



NVIDIA QUADRO PLEX 2100 D4 A QUANTUM LEAP IN VISUAL COMPUTING



QUADRO PLEX
DATASHEET

Whether you are 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 2100 D4 delivers breakthrough levels of productivity and capability, giving geophysicists, scientists, engineers, and other technical professionals visual supercomputing power at their desktops.

Maximize the number of GPUs or displays available with a Quadro Plex 2100 D4. Certified on all industry leading applications and featuring NVIDIA® SLI® Mosaic Mode, Quadro Plex 2100 D4 enables transparent scaling across multiple displays.



PRODUCT SPECIFICATIONS

- NVIDIA QUADRO GPU
 - > Quadro FX 4700 X2
- # OF NVIDIA QUADRO GPUS
 - > 4
- TOTAL FRAME BUFFER
 - > 4 GB (1 GB/GPU)
- CUDA™ PARALLEL PROCESSOR CORES
 - > 512
- DISPLAY CHANNELS
 - > 8 Dual-link DVI
- SHADER MODEL
 - > 4.0
- NVIDIA CUDA™ TECHNOLOGY
 - > Yes
- OPTION
 - > NVIDIA Quadro G-Sync II
- GENLOCK/FRAME LOCK
 - > Yes, with NVIDIA Quadro G-Sync II
- FRAME SYNCHRONIZATION
 - > Yes, with NVIDIA Quadro G-Sync II
- FSAA (MAX PER CHANNEL)
 - > 128x 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)

FEATURES AND BENEFITS

DEDICATED VISUAL COMPUTING SYSTEM	Enables NVIDIA® SLI™ multi-GPU capability on any NVIDIA Quadro Plex certified PCI Express platform.
8 DUAL-LINK DIGITAL DISPLAY CONNECTORS	Full dual-link TMDS transmitters support up to 8 ultra-high-resolution panels (up to 3840 x 2400 @ 24Hz on each panel).
512-CORE NVIDIA® CUDA™ PARALLEL COMPUTING PROCESSOR (128-CORE PER GPU)	512-core parallel computing processor architecture (128-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.
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, desktide 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
- > Native support for Sony 4K SXRD™ large venue projector
- > Stereo connector

PRODUCT DETAILS

- > Quadro Plex Desktide 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