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

FORM FACTOR
> Low-profile 2.7" (H) x 5.7" (L)

FRAME BUFFER MEMORY
> 512 MB DDR3

MEMORY INTERFACE
> 64-bit

MEMORY BANDWIDTH
> 14 GB/s

MAX POWER CONSUMPTION
> 19.5 W

GRAPHICS BUS
> PCI Express 2.0 x16

DISPLAY CONNECTORS
> DisplayPort (2)

THERMAL SOLUTION
> High-quality, variable-speed fansink

NVS 310

Features	Benefits
LOW-PROFILE AND FLEXIBLE FORM FACTOR	Delivers simplified IT administration and deployment throughout the enterprise. NVS 310 fits into any existing installations without being disruptive, regardless of desktop system (standard tower PC, workstation, small form-factor system) or the display type (LCD, DLP, plasma).
INTELLIGENT POWER MANAGEMENT	Reduces overall system energy costs by intelligently adapting the total power utilization of the graphics subsystem based on the applications being run by the end user. This power-optimized design helps reduce Total Cost of Ownership (TCO) and increases reliability.
NVIDIA ENTERPRISE-MANAGEMENT TOOLS[1]	Maximize system uptime by enabling seamless wide-scale deployment. Also, allow remote query and control of graphics and display settings for systems spread across your installations.
DUAL DISPLAYPORT 1.2 DISPLAY CONNECTORS (WITH AUDIO)	Provide compact and secure connectivity for ultra-high-resolution panels (up to 2560 x 1600). These connectors enable maximum range, resolution, refresh rate, and color depth to support the latest display technologies.
MULTI-DISPLAY EXPERIENCE WITH NVIDIA® MOSAIC TECHNOLOGY	Offers the ideal solution for seamless taskbar spanning, as well as transparent scaling of any application across up to eight displays. Works over multiple displays or one ultra-high resolution display using a single or multiple NVS graphics cards. *Mosaic Technology is supported on Win 7 and Linux only.*
NVIDIA nVIEW® DESKTOP SOFTWARE	Delivers maximum flexibility for single large-display or multi-display options. This provides unprecedented end-user control of the desktop experience for increased productivity.

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)

> Compliance with professional OpenGL and DirectX applications

ADVANCED DISPLAY FEATURES

> 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 adaptors 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[2]
  >(DD+), andMPEG-2/MPEG-4 AAC[2]
> 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[3]
> Scriptable using WMI Command Line interface for integration with system-level management tools[3]
> Scalable enterprise-class tools to remotely install and configure graphics drivers across your entire organization

GPU COMPUTING SUPPORT

> NVIDIA CUDA
> DirectCompute
> OpenACC

To learn more about NVIDIA NVS, go to **www.nvidia.com/nvs**

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