### **NVIDIA GEFORCE DESKTOP GRAPHICS PROCESSORS**

# **QUICK GUIDE**



| Featured Technologies |                               |  |      | Features at a Glance |             |            |               |                      |         | Performance          |            |                               |                   | Software                     |                               |                                  |  |                       |                                  |                   |   |
|-----------------------|-------------------------------|--|------|----------------------|-------------|------------|---------------|----------------------|---------|----------------------|------------|-------------------------------|-------------------|------------------------------|-------------------------------|----------------------------------|--|-----------------------|----------------------------------|-------------------|---|
| Gr<br>(GI             | aphics Processing Unit<br>PU) | Ideal for  | cuba | PhysX™               | NVIDIA SLI® | 3D Vision™ | PureVideo HD® | Multi-Display Option | DirectX | Unified Architecture | CUDA Cores | Certified for Windows® Vista™ | Windows 7 Support | Maximum Analog<br>Resolution | Maximum Digital<br>Resolution | Standard Memory<br>Configuration | Maximum Memory<br>Bandwidth (per second) | Graphics Performance² | Compute Performance <sup>3</sup> | PhysX Performance | Driver/05 Support   |
|                       | GeForce GTX 295               | ENTHUSIAST Extreme Gamer Power User Multimedia Enthusiast              | 1    | 1                    | Quad SLI    | 1          | 1             | 1                    | 10      | J                    | 480        | /                             | 1                 | 2048x1536                    | 2560x1600                     | 1.8GB                            | 223.8GB                                  | 40x                   | 8x                               | 12.3x             | GeForce Unified Driver Architecture - Windows 7 64-bit - Windows 7 32-bit - Windows Vista x86 - Windows Vista x64 - Windows XP - Windows XP |
|                       | GeForce GTX 285               |  | 1    | J                    | 3-way       | /          | /             | 1                    | 10      | J                    | 240        | 1                             | 1                 | 2048x1536                    | 2560×1600                     | 1GB                              | 159.0GB                                  | 28x                   | 8x                               | 6.7x              |   |
|                       | GeForce GTX 275               |  | J    | /                    | 3-way       | /          | J             | 1                    | 10      | <b>/</b>             | 240        | J                             | 1                 | 2048x1536                    | 2560x1600                     | 896MB                            | 127.0GB                                  | 25x                   | 8x                               | 6.7x              |   |
|                       | GeForce GTX 260               |  | 1    | /                    | 3-way       | 1          | 1             | 1                    | 10      | <b>/</b>             | 216        | 1                             | 1                 | 2048x1536                    | 2560x1600                     | 896MB                            | 111.9GB                                  | 21x                   | 8x                               | 6.3x              |   |
|                       | GeForce GTS 250               | PERFORMANCE Gamer Multimedia User Casual Gamer                         | 1    | 1                    | 3-way       | 1          | 1             | 1                    | 10      | 1                    | 128        | 1                             | 1                 | 2048x1536                    | 2560x1600                     | 512MB/1GB                        | 70.4GB                                   | 15x                   | 7x                               | 5.7x              |   |
| Express               | GeForce 9800 GT               |  | 1    | 1                    | J           | /          | <b>/</b>      | 1                    | 10      | <b>J</b>             | 112        | 1                             | 1                 | 2048x1536                    | 2560x1600                     | 512MB                            | 57.6GB                                   | 13x                   | 6x                               | 4.9x              |   |
| PCI Ex                | GeForce GT 240                |  | 1    | J                    |             | /          | /             | J                    | 10.1    | J                    | 96         | 1                             | 1                 | 2048x1536                    | 2560x1600                     | 512MB/1GB                        | 54.4GB                                   | 11x                   | 6x                               | 4.5x              | Professional x64 - Windows Server 2003 x64  |
|                       | GeForce GT 220                | - <b>MAINSTREAM</b><br>Business User<br>Casual Gamer<br>- Home PC User | 1    | J                    |             |            | J             | J                    | 10.1    | J                    | 48         | 1                             | 1                 | 2048x1536                    | 2560x1600                     | 1GB                              | 25.3GB                                   | 6x                    | 4x                               | 2.9x              | - Linux 32-bit<br>- Linux 64-bit<br>- FreeBSD 32-bit<br>- FreeBSD 64-bit  |
|                       | GeForce 9500 GT               |  | 1    | J                    | J           |            | 1             | J                    | 10      | J                    | 32         | 1                             | 1                 | 2048x1536                    | 2560x1600                     | 512MB                            | 16.0GB                                   | 4x                    | 3x                               | 2.3x              |   |
|                       | GeForce 9400 GT               |  | 1    |                      |             |            | 1             | J                    | 10      | J                    | 16         | 1                             | 1                 | 2048x1536                    | 2560x1600                     | 512MB                            | 12.8GB                                   | 2x                    | 3x                               | n/a               |   |
|                       | GeForce 210                   |  | 1    |                      |             |            | 1             | J                    | 10.1    | <b>J</b>             | 16         | 1                             | 1                 | 2048x1536                    | 2560x1600                     | 512MB                            | 12.6GB (DDR3)<br>8.0GB (DDR2)            | 2x                    | 2x                               | n/a               |   |
|                       | GeForce 8400 GS               |  | J    |                      |             |            | <b>√</b> 1    | 1                    | 10      | 1                    | 8          | J                             | 1                 | 2048x1536                    | 1920x1200                     | 256MB                            | 6.4GB                                    | 1x                    | 1x                               | n/a               |   |

<sup>1</sup> Varies by Add-in-Card partner (Pure Video HD column)

<sup>2</sup> Graphics testing based on 3DMark Vantage, Performance preset at 1280x1024

<sup>3</sup> Compute testing based on Badaboom PlushLife\_1280x720x30x20mbs.mpg video clip

## **NVIDIA GEFORCE FAMILY**

#### **NVIDIA CROSS-SELLING MATRIX**

| Segment                               | NVIDIA Solution | SLI-Ready | Certified for<br>Windows® Vista™ | Windows 7<br>Support | Replaces ATI Board  |  |  |
|---------------------------------------|-----------------|-----------|----------------------------------|----------------------|---------------------|--|--|
|                                       | GeForce GTX 295 | Quad SLI  | <b>/</b>                         | <b>/</b>             | Radeon HD 5870      |  |  |
| ENTHUSIAST Extreme Gamer              | GeForce GTX 285 | 3-way     | /                                | /                    | Radeon HD 5850      |  |  |
| Power User<br>Multimedia Enthusiast   | GeForce GTX 275 | 3-way     | /                                | /                    | Radeon HD 4890      |  |  |
|                                       | GeForce GTX 260 | 3-way     | /                                | /                    | Radeon HD 5770      |  |  |
|                                       | GeForce GTS 250 | 3-way     | /                                | /                    | Radeon HD 5750      |  |  |
| PERFORMANCE Gamer Multimedia User     | GeForce 9800 GT | /         | /                                | /                    | Radeon HD 4830      |  |  |
| Casual Gamer                          | GeForce GT 240  |           | /                                | /                    |                     |  |  |
|                                       | GeForce GT 220  |           | /                                | /                    | Radeon HD 4670      |  |  |
|                                       | GeForce 9500 GT | /         | /                                | /                    | Radeon HD 4550      |  |  |
| MAINSTREAM Business User Casual Gamer | GeForce 9400 GT |           | /                                | /                    | Radeon HD 4350      |  |  |
| Home PC User                          | GeForce 210     |           | /                                | /                    | Radeon HD 4350/4550 |  |  |
|                                       | GeForce 8400 GS |           | J                                | J                    | Radeon HD 3450      |  |  |

Graphics cards based on these GeForce GPUs qualify for the Premium Device logo called "Certified for Windows Vista". However, depending on the shipping memory configuration, these graphics cards may not qualify for the Windows Vista Premium System Logo.

### WHY NVIDIA GEFORCE?

- > GeForce is the most stable, reliable, and recognized brand in graphics technology, and is the leading GPU of choice for both corporate and consumer computer users.
- > GeForce® GPUs with CUDA™ technology deliver Graphics Plus™. Experience world-class graphics on today's hottest games, bring your games to life with GPU accelerated NVIDIA PhysX® gaming effects, immerse yourself in Stereoscopic 3D game play, transcode your videos up to 20x faster for your portable devices and edit digital images faster and smoother.
- > GeForce GPUs are backed by the NVIDIA®

  GeForce® unified driver architecture, ensuring the best out-of-box experience for every user.

  GeForce drivers deliver industry-leading graphics features; one driver for all products and continual performance and feature updates over the life of the product.
- > GeForce is a top-to-bottom solution, delivering GPUs for every user and every budget. From the PC gamer who craves the best graphic performance to the mainstream digital media user, GeForce GPUs provide the perfect solution.
- > NVIDIA invents and delivers industry-shaping technologies that revolutionize the end-user experience. The latest innovations include an NVIDIA unified architecture as well as NVIDIA SLI® and NVIDIA® PureVideo® HD technologies.

