THE NEW VISION IN PRODUCTIVITY.
NVIDIA® NVS™ 310
The standard for multi-display commercial graphics.

Boost your enterprise’s productivity with the NVIDIA® NVS™ 310 dual-display professional graphics solution.

The NVS 310 graphics board provides a reliable hardware and software platform to enable fast, cost-effective display integration and deployment, in large commercial enterprises across various industries such as financial services, digital signage, education, insurance, government, hospitals and call centers.

Each board features DisplayPort 1.2, NVIDIA® Mosaic technology, and NVIDIA nView® desktop-management software, and can drive up to two 30-inch displays at 2560 x 1600 resolutions. This lets you maximize your productivity by better managing your desktop applications and optimizing your desktop real estate.

Take advantage of extensive enterprise-management tools to seamlessly deploy NVIDIA technology and business applications across your enterprise for maximum uptime. Using a standard WMI-based interface, you can also remotely query and control graphics and display settings for systems spread across your corporate environments.

Every NVS 310 is tested on leading business applications and designed with the ideal balance of performance and power to meet your most demanding business needs. Enjoy full compatibility with industry-leading business applications such as Microsoft Office Suite, Adobe® Acrobat®, McAfee Virus Scan, Internet Explorer, Google Chrome, and many others.

**NVS 310 PRODUCT SPECIFICATIONS**

<table>
<thead>
<tr>
<th>FORM FACTOR</th>
<th>Low-profile 2.7” (H) x 5.7” (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRAME BUFFER MEMORY</td>
<td>512 MB DDR3</td>
</tr>
<tr>
<td>MEMORY INTERFACE</td>
<td>64-bit</td>
</tr>
<tr>
<td>MEMORY BANDWIDTH</td>
<td>14 GB/s</td>
</tr>
<tr>
<td>MAX POWER CONSUMPTION</td>
<td>19.5 W</td>
</tr>
<tr>
<td>GRAPHICS BUS</td>
<td>PCI Express 2.0 x16</td>
</tr>
<tr>
<td>DISPLAY CONNECTORS</td>
<td>DisplayPort [2]</td>
</tr>
<tr>
<td>THERMAL SOLUTION</td>
<td>High-quality, variable-speed fansink</td>
</tr>
</tbody>
</table>
## Technical Specifications

### Supported Platforms
- Microsoft Windows 7 (64-bit and 32-bit)
- Microsoft Windows Vista (64-bit and 32-bit)
- Microsoft Windows XP (64-bit and 32-bit)
- Linux-x86 and Linux-x86_64
- AMD64, Intel EM64T
- Solaris
- PCI Express 2.0

### NVIDIA NVS 310 Architecture
- Integrated DisplayPort (version 1.2)
- PCI Express 2.0 support
- 12 pixels per-clock rendering engine
- NVIDIA® CUDA® technology capability
- Scalable geometry architecture
- Hardware tessellation engine
- NVIDIA® GigaThread™ engine
- Shader Model 5.0 (OpenGL 4.1 and DirectX 11)
- Decode acceleration for MPEG-2, MPEG-4 Part 2 Advanced Simple Profile, H.264, MVC, VC1, DivX (version 3.11 and later), and Flash (10.1 and later)
- Blu-ray dual-stream hardware acceleration (supporting HD picture-in-picture playback)

### Advanced Display Features
- Compliance with professional OpenGL and DirectX applications
- DisplayPort 1.2, HDMI 1.4, and HDCP support
- Two digital displays at resolutions up to 2560 x 1600 @ 60 Hz
- Optionally, for cable-management benefits, use DisplayPort 1.2
- Multi-Stream Technology enables driving maximum of two displays up to 1920 x 1200 @ 60 Hz
- Industry-standard cable adapters to drive different display types
- DisplayPort to DVI-D (Single Link) to drive DVI displays up to 1920 x 1200 @ 60 Hz
- DisplayPort to DVI-D (Dual Link) to drive DVI displays up to 2560 x 1600 @ 60 Hz
- DisplayPort to HDMI cables to drive HD Displays up to 1920 x 1080 @ 60 Hz
- DisplayPort to VGA cables to drive analog (VGA) displays up to 1920 x 1200 @ 60 Hz
- Support for integrated audio via DisplayPort and HDMI
- Support for multiple-display modes including DualView, Span, and Clone modes

### DisplayPort and HDMI Digital Audio
- Support for the following audio modes: Dolby Digital (AC3), DTS 5.1, Dual Channel and Multichannel (7.1) LPCM, Dolby Digital Plus
- DD+ and MPEG-2/MPEG-4 AAC
- Data rates of 44.1 KHz, 48 KHz, 88.2 KHz, 96 KHz, 176 KHz, and 192 KHz
- Word sizes of 16-bit, 20-bit, and 24-bit

### NVIDIA Enterprise-Management Tools
- Monitor, access, and configure graphics and display information of remote machines using industry-standard WMI interface
- Scriptable using WMI Command Line interface for integration with system-level management tools
- Scalable enterprise-class tools to remotely install and configure graphics drivers across your entire organization

### GPU Computing Support
- NVIDIA CUDA
- DirectCompute
- OpenACC

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To learn more about NVIDIA NVS, go to [www.nvidia.com/nvs](http://www.nvidia.com/nvs)

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1. Available as an optional install item on the standard NVS 310 drivers downloadable from www.nvidia.com
2. Audio format supported only over HDMI
3. Supported in Microsoft Windows 7 only

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