# NVIDIA QUADRO PLEX 2200 D2
# A QUANTUM LEAP IN VISUAL COMPUTING

QUADRO PLEX DATASHEET

Whether searching for and extracting oil, designing and bringing the next luxury vehicle to market, or providing a diagnosis of a patient's condition, professionals are faced with a mountain of data that needs to be distilled into meaningful and actionable visualizations.

The size and complexity of data is growing at an exponential rate. In an increasingly competitive and high-pressure landscape professionals need to deliver results better, faster, and more cost effectively than ever before. These pressures require the most advanced platform solutions.

As a multi-GPU visual computing system (VCS), the NVIDIA® Quadro® Plex 2200 D2 delivers breakthrough levels of productivity and capability, giving geophysicists, scientists, engineers, and other technical professionals visual supercomputing power at their desktops.

Get the computational and rendering power of the highest performance GPUs in an ultra dense configuration. Certified on all industry leading applications and featuring NVIDIA® SLI® Mosaic Mode, Quadro Plex 2200 D2 enables transparent scaling across multiple displays.

## PRODUCT SPECIFICATIONS

NVIDIA QUADRO GPU
> Quadro FX 5800

# OF NVIDIA QUADRO GPUS
> 2

TOTAL FRAME BUFFER
> 8 GB (4 GB/GPU)

CUDA™ PARALLEL PROCESSOR CORES
> 480 (240 per GPU)

DISPLAY CHANNELS
> 4 Dual-link DVI or 2 DisplayPort

SHADER MODEL
> 4.0

NVIDIA® CUDA™ TECHNOLOGY
> Yes

DOUBLE PRECISION
> Yes

GENLOCK/FRAME LOCK
> Yes, with NVIDIA G-Sync II

FRAME SYNCHRONIZATION
> Yes, with NVIDIA G-Sync II

FSAA (MAX PER CHANNEL)
> 64x SLI FSAA

HOST CONNECTION
> PCI Express x16 (x8 optional), Small Form Factor, Passive (10W)

POWER
> 640W Max

ACOUSTICS
> 40 dB

FORM FACTOR
> Tower Desktop (9.49" H x 20.55" D) or 3U Rack Mount (3U H x 8.5" W x 20.55" D)

Images courtesy of Schlumberger, CyberHeart Inc., WTVF station and WSI corporation, and Realtime Technology AG.

## FEATURES AND BENEFITS

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|---|---|
| DEDICATED VISUAL COMPUTING SYSTEM | Enables NVIDIA® SLI™ multi-GPU capability on any NVIDIA Quadro Plex certified PCI Express platform. |
| 64-BIT FLOATING POINT PRECISION | IEEE 754 single & double precision floating point precision for CUDA enabled applications delivering 1TeraFlop of performance in single floating point calculations or 345 GFlops in double precision. |
| 8 GB TOTAL FRAME BUFFER (4 GB PER GPU) | Delivers high throughput for interactive visualization of large models and high-performance for real time processing of large textures and frames and enables the highest quality and resolution full-scene antialiasing (FSAA). |
| 480-CORE NVIDIA® CUDA™ PARALLEL COMPUTING PROCESSOR (240-CORE PER GPU) | 480-core parallel computing processor architecture (240-core per GPU) exposed through a C language environment and tool suite in combination with high performance visualization, CUDA unleashes new capabilities to solve highly complex challenges such as real-time ray tracing, video encoding, and interactive volume rendering. |
| 4 DUAL-LINK DIGITAL DISPLAY CONNECTORS | Full dual-link TMDS transmitters support ultra-high-resolution panels (up to 3840 x 2400 @ 24Hz on each panel) --which result in amazing image quality producing detailed photorealistic images. |
| DUAL DISPLAYPORT DIGITAL DISPLAY CONNECTORS | DisplayPort support ultra-high-resolution panels (up to 2560 x 1600) and panels supporting 30-bit color which result in amazing image quality producing detailed photorealistic images. |
| NVIDIA SLI MOSAIC MODE | Enables transparent use of multi GPUs on multiple displays to simplify 4K projection systems. |
| FRAME SYNCHRONIZATION | Allows the display channels from multiple workstations to be synchronized, thus creating one large "virtual display" that can be driven by a multisystem cluster for performance scalability. |
| FLEXIBLE FORM FACTOR | Workstation, deskside tower or standard 19" rack form factor enables deployment in a wide range of environments. |

## TECHNICAL SPECIFICATIONS

### SUPPORTED PLATFORMS

- NVIDIA® Quadro® Plex officially certified system or platform
- Microsoft® Windows® XP (64-bit and 32-bit)
- Microsoft Windows 2000 (32-bit)
- Linux® - Hardware OpenGL® implementation – NVIDIA and ARB extensions (64-bit and 32-bit)
- Solaris® x86

### NVIDIA QUADRO GPU ARCHITECTURE

- 128-bit color precision (IEEE fp32 bit per component)
- 3D volumetric texture support
- Fully programmable GPU (OpenGL2.1/ DirectX 9.0c/DirectX 10)
- Shader Model 4.0
- NVIDIA® CUDA™ enabled C-Programming Environment

### DISPLAY RESOLUTION SUPPORT

- Analog displays up to 2560 x 1600 @ 60 Hz
- Dual-link DVI-I outputs – drive digital displays at resolutions up to 2560 x 1600 @ 60Hz
- DisplayPort – 10-bit
- Native support for Sony 4K SXRD™ large venue projector
- Stereo connector

### PRODUCT DETAILS

- Quadro Plex Deskside VCS
- Quiet operation (40dB) suitable for office environment
- Connects to host via cabling to a low power PCI Express x8 or x16 adapter card (PCIE 2.0 Compliant)
- Optional rack mount kit

Where to Buy | **www.nvidia.com/quadroplex**



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