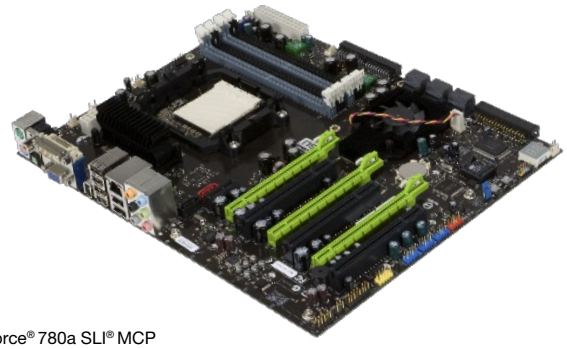
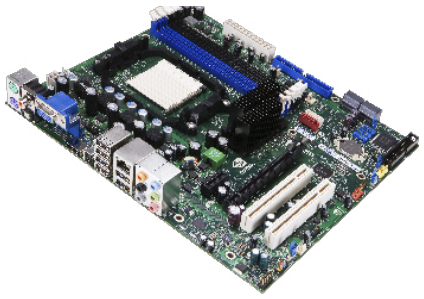
# NVIDIA-based Motherboard Family for AMD



NVIDIA nForce® 780a SLI® MCP



NVIDIA GeForce® 8300 mGPU

## Why NVIDIA nForce MCPs?

### NVIDIA® SLI® Technology

- The combination of NVIDIA nForce® MCPs and GeForce® GPUs deliver the ultimate PC gaming experience
- Revolutionary platform innovation that allows users to intelligently scale graphics performance by combining multiple NVIDIA graphics solutions
- SLI-certified components deliver unmatched performance and compatibility with NVIDIA nForce based motherboards

### Advanced Networking

- Native Gigabit Ethernet solution with low CPU utilization
- NVIDIA DualNet® technology includes teaming and TCP/IP acceleration for greater bandwidth and better system performance
- Prioritize important network traffic with NVIDIA FirstPacket™ technology

### Performance

- NVIDIA HybridPower™ technology provides graphics performance when you need it and quiet, low-power computing when you don't
- ESA-certified components and applications bring you unprecedented control to monitor and tune your PC performance
- NVIDIA Control Panel utility gives you access to BIOS level settings directly from Microsoft Windows to quickly optimize PC performance

### Storage

- Confidently store and protect priceless digital media files with NVIDIA MediaShield™ technology
- Support for multiple SATA 3Gb/s drives
- Reliable, accessible, scalable, and easy to manage storage

## Why NVIDIA GeForce Motherboard GPUs?

### Award-Winning GeForce® GPUs

- Best-in-class performance on today's media rich applications
- NVIDIA GeForce Boost technology turbocharges the performance of select discrete GeForce GPUs
- Experience cutting-edge effects with support for Microsoft DirectX® 9.0 and 10
- Improve productivity with the abilityto drive two displays with NVIDIA nView™ Technology

### Home Theatre Quality HD Video

- Stunning video playback and superb picture clarity with NVIDIA® PureVideo® technology
- Offloads video decoding from the CPU, resulting in smooth, stutter-free, high-definition video playback
- Supports H.264, VC-1, and MPEG-2 HD-Video playback formats
- Blu-ray and HD DVD playback at highest quality settings with PureVideo HD technology

### Award-Winning Core Logic

- Uncompromised features and system performance
- Confidently store and protect priceless digital assets with NVIDIA MediaShield™ technology
- Native networking support including Gigabit Ethernet
- SATA drive compatibility and PCIe expandability

### Flexible Platform for Mainstream PCs

- Ready for Microsoft® Windows Vista™ Premium experience
- Easily upgraded to discrete GeForce GPUs
- Perfect for building a wide variety of systems including media PCs, home PCs, and business PCs

# Quick Guide to NVIDIA-based Motherboards for AMD

| | | | GRAPHICS | | | | | | | | | CPU | | | PERFORMANCE TUNING | | | MEMORY | | STORAGE | | OS | AUDIO | NETWORKING | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PRODUCT | IDEAL FOR | Form Factor | NVIDIA® SLI® Technology | PCI Express® x16 Slots | NVIDIA GeForce® Boost | NVIDIA HybridPower™ | NVIDIA PureVideo® | PCI Express 2.0 | DirectX Support | Display Outputs | Processor Supported | Socket Supported | HT speed | ESA-Certified | NVIDIA Control Panel | NVIDIA System Monitor | DDR Support | SLI-Ready Memory | SATA/PATA Drive Support | NVIDIA MediaShield™ RAID | Microsoft® Windows® Vista™ Capable | Audio Specification | Gigabit Ethernet Connections | NVIDIA FirstPacket™ technology |
| NVIDIA nForce MCPs | nForce 590 SLI | **Enthusiast** Overclocker, Extreme Gamer, Power User, Multimedia Enthusiast | ATX | 2-way SLI | 3 | | | | | | | Athlon 64 FX, Athlon 64 X2, Athlon 64 | AM2+ AM2 | HT1 | ✓ | ✓ | | DDR2 | ✓ | 6/2 | 0, 1, 0+1, 5 | ✓ | HDA | 2 | ✓ |
| | nForce 570 SLI | **Performance** Gamer, Multimedia User | ATX | 2-way SLI | 2 | | | | | | | Athlon 64 X2, Athlon 64 | AM2+ AM2 | HT1 | | ✓ | | DDR2 | ✓ | 6/2 | 0, 1, 0+1, 5 | ✓ | HDA | 2 | ✓ |
| | nForce 570 LT SLI | | ATX | 2-way SLI | 2 | | | | | | | Athlon 64 X2, Athlon 64 | AM2+ AM2 | HT1 | | ✓ | | DDR2 | | 4/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | ✓ |
| | nForce 730a | **Mainstream** Business User, Casual Gamer, Home PC User | ATX | | 1 | ✓ | ✓ | HD | ✓ | 10 | DVI VGA | Phenom, Athlon 64 FX, Athlon 64 X2, Athlon 64 | AM2+ | HT3 | | ✓ | | DDR2 | | 6/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | ✓ |
| | nForce 720a | | ATX | | 1 | ✓ | ✓ | ✓ | ✓ | 10 | DVI VGA | Phenom, Athlon 64 FX, Athlon 64 X2, Athlon 64 | AM2+ | HT3 | | ✓ | | DDR2 | | 6/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | ✓ |
| | nForce 560 | | ATX | | 1 | | | | | | | Athlon 64 X2, Athlon 64, Semphron | AM2+ AM2 | HT1 | | ✓ | | DDR2 | | 4/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | ✓ |
| | nForce 710a | **Value** Business User, Value PC Buyer | ATX | | 1 | | | | ✓ | | | Phenom, Athlon 64 FX, Athlon 64 X2, Athlon 64 | AM2+ | HT3 | | ✓ | | DDR2 | | 6/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | ✓ |
| | nForce 520 | | ATX | | 1 | | | | | | | Athlon 64 X2, Athlon 64, Semphron | AM2+ AM2 | HT1 | | ✓ | | DDR2 | | 4/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1* | |
| | nForce 520 LE | | ATX | | 1 | | | | | | | Athlon 64 X2, Athlon 64, Semphron | AM2+ AM2 | HT1 | | ✓ | | DDR2 | | 2/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1* | |
| NVIDIA GeForce mGPUs | GeForce 8300 | **Mainstream** Business User, Casual Gamer, Home PC User | uATX | | 1 | ✓ | ✓ | HD | ✓ | 10 | HDMI DVI VGA | Phenom, Athlon 64 X2, Athlon 64 | AM2+ | HT3 | | | | DDR2 | | 6/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | ✓ |
| | GeForce 8200 | | uATX | | 1 | ✓ | ✓ | HD | ✓ | 10 | HDMI DVI VGA | Phenom, Athlon 64 X2, Athlon 64 | AM2+ | HT3 | | | | DDR2 | | 6/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | ✓ |
| | GeForce 8100 | | uATX | | 1 | ✓ | ✓ | ✓ | ✓ | 10 | HDMI DVI VGA | Phenom, Athlon 64 X2, Athlon 64 | AM2+ | HT3 | | | | DDR2 | | 6/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | ✓ |
| | GeForce 7050 PV | | uATX | | 1 | | | ✓ | | 9 | HDMI DVI VGA | Athlon 64 FX, Athlon 64 X2, Athlon 64, Semphron | AM2+ AM2 | HT1 | | | | DDR2 | | 4/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | |
| | GeForce 7025 | | uATX | | 1 | | | | | 9 | DVI VGA | Athlon 64 FX, Athlon 64 X2, Athlon 64, Semphron | AM2+ AM2 | HT1 | | | | DDR2 | | 4/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | |
| | GeForce 6100 nForce 430 | **Value** Business User, Value PC Buyer | uATX | | 1 | | | | | 9 | VGA | Athlon 64 FX, Athlon 64 X2, Athlon 64, Semphron | AM2 939 754 | HT1 | | | | DDR2** DDR | | 4/2 | 0, 1, 0+1, 5 | ✓ | HDA | 1 | |
| | GeForce 6100 nForce 405 | | uATX | | 1 | | | | | 9 | VGA | Athlon 64 FX, Athlon 64 X2, Athlon 64, Semphron | AM2 939 754 | HT1 | | | | DDR2** DDR | | 2/2 | 0, 1 | ✓ | HDA | 1* | |

10/100 internet *
Socket AM2 only **

# Features and Benefits for NVIDIA-based Motherboards for AMD

| | Features | Benefits |
|---|---|---|
| **Graphics** | NVIDIA® SLI® Technology | NVIDIA SLI technology is a revolutionary platform innovation that allows users to intelligently scale graphics performance by combining multiple NVIDIA graphics solutions in a single system with an NVIDIA nForce® SLI MCP |
| | PCI Express® x16 slots | x16 PCI Express slots provides graphics expandability with add in graphics cards |
| | NVIDIA GeForce® Boost Technology | GeForce Boost turbocharges the performance of NVIDIA GeForce GPUs when combined with an NVIDIA motherboard. (On select products. Visit www.nvidia.com/hybridsli for more information) |
| | NVIDIA HybridPower™ Technology | NVIDIA HybridPower unleashes graphics performance for demanding 3D applications and intelligently switches to low-power operation for everyday computing needs. (On select products. Visit www.nvidia.com/hybridsli for more information) |
| | NVIDIA® PureVideo® and PureVideo HD Technology | The combination of high-definition video decode acceleration and post-processing that delivers unprecedented picture clarity, smooth video, accurate color, and precise image scaling for movies and video.<br>PureVideo HD includes required content protection circuitry (HDCP) for playing Blu-ray and HD DVD movies at the highest quality possible, and is directly integrated with the leading HD movie software players. PureVdieo HD delivers the ultimate high-definition movie experience on a PC. |
| | PCI Express 2.0 | Offers a future-proofing bridge to tomorrow's most bandwidth-hungry games and 3D applications by maximizing 5 GT/s of bandwidth (twice that of first generation PCI Express) and is fully backwards compatible with existing PCI Express products |
| | Microsoft® DirectX® Support | Ensures top-notch compatibility and performance for all Microsoft® DirectX® applications, including support for DirectX 10 on select products |
| | Display Outputs | HDMI with HDCP - On board HDMI connector designed to meet the output protection management (HDCP) and security specifications of the Blu-ray Disc and HD DVD formats, allowing the playback of encrypted movie content on PCs when connected to HDCP-compliant displays.<br>DVI with HDCP - Able to drive any single-link digital flat-panel display |
| **Performance Tuning Tools and Software** | ESA Certified | ESA-certified components and applications provide real-time and complete PC performance management, bringing you unprecedented control to manage and tune thermal, electrical, acoustic and operating characteristics to maximize your PC's performance. |
| | NVIDIA Control Panel Utility | Access, monitor, and dynamically adjust crucial system components including CPU temperatures, voltages, bus speeds, and CPU core speed in real time with clear, user-friendly control panel |
| | NVIDIA System Monitor | NVIDIA System Monitor allows you to seamlessly monitor PC characteristics in an intuitive and customizable 3D environment |
| **Memory** | NVIDIA SLI-Ready Memory with EPP | SLI-Ready memory with EPP increases the bandwidth of memory buses with select third party components with one click implementation |
| **Storage** | NVIDIA® MediaShield™ Storage Technology | Suite of features that safeguards your most important digital media assets, including:<br>• Multiple Disk Setup: Simple point and click wizard-based interface for RAID 0, 1, 0+1, or 5 across SATA devices<br>• DiskAlert System: identifies the specific disk in the event of a failure<br>• RAID Morphing: ability to change from one supported RAID configuration to another<br>• Bootable RAID Array: supports the use of multi-disk configurations for loading the operating system at power-up |
| | SATA 3Gb/sec. with NCQ | Blazingly fast disk performance with the latest SATA 3Gb/s. hard disk drives with full support for native and tagged command queuing and hot plug |
| | Ultra ATA-133 | Dual-channel ATA interface capable of a maximum data transfer rate of 133 Mbps per channel |
| **OS Support** | Microsoft® Windows® Vista™ Capable | • NVIDIA nForce MCPs are ready for Microsoft Windows Vista Premium when coupled with an NVIDIA GeForce GPU and 512MB of system memory<br>• NVIDIA GeForce mGPUs are ready for Microsoft Windows Vista Premium when coupled with 1GB of system memory |
| **Audio** | High Definition Audio (HDA) | Features 32-bit, 192kHz quality for eight channels |
| **Networking** | NVIDIA Native Gigabit Ethernet | The industry's fastest Gigabit Ethernet performance eliminates network bottlenecks and improves overall system efficiency and performance |
| | NVIDIA FirstPacket™ Technology | Assures your game data, VoIP conversations, and large file transfers are delivered according to your set preferences. Lowers your ping time for improved online gaming |

* Features vary by product and motherboard design. Please confirm actual specs with your motherboard manufacturer

For more information on NVIDIA based Motherboards, visit www.nvidia.com/motherboards



NVIDIA