

NVIDIA NFORCE FEATURES AND BENEFITS* for INTEL

	FEATURES	BENEFITS
CPU	Dynamic Adaptive Speculative Pre-processor (DASP)	- Boosts CPU speed by storing application instructions and data before they are needed
	Extreme FSB overclocking	- The front side bus (FSB) in the NVIDIA nForce 680i SLI MCP is specified to run at 1333MHz to support existing and future FSB speeds. Through overclocking, however, the NVIDIA nForce 600 Series can deliver speeds well beyond FSB specification.
GRAPHICS INTERFACE	PCI Express®	- Supports the latest add in graphics cards and other features with full x16 implementation. Delivers over 4GB/sec. in both upstream and downstream data transfers
	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
	Third PCIe Slot for Graphics Expansion	Make sure your rig is ready for the future. The third PCIe slot can be used for new three GPU applications or a PCIe card of your choice.
	NVIDIA LinkBoost™ Technology	Select NVIDIA nForce MCPs automatically increases bandwidth when select NVIDIA® GeForce® graphics cards are detected.
MEMORY	NVIDIA DualDDR2 Architecture (Dual 64-bit memory controllers, 128-bit interface)	- Experience the highest level of system performance and run the most demanding applications with revolutionary 64-bit memory controllers
	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: <ul style="list-style-type: none"> • Multiple Disk Setup: Simple point and click wizard-based interface for RAID 0, 1, 0+1, or 5 across SATA devices • DiskAlert System: identifies the specific disk in the event of a failure • RAID Morphing: ability to change from one supported RAID configuration to another • 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/sec. hard disk drives with full support for native and tagged command queuing and hot plug
	Parallel 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-based motherboards are perfect for Microsoft Windows Vista when coupled with an NVIDIA GeForce® graphics processing unit and 512MB of system memory
AUDIO	High Definition Audio (HDA)	- Features 32-bit, 192kHz quality for eight channels
	AC'97 Audio	- Features 20-bit, 48kHz support, and is fully AC'97 compliant
PERFORMANCE TUNING TOOLS AND SOFTWARE	NVIDIA nTune™ 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 Forceware™ Platform Software	- Delivers industry-leading features and rock-solid stability and reliability for NVIDIA nForce MCPs
CONNECTIVITY	USB 2.0	- Connect to a variety of digital devices including mice, keyboards, game controllers, digital cameras, and digital camcorders
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
	NVIDIA DualNet® technology	- Two Gigabit Ethernet MACs with TCP/IP acceleration - Teaming: allows two connections to work together to provide up to twice the Ethernet bandwidth for large data transfers from file servers to other PCs. It also provides network redundancy through fail-over capability
	TCP/IP Acceleration	- Delivers the highest system performance by offloading CPU-intensive packet filtering tasks in hardware, providing users with a fast networking environment
	Checksum Offload	- Improves networking efficiency by reducing CPU utilization. Allows the processor to concentrate on other tasks
	Jumbo Frame Support	- Reduces the number of calls to the network driver, thereby reducing CPU overhead and improves throughput
	Windows Control Panel/Web-based Management	- Provides easy access to system set-up and configuration. Interface determined by software version
	IPv6 Support	- Ability to future proof PC systems as standards evolve

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



NVIDIA Corporation | 2701 San Tomas Expressway, Santa Clara, CA 95050 | T (408) 486 2000 | F (408) 486 2200 | www.nvidia.com

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NVIDIA NFORCE | LINECARD | NOV06



BUILD THE BEST DESKTOP PC WITH NVIDIA NFORCE for INTEL

NVIDIA NFORCE KEY POINTS

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 motherboards

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

Performance

- With comprehensive overclocking tools to push the limits on front side bus (FSB) speed, the NVIDIA nForce 600 series is designed for overclocking
- NVIDIA nTune™ utility give you access to BIOS level settings directly from Microsoft Windows to quickly optimize PC performance
- SLI-Ready memory with EPP increases the bandwidth of memory buses with select third party components with one click implementation

Advanced Networking

- Native Gigabit Ethernet solution with lowest 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

		CPU				GRAPHICS INTERFACE				MEMORY		MEDIASHIELD STORAGE			OS	AUDIO	PERFORMANCE TUNING TOOLS	ADVANCED NETWORKING					
		Processor Supported	Socket Supported	FSB Speed	Extreme FSB Overclocking	Advanced Bus Support	NVIDIA SLI™ Technology	Third PCIe Graphics Expansion Support	NVIDIA LinkBoost™ Technology	DDR Support	Support for NVIDIA SLI-Ready memory	SATA/PATA Drive Support	SATA	NVIDIA Mediashield™ RAID	Microsoft® Windows® Vista™ Capable	Audio Specification	NVIDIA nTune™ Utility	NVIDIA Gigabit Ethernet Connections	NVIDIA FirstPacket™ technology	NVIDIA DualNet® technology	TCP/IP Acceleration		
PRODUCT	IDEAL FOR																						
NVIDIA nForce 600 Series	NVIDIA nForce 680i SLI	Enthusiast SLI Overclocker, Extreme Gamer, and Multimedia Enthusiast	Core™2 Extreme Core™2 Quad Core™2 Duo	LGA775	1333*/1066/800 MHz	Best	PCI Express® 16, 16, 8, 1, 1, 1, 1, 1, 1	SLI x16	✓	✓	DualDDR2 up to 800 MHz	Up to 1200 MHz	6/2	3Gb/s	0, 1, 0+1, 5	✓	HDA	✓	2	✓	✓	✓	
	NVIDIA nForce 650i SLI	Performance SLI Overclocker, Power User, Gamer, and Multimedia Hobbyist	Core™2 Extreme Core™2 Quad Core™2 Duo	LGA775	1066/800 MHz	Good	PCI Express 8, 8, 1, 1 or 16, 1, 1	SLI x8				DualDDR2 up to 800 MHz		4/4	3Gb/s	0, 1, 0+1, 5	✓	HDA	✓	1	✓		
	NVIDIA nForce 650i Ultra	Performance Overclocker, Power User, Gamer, and Multimedia Hobbyist	Core™2 Extreme Core™2 Quad Core™2 Duo	LGA775	1066/800 MHz	Good	PCI Express 16, 1, 1					DualDDR2 up to 800 MHz		4/4	3Gb/s	0, 1, 0+1, 5	✓	HDA	✓	1	✓		
NVIDIA nForce 500 Series	NVIDIA nForce 590 SLI	Enthusiast Overclockers, Extreme Gamer, and Multimedia Enthusiast	Core™2 Family Pentium D Pentium 4	LGA775	1066/800 MHz	Good	PCI Express® 16, 16, 8, 1, 1, 1, 1, 1, 1, 1, 1	SLI x16	✓	✓	DualDDR2 up to 667 MHz	Up to 800 MHz	6/2	3Gb/s	0, 1, 0+1, 5	✓	HDA	✓	2	✓	✓	✓	
	NVIDIA nForce 570 SLI	Performance Gaming Power User, Gamer, and Multimedia Hobbyist	Core™2 Family Pentium D Pentium 4 Celeron D	LGA775	1066/800 MHz		PCI Express 8, 8, 1, 1, 1 or 16, 1, 1, 1, 1	SLI x8				DualDDR2 up to 667 MHz		4/4	3Gb/s	0, 1, 0+1, 5	✓	HDA	✓	1			
NVIDIA nForce4 Family	NVIDIA nForce4 SLI X16	Enthusiast Extreme Gamer and Multimedia Enthusiast	Core™2 Family Pentium D Pentium 4	LGA775	1066/800 MHz		PCI Express 16, 16, 1, 1, 1, 1, 1, 1	SLI x16				DualDDR2 up to 667 MHz		4/4	3Gb/s	0, 1, 0+1, 5	✓	AC'97	✓	1			✓
	NVIDIA nForce4 SLI	Performance Gaming Power User, Gamer, and Multimedia Hobbyist	Pentium D Pentium 4 Celeron D	LGA775	1066/800 MHz		PCI Express 8, 8, 1, 1, 1	SLI x8				DualDDR2 up to 667 MHz		4/4	3Gb/s	0, 1, 0+1, 5	✓	AC'97	✓	1			✓
	NVIDIA nForce4 SLI XE	Performance Power User, Gamer, and Multimedia Hobbyist	Pentium D Pentium 4 Celeron D	LGA775	1066/800 MHz		PCI Express 8, 8, 1, 1, 1	SLI x8				DualDDR2 up to 667 MHz		4/4	3Gb/s	0, 1, 0+1, 5	✓	HDA	✓	1			
	NVIDIA nForce4 Ultra	Performance Multimedia Power User, Gamer, and Multimedia Hobbyist	Core™2 Family Pentium D Pentium 4 Celeron D	LGA775	1066/800 MHz		PCI Express 16, 1, 1, 1, 1					DualDDR2 up to 667 MHz		4/4	3Gb/s	0, 1, 0+1, 5	✓	HDA	✓	1			

* Available on CPUs supporting 1333MHz FSB