



## THE MAINSTREAM GPU

### PRODUCT DESCRIPTION

The GeForce2 MX family brings the power of a Graphics Processing Unit (GPU) to the mainstream computer. With its innovative TwinView™ architecture, GeForce2 MX is the only GPU capable of driving two displays independently, including digital display, analog RGB (VGA), and TV-out. In addition, the GeForce2 MX family uniquely incorporates Digital Vibrance Control™, which makes all images—including 2D, 3D, and video—more colorful and vibrant, even on digital flat panels. Utilizing a two-pipe form of the breakthrough GeForce2 GTS™ 3D architecture, GeForce2 MX is a robust GPU at mainstream price points.

GeForce2 MX not only provides incredible 3D graphics, it is also a complete video solution. Its integrated High-Definition Video Processor (HDVP) supports ATSC 720p high-definition resolution at 60fps. Combine GeForce2 MX with a high-performance, high-level software MPEG-2 decoder and a digital TV receiver for a cost-effective, high-quality HDTV solution. GeForce2 MX also enables groundbreaking new applications, such as hardware time-shifting and digital VCR capabilities.



GeForce2 MX takes advantage of the latest advancements in PC and MAC computing to provide maximum performance in all graphics applications. It is the most complete Microsoft® DirectX® 7 hardware implementation and meets all the requirements specified by the Microsoft PC 00, PC 99, and PC 99a initiatives. GeForce2 MX delivers the industry's fastest Direct3D® and OpenGL® acceleration in its class. GeForce 2 MX also features full support for the MAC® OS.

GeForce2 MX continues NVIDIA's tradition of bringing leading edge technology to the mainstream with its cost-effective, integrated VGA, 2D, 3D, and video in a single-chip solution. GeForce2 MX GPU delivers stunning visuals for a whole range of applications from crystal-clear, high-resolution 2D/3D graphics on multiple displays to 3D games to video applications such as HDTV, DVD, and video conferencing.





## FEATURES

- TwinView Architecture
  - Two RGB Monitors (With Second RAMDAC)
  - Two Analog Flat Panels
  - Digital flat panel + analog flat panel
  - Digital flat panel + RGB monitor
  - Digital flat panel + TV
  - RGB monitor + TV
  - RGB monitor + analog flat panel (with second RAMDAC)
  - Analog flat panel + TV
- Digital Vibrance Control—PC only
- Second generation transform and lighting (T&L) engines
  - 256-bit graphics engine
  - 4 texture-mapped, filtered, lit texels per clock cycle
  - Single-pass multitexturing
  - 32-bit colors, Z/stencil buffer
  - High quality texture filtering, including anisotropic
  - Advanced per-pixel lighting, texturing, and shading
  - Cube environment mapping
  - DirectX and S3 texture compression
  - Complete DirectX 7 support
- NVIDIA Shading Rasterizer (NSR)
- High-Definition Video Processor (HDVP)
  - Independent hardware color controls for video overlay
  - Hardware color space conversion (YUV 4:2:2 and 4:2:0)
  - 5-tap horizontal by 3-tap vertical filtering
  - 8:1 upscaling and downscaling
  - Per-pixel color keying
  - Multiple video windows with hardware color space conversion and filtering
  - DVD sub-picture alpha blended compositing
  - Video acceleration for DirectShow, MPEG-1, MPEG-2 and Indeo

- Robust system interface
  - Comprehensive AGP 4X support, including Execute Mode
  - Comprehensive AGP 1X, 2X and VAGP support
  - NTSC and PAL TV output
  - VIP 2.0 video I/O port
  - Flexible memory configurations, up to 64MB of SDR or DDR SDRAM/SGRAM
- High performance 256-bit 2D Engine
  - Optimized for multiple color depths including 32, 24, 16, 15, and 8-bits per pixel
  - True-color hardware cursor
  - Multibuffering (double, triple, quad) for smooth animation and video playback
- Designed to WHQL Compatibility standards
  - Windows XP, Windows 2000, Windows NT® 4.0, Windows NT 3.5 display drivers
  - Windows 98 and Windows 95 display drivers
  - DirectDraw, Direct3D, DirectVideo, and ActiveX drivers
  - OpenGL ICD for Windows 95, Windows 98, Windows 2000 and Windows NT
  - Complete Linux display and OpenGL drivers
  - OS/2 display driver
  - Fully PC 00, PC 99 and PC 99a compliant

## PERFORMANCE

- Maximum 3D/2D resolution of 2048 x 1536 @ 75Hz
- Complete DirectX 7, DirectX 6 and DirectX 5 support

## QUALITY

- NVIDIA Unified Driver Architecture
- Industry's first fully compliant professional OpenGL 1.2 support for all Linux™ and Windows® operating systems
- WHQL-certified Windows XP, Windows 2000, Windows NT 4.0, Windows 3.5
- Complete Linux drivers, including full OpenGL
- Mac OS driver support
- MAC API support
  - OpenGL® 1.2 and lower
  - QuickDraw®
  - QuickTime®
  - 3D Rave

	GEFORCE2 MX	GEFORCE2 MX 200	GEFORCE2 MX 400
<b>FILL RATE</b>	700	700	800
<b>TRIANGLES/SEC</b>	20 MILLION	20 MILLION	25 MILLION
<b>MEMORY BANDWIDTH</b>	2.7GB/S	1.3GB/S	2.7GB/S
<b>MAX. MEMORY</b>	32MB	32MB	64MB



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