The NVIDIA® Quadro® FX 380 LP professional graphics solution, designed for
desktop and small form factor systems, is certified for leading 3D applications.
This power-efficient member of the Quadro family enables designers,
amanufacturers, architects, and engineers to create and interact with more complex
designs, increase visual quality, and maximize productivity.

In the past, design professionals often had to
sacrifice the ability to interact with realistic 3D
designs, and instead had to rely on simplified
representations. As a result, design decisions
were often based on less precise information.
As software vendors such as Autodesk shift
their 2D applications to incorporate the
benefits of 3D, it becomes even more critical
for professionals to enhance their computing
platform for maximum productivity.

As a Built for Professionals™ solution, the
Quadro FX 380 LP, enables digital artists and
designers to realize more than 2X higher
performance when working with professional
3D applications when compared to consumer
graphics boards*. In addition, Quadro FX 380
LP is EnergyStar compliant, with an ultra-low,
28 Watt power consumption rating. Featuring
the NVIDIA® CUDA™ parallel computing
architecture and certified on leading CAD
and DCC applications, Quadro FX 380 LP
meets stringent performance and reliability
requirements, yet is extremely affordable.

The entire NVIDIA Quadro family takes leading
professional 3D applications to a new level
of interactivity by enabling unprecedented
capabilities and precision. Professional
applications leverage the Quadro GPU to
enable hardware-accelerated features,
performance, and quality not found in any
other professional graphics solution. From
the award-winning, ultra high-end Quadro
FX 5800 all the way to the entry-level Quadro
FX 380 LP, NVIDIA delivers a full range of
productivity-enhancing professional solutions
with leadership performance and value.

PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>FORM FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Profile, 2.731” (H) x 6.6” (L), Single Slot</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CUDA CORES</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRAME BUFFER MEMORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>512 MB DDR3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEMORY INTERFACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-bit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEMORY BANDWIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.8 Gbps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAX POWER CONSUMPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>28W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GRAPHICS BUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCI Express Gen 2 x16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISPLAY CONNECTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Link DVI (1), DisplayPort (1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THERMAL SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable Speed Active Fansink</td>
</tr>
</tbody>
</table>

*Viewperf 10 Geometric comparison to GeForce GTS 250
Image Courtesy of: Autodesk, Modo image created by Muharraqi-Studios |Khalid Al-muharraqi|, and NVIDIA Corporation.
### Features vs Benefits

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-Profile Form Factor</td>
<td>Enables ISV certified, professional 3D graphics in space saving, small form factor systems.</td>
</tr>
<tr>
<td>Performance Drivers for Autodesk AutoCAD and 3D Studio Max</td>
<td>Increases productivity with up to a 10X acceleration in AutoCAD 2010 and up to 2X in 3D Studio Max while improving image quality.</td>
</tr>
<tr>
<td>Drive HD Video on Dual Displays</td>
<td>Display a separate HD video on each of the two displays, each supporting resolutions up to 2500x1600 @60Hz.</td>
</tr>
<tr>
<td>512 MB DDR3 GPU Memory with Ultra Fast Memory Bandwidth</td>
<td>Delivers high throughput needed to interact with large textured models.</td>
</tr>
<tr>
<td>30-Bit Color Fidelity</td>
<td>30-bit color fidelity (10-bits per color) enables billions rather than millions of color variations for rich, vivid image quality with the broadest dynamic range. 10-bit grayscale delivers 4X the number of shades of gray, critical for medical imaging applications.</td>
</tr>
<tr>
<td>NVIDIA CUDA Architecture</td>
<td>NVIDIA® CUDA™ is a revolutionary parallel computing architecture for Quadro professional GPUs, enabling breakthrough performance in areas such as video encoding, image processing, ray tracing, and accurate physics. CUDA enables this unprecedented performance via standard programming languages such as C and FORTRAN or APIs such as OpenCL and Microsoft DirectCompute.</td>
</tr>
</tbody>
</table>

### Technical Specifications

#### Mechanical Specifications

- **Low Profile**: 2.7” x 6.6” single slot board (low profile and ATX brackets available)
- **1 DVI-I Dual Link & 1 DisplayPort connector**
- **Variable speed active fan-sink**
- **28W Max Power**

#### 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)
- 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

#### NVIDIA Quadro FX 380 LP 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
- Full Shader Model 4.1 (OpenGL 3.2/DirectX 10.1 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
- Optimized compiler for Cg and Microsoft HLSL
- OpenGL 3.2 and DirectX 10.1 support
- Open source compiler

#### GPU Computing Support

- CUDA C and CUDA FORTRAN
- OpenCL
- Microsoft DirectCompute

#### High Resolution Antialiasing

- Rotated Grid Full-Scene Antialiasing (RG FSAA)
- 32x FSAA dramatically reduces visual aliasing artifacts or “jaggies” at resolution up to 1920x1200

#### Display Resolution Support

- DisplayPort output drives a digital display at resolutions up to 2560 x 1600 @ 60Hz
- Dual-link DVI-I output drives a digital display at resolutions up to 2560 x 1600 @ 60Hz
- Internal 400 MHz DAC drives one analog display up to 2048 x 1536 @ 85Hz

#### NVIDIA® NVIeW® Architecture

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

---

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