



NVIDIA Vanta™

Low-Cost 128-bit Twin Texel 3D Processor



PRODUCT DESCRIPTION

The NVIDIA Vanta™ is a low-cost, 128-bit Twin Texel, highly-integrated 3D graphics processor, designed specifically for value-conscious corporate users. Leveraging the RIVA TNT2™ architecture, NVIDIA Vanta delivers breakthrough 3D and industry-leading 2D graphics performance, making it ideal for 1999 corporate desktops. In addition to its outstanding graphics capabilities, the NVIDIA Vanta provides complete support for video, software and hardware DVD playback, as well as the latest system technologies such as AGP 4X bus and flat panel displays.

The NVIDIA Vanta graphics processor is perfect for small and medium business users who require high-performance 2D platform and for corporate users who also have data-intensive visualization demands. The NVIDIA Vanta sets the standard for the mainstream PC graphics market and Microsoft's PC 98, PC 99, and DirectX 6.0 initiatives. NVIDIA Vanta will be WHQL certified for Windows 2000, Windows NT 4.0, Windows NT 3.5, Windows 98, and Windows 95. This driver is forward and backward compatible with the Detonator Driver family.

Reliability, compatibility, performance, and quality at a low cost are the reasons why NVIDIA Vanta is the product of choice for leading OEMs, and system integrators.

NVIDIA Vanta – Full-Featured Graphics Solution for Mainstream Corporate Desktops.

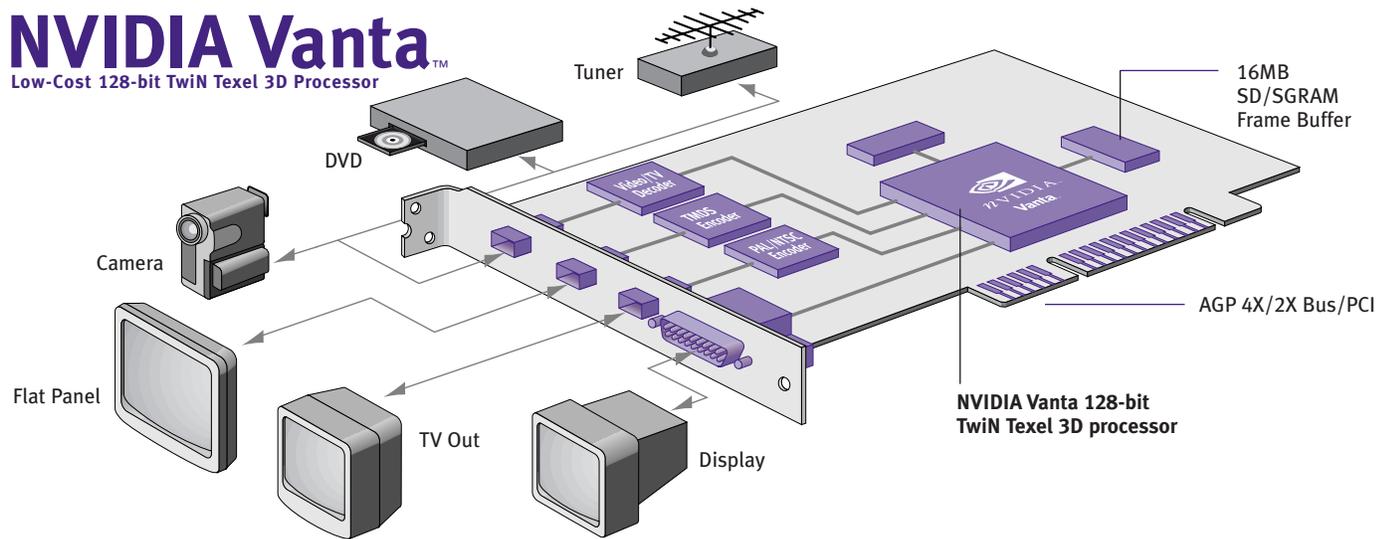
PRODUCT OVERVIEW

Compatibility Performance & Reliability Quality

- Proven 128-bit Twin Texel architecture
- Unique Vanta Pad Mirroring™ technology for AGP 4X motherboard designs
- Small footprint 320 BGA package
- Unified driver across product line
- Complete DirectX 6.0 and OpenGL support
- WHQL certified Windows 2000, Windows NT 4.0, 3.5, Windows 98 and Windows 95 display drivers
- 128-bit graphics engine
- 32-bit color, 32-bit Z/stencil buffer
- Maximum resolution of 1920x1200x32 @ 72Hz
- AGP 4X/2X system interface
- Digital flat panel support with scaling, centering, and filtering

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High-performance 128-bit 2D acceleration

- Hardware acceleration for all Windows GDI operations
- Optimized for multiple color depths including 32, 24, 16, 15, and 8 bits per pixel
- True-color hardware cursor
- Hardware color dithering
- Multi-buffering (up to quad buffering) for smooth animation and video playback
- Fast 32-bit VGA/SVGA support
- Maximum resolution of 1920x1200x32 @ 72Hz

Award-winning 3D performance

- Second-generation 128-bit Twin Texel architecture
- Complete DirectX 6.0 and 5.0 support
- Single-pass multi-texturing
- 32-bit rendering with destination alpha
- 32-bit Z/stencil buffer
- Anti-aliasing: full scene, order independent
- Point-sampled, bilinear, and 8 tap anisotropic filtering
- 100% hardware triangle setup
- TextureBlend support
 - Multi-texture, bump mapping
 - Texture modulation
 - Light, reflection, environment mapping
 - Detail, procedural textures
- Per-pixel perspective-correct texture mapping
 - Fog, light, mip mapping
- Optimized for Pentium III and K6-2 processors

High-quality video acceleration

- Full-screen, full-frame DVD playback
- Advanced support for DirectDraw
- Back-end hardware video scaling for video conferencing and playback
- Hardware color-space conversion (YUV 4:2:2 and 4:2:0)
- Multi-tap X and Y filtering
- 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

- AGP 4X/2X system bus (AGP 2.0 and AGP 1.0 compliant)
- Digital Flat Panel interface with scaling, centering, and filtering for flat panels up to 1280x1024
- 64-bit frame-buffer interface, supporting up to 32MB SDRAM/SGRAM
- Busmastering DMA PCI 2.1 interface
- NTSC and PAL TV output
- CCIR-656 video capture port

Built-in compatibility with unified driver

- Windows 2000, Windows NT 4.0, Windows NT 3.5, Windows 98, and Windows 95 display drivers
- Complete support for DirectDraw, Direct3D, DirectShow, and ActiveX
- OpenGL ICD for all operating systems listed above
- OS/2 display driver
- Window 3.x display driver
- Fully PC98 and PC99 compliant

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