



RIVA TNT™

128-bit TwiN Texel 3D Processor



PRODUCT DESCRIPTION

The RIVA TNT™ is the first integrated, 128-bit 3D processor that processes 2 pixels per-clock-cycle which enables single-pass multi-texturing and delivers a mind-blowing 180 million pixels-per-second fill rate. RIVA TNT's (TwiN Texel) 32-bit color pipeline, 24-bit Z, 8-bit stencil buffer and per-pixel precision delivers unsurpassed quality and performance allowing developers to write standards-based applications with stunning visual effects and realism.

The RIVA TNT offers industry-leading 3D and 2D performance, meeting all the requirements of the mainstream PC graphics market and Microsoft's PC'98 and DirectX 6.0 initiatives. The RIVA TNT delivers the industry's fastest Direct3D™ acceleration solution and leadership VGA, 2D and video performance enabling a range of applications from 3D games to DVD and video conferencing. A complete high performance OpenGL ICD is included in the standard software driver package.

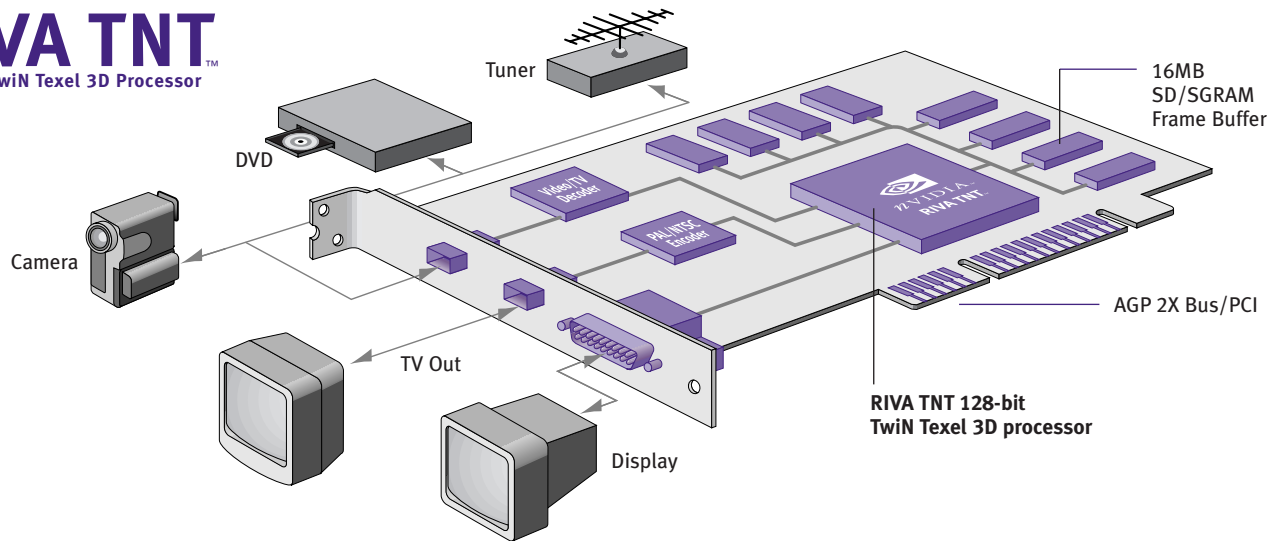
PRODUCT OVERVIEW

Compelling Visual Quality

- World's fastest 3D and 2D processor
- 128-bit TwiN Texel architecture
- Single-pass multi-texturing
- Optimized Direct 3D acceleration
- 16MB frame buffer
- 32-bit color,
- 24-bit Z-buffer, 8-bit stencil
- Maximum 3D/2D resolution of 1920 x 1200 @ 75Hz
- AGP 2X Bus
- Complete DirectX 6.0 and OpenGL support
- WHQL certified Windows 2000, Windows NT 4.0, Windows NT 3.5, Windows 98, and Windows 95 display drivers

RIVA TNT™

128-bit Twin Texel 3D Processor



Award-Winning 3D/2D graphics performance

- 180 million pixels/second fill rate
- 6 million triangles/second peak
- 1.8GB/second frame buffer bandwidth architecture
- Maximum 3D/2D resolution of 1920x1200 @ 75Hz

Visually stunning interactive 3D

- Optimized Direct3D acceleration
- Complete DirectX 6.0 and 5.0 support
- 128-bit Twin Texel (TNT) architecture
 - 2 texture mapped, lit pixels-per-clock cycle
 - Single-pass multi-texturing
 - 2X raw performance of most operations
- 24-bit Z buffer (floating point or integer)
- 8-bit stencil buffer
- Anti-aliasing: full scene, order independent
- 32-bit ARGB rendering with destination alpha
- Point-sampled, bilinear, and 8 tap anisotropic filtering
- 100% hardware triangle setup
- TextureBlend support
 - Multi-texture
 - Bump map
 - Texture modulation
 - Light maps
 - Reflection maps
 - Detail textures
 - Environment maps
 - Procedural textures
- Per-pixel perspective correct texture mapping
 - Fog, light, mip mapping

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

High quality video playback

- 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

- Comprehensive AGP 2X support, including sideband
- Busmastering DMA PCI 2.1 interface
- NTSC and PAL TV output
- CCIR-656 video capture port
- Flexible memory configurations, up to 16MB of SDRAM/SGRAM

Designed to WHQL compatibility standards

- 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
- Window 3.x display driver
- Fully PC98 and PC99 compliant

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