for 10 to 30 concurrent users.

**Recommended System Requirements**

• OS: Windows Server 2012 R2
- RAM: 8Gb+
- Processor: Intel® Xeon® processor or equivalent (4 or more cores)
- Disk space: 20Gb (in case NIS will not be used); 200GB (in case NIS will be used)
- Database: Firebird

**Minimum System Requirements**

- OS: Windows 7
- RAM: 6Gb+
- Processor: Intel Core i3/i5 processor or equivalent (2 or more cores)
- Disk space: 20Gb (in case NIS will not be used); 200GB (in case NIS will be used)
- Database: Firebird

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The Altium Vault cannot be installed on a PC running Windows XP. In addition, if your version of Windows Operating System does not support Windows Authentication (including: Core, Home, Starter, and Base editions), you will not be able to install, or upgrade to, Altium Vault 3.0.

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⚠️ The Part Catalog service in the Altium Vault (3.0 and later) provides a re-engineered system for making real-world part choices, enabling supply chain information to be stored and retrieved in a more efficient way. Be aware that this does result in an incompatibility in the way Part Choices are handled between Altium Designer and the Altium Vault. Altium Designer (17.0 and later) supports bidirectional PCL (Part Choice List) data retrieval with Altium Vault (3.0 or later). However, previous versions of Altium Designer can only retrieve such data from previous versions of the Altium Vault, and vice-versa.

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**Source URL:**