This document is intended to help customers understand the Intel® HD Graphics integrated graphics solution available with certain CPU SKUs, and determine whether Intel HD Graphics may be sufficient for the customer’s needs.

Recommendations

Intel HD Graphics provide great video and audio support that are more than sufficient for Microsoft® Office applications and watching Internet videos and movies in HD¹. Intel HD Graphics improves on Intel’s previous generation performance and takes a step up adding, for the first time, application certifications—Autodesk AutoCAD and Adobe Photoshop CS4.

If you are currently using an NVIDIA Quadro FX, NVIDIA Quadro NVS or ATI FirePro™ solution HP Workstations recommends continuing to use an add-in card.

FAQ

Will using integrated graphics slow down my machine?

Integrated graphics share the same memory as the processor, so a heavy graphics load could impact application performance. How much will depend on the application, the graphics load, etc. Users of Office applications such as Excel, PowerPoint, and Word are unlikely to see performance differences in these applications between integrated and add-in cards.

Can I use both add-in and integrated graphics devices?

HP does not support mixing graphics vendors. We cannot guarantee a consistent customer experience in such an environment. Integrated graphics will be disabled when an add-in graphics card is present.

How much memory is used?

Graphics memory is shared with system memory. Graphics memory usage varies depending on the amount of system memory installed, BIOS settings, operating system, and system load. 32 MB is pre-allocated for graphics use at system boot time. Up to 96 MB of additional memory may be allocated by the BIOS for PAVP (Protected Audio Video Playback) support.

Additional memory is allocated for graphics as needed using Intel® Dynamic Video Memory Technology (DVMT), to provide an optimal balance between graphics and system memory use.
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Graphics/Video API support</th>
<th>Microsoft DirectX® 10 with support for Pixel Shader 3.0, OpenGL® 2.1</th>
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<tbody>
<tr>
<td>Bus type</td>
<td>Integrated</td>
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<tr>
<td>Graphics memory</td>
<td>UMA architecture (GFX frame buffer)—Graphics memory is shared with system memory. (Intel DVMT 5.0)</td>
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<tr>
<td>HW video decode</td>
<td>Hardware accelerated decode for MPEG2 encrypted video; support for PAVP Lite for protected content.</td>
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<td>Display outputs</td>
<td>HP Z200: 1 DisplayPort and 1 Single-Link DVI; HP Z200 SFF: 1 DisplayPort and 1 VGA</td>
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<tr>
<td>Optional adapter support</td>
<td>HP Z200: Second DVI supported via DisplayPort to DVI-D adapter. VGA supported via DVI to VGA adapter or DisplayPort to VGA adapter. HP Z200 SFF: Second VGA via DisplayPort to VGA adapter.</td>
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<tr>
<td>Application certification(s)</td>
<td>Autodesk AutoCAD, Adobe PhotoShop CS4 (Photoshop, Premiere and Flash).</td>
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### References

Please visit these links for more information.


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1 HD content required to view HD images. Internet access required. Performance dependent on network latency and image frame content.