NVIDIA QUADRO CX
THE ACCELERATOR FOR ADOBE CREATIVE SUITE 4

Creativity is not just your passion, it's your business. The NVIDIA® Quadro® CX is *the* accelerator for Adobe® Creative Suite® 4—giving you the performance, tools, and reliability you need to maximize your creativity. Create more, faster—with Quadro CX.

A FASTER WAY TO WORK

Don't sacrifice creativity to meet a deadline. Encode H.264 video at lightning-fast speeds with the NVIDIA CUDA™-enabled plug-in for Adobe Premiere® Pro CS4. Accelerate rendering time for advanced effects such as transformations, color correction, depth of field blur, turbulent noise, and more by leveraging the massively parallel power of the Quadro CX GPU.

A BETTER WAY TO WORK

Your tools are key to your success. Experience fluid interaction with the Adobe Photoshop® canvas for smoother zooming and image rotation. Accurately see what your deliverable will look like with 30-bit color or uncompressed 10-bit/12-bit SDI before final output*. Easily work across multiple displays with NVIDIA nView® advanced management tools for a smoother production pipeline.

A MORE RELIABLE WAY TO WORK

You can't afford system downtime. Quadro CX is engineered and optimized by NVIDIA and designed for Adobe Creative Suite 4 to deliver exceptional performance when you need it. Additional free plug-ins will deliver ongoing feature and performance improvements to maximize your investment.

PRODUCT SPECIFICATIONS

MEMORY SIZE
> 1.5 GB GDDR3

MEMORY INTERFACE
> 384-bit

MEMORY BANDWIDTH
> 76.8 GB/sec

MAX POWER CONSUMPTION
> 150W

NUMBER OF SLOTS
> 2

DISPLAY CONNECTORS
> DVI-I, Dual DisplayPorts, Stereo

DUAL LINK DVI
> Yes (1)

DISPLAY PORT
> Yes (2)

OPENGL
> 2.1

SHADER MODEL
> 4

DIRECTX
> 10

CUDA™ TECHNOLOGY
> Yes

SLI FRAME RENDERING SUPPORT
> Yes

GENLOCK / FRAMELOCK
> Yes

* Quadro CX hardware is capable of native 30-bit color DisplayPort output; SDI capability via optional Quadro SDI board and application plug-ins.

FEATURES AND BENEFITS

THE ACCELERATOR FOR ADOBE® CREATIVE SUITE®4	The NVIDIA Quadro CX is the accelerator for Adobe® Creative Suite® 4—giving creative professionals the performance, tools, and reliability they need to maximize their creativity. Quadro CX enables H.264 video encoding at lightning-fast speeds with NVIDIA CUDA technology and accelerates rendering time for advanced effects.
1.5GB GDDR3 GPU MEMORY WITH ULTRA-FAST MEMORY BANDWIDTH	Massive 1.5GB frame buffer and memory bandwidth up to 76.8 GB/sec. 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).
NVIDIA ® CUDA™ PARALLEL COMPUTING PROCESSOR	A parallel computing processor architecture 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.
HIGHEST COLOR FIDELITY	10-bit per component color fidelity enables billions rather than millions of color variations for rich, vivid image quality with the broadest dynamic range.
DUAL DISPLAYPORT DIGITAL DISPLAY CONNECTORS	Dual DisplayPort connectors support ultra-high-resolution panels (up to 2560 x 1600)
SINGLE DUAL-LINK DIGITAL DISPLAY CONNECTOR	Dual-link TMDS transmitter supports ultra-high-resolution panels (up to 3840 x 2400 @ 24Hz)

TECHNICAL SPECIFICATIONS

SUPPORTED PLATFORMS FOR ELEMENTAL RAPIHD PLUG-IN

> Microsoft Windows Vista (64-bit and 32-bit)
> Microsoft Windows XP (32-bit)

OTHER SUPPORTED PLATFORMS

> Microsoft Windows XP (64-bit)
> Microsoft Windows 2000 (32-bit)
> Linux® - Full OpenGL implementation, complete with NVIDIA and ARB extensions (64-bit and 32-bit)
> Solaris®
> AMD64, Intel EM64T
> PCI Express 2.0 Support

NVIDIA QUADRO CX ARCHITECTURE

> 128-bit color precision
> Unlimited fragment instruction
> Unlimited vertex instruction
> 3D volumetric texture support
> Hardware-accelerated, antialiased points & lines
> Hardware OpenGL overlay planes
> Hardware-accelerated, two-sided lighting
> Hardware-accelerated clipping planes

> 3rd-generation occlusion culling
> Window ID clipping functionality
> Hardware-accelerated line stippling

SHADING ARCHITECTURE

> Full Shader Model 4.0 (OpenGL 2.1/DirectX 10 class)
> Long fragment programs (unlimited instructions)
> Long vertex programs (unlimited instructions)
> Looping and subroutines (up to 256 loops per vertex program)
> Dynamic flow control
> Conditional execution

HIGH LEVEL SHADER LANGUAGES

> Optimized compiler for Cg and Microsoft HLSL
> OpenGL 2.1 and DirectX 10 support
> Open source compiler

HIGH-RESOLUTION ANTIALIASING

> Rotated Grid Full-Scene Antialiasing (RG FSAA)
> 32x FSAA dramatically reduces visual aliasing artifacts or "jaggies" at resolution up to 1920 x 1200

DISPLAY RESOLUTION SUPPORT

> Dual DisplayPort connectors support ultra-high-resolution panels up to 2560 x 1600
> Single dual-link DVI-I outputs drive two digital displays at resolutions up to 2560 x 1600 @ 60Hz
> Internal 400 MHz DACs—Two analog displays up to 2048 x 1536 @ 85Hz

NVIDIA NVIEW TECHNOLOGY

> Advanced multi-display desktop & application management, seamlessly integrated into Microsoft Windows

H.264 RENDERING SOLUTION

> Baseline Profile for Adobe Flash and portable media players
> Main Profile for Adobe Flash and Blu-ray players
> High Profile for Adobe Flash and Blu-ray players
> Adaptive quantitization
> Variable bit rate, one and two pass algorithms
> Adaptive I-frame insertion
> MP4 and TS output file support

To learn more about NVIDIA Quadro CX, go to **www.nvidia.com/quadrocx**