



## GEFORCE® GTX 680 4GB

## VCGGTX6804XPB

### Game-Changing Innovation

The GeForce® GTX 680 delivers more than just state-of-the-art features and technology. It gives you truly gaming-changing performance that taps into the power next generation GeForce® Kepler-architecture to redefine smooth, seamless, lifelike gaming. NVIDIA GPU Boost technology that dynamically maximize clock speeds to push performance to the new levels and bring out the best in every game. Ultra-smooth gaming with exciting new NVIDIA Adaptive V-Sync technology.

#### PACKAGE INCLUDES

- GeForce® GTX 680 4GB graphics card
- Quick Installation Guide
- Installation DVD, which includes:
  - NVIDIA® Graphics Drivers
  - NVIDIA® GeForce® Demos
  - PhysX™ System Software
- DVI-to-VGA adapter
- 6-pin PCIe to Molex Power Adapter

#### KEY FEATURES

- NVIDIA® GPU Boost
- NVIDIA® Adaptive Vertical Sync
- NVIDIA® Surround™ Technology\*
- Support for four concurrent displays including:\*\*\*
  - Two Dual-Link DVI
  - HDMI® 1.4a
  - DisplayPort 1.2
- Microsoft® DirectX® 11 with DirectCompute 5.0
- NVIDIA® PhysX® technology
- NVIDIA® 3D Vision®-Ready
- NVIDIA® CUDA® technology
- PCI Express 3.0 support
- OpenGL 4.3 support
- OpenCL™ support

#### REQUIREMENTS

- PCI Express compliant motherboard with one dual-width x16 graphics slot
- One 6-pin PCI Express supplementary power connectors
- Minimum 550W or greater system power supply (with a minimum 12V current rating of 38A)<sup>1</sup>
- 300 MB of available hard-disk space 2GB system memory (4GB or higher recommended)
- Microsoft Windows 7, Windows Vista, or Windows XP Operating System (32 or 64-bit)
- DVD-ROM drive or Internet connection for installation
- DVI, HDMI, DisplayPort or VGA compatible monitor

#### PRODUCT SPECIFICATIONS

<b>GPU</b>	GeForce® GTX 680
<b>CUDA Cores</b>	1536
<b>Core Speed</b>	1006 MHz
<b>Boost Speed</b>	1058 MHz
<b>Memory Size</b>	4096 MB GDDR5
<b>Memory Interface</b>	256 bit
<b>Memory Frequency</b>	6.0 Gbps
<b>TDP</b>	195W-Active
<b>SLI</b>	3-Way SLI
<b>Multi-Screen</b>	4 Concurrent Screens*** NVIDIA 3D Surround**
<b>Outputs</b>	DVI-I, DVI-D, HDMI® 1.4a, DisplayPort 1.2
<b>Resolution</b>	2560×1600 (Digital)
<b>Power Input</b>	2× 6-pin PCI-E Power
<b>Bus Type</b>	PCI-Express 3.0 16x
<b>UPC</b>	751492553320
<b>Card Dimensions</b>	10"× 4.376" Dual-Slot
<b>Box Dimensions &amp; Weight</b>	12.5"× 6.25"× 2.5", 2.5 lbs.

\* NVIDIA® 3D SURROUND requires additional hardware, please see [www.NVIDIA.com/get3D](http://www.NVIDIA.com/get3D) for detail information

\*\* PNY One-Year warranty will be extended to Lifetime of the original purchaser upon completion of product registration. Product must be registered on PNY's website [www.pny.com](http://www.pny.com) within 90 days of purchase. Features and specifications subject to change without notice.

\*\*\* 3- or 4-Screen Support only in Windows 8, Windows 7 and Windows Vista. Windows XP or earlier version will only support dual monitors.

